

Fostering International Trade: Ten Years of MRA Success

by the APEC TEL MRA Task Force

FOREWORD

Trade is the basis for international peace and goodwill. The community of nations that form the Asia-Pacific Economic Cooperation (APEC) works to facilitate economic growth, trade and cooperation. By bringing together common interests, APEC creates opportunities for its twenty-one member nations in all sectors of the member nations' economies.

Specific to APEC's aims the successful recognition process of product approvals between member nations. This article discusses the history of this cooperation and some of the many benefits of this cooperation for manufacturers, regulators and consumers. This article provides an overview of the background of the APEC TEL MRA, country experience implementing the Arrangement as well as some prospects for future cooperation.

The APEC Mutual Recognition Arrangement (MRA) for conformity assessment of telecommunications equipment, the world's first multi-lateral MRA, celebrated its tenth anniversary in July 2009. Developed by the APEC Telecommunications and Information Working Group (APEC TEL), the MRA benefits manufacturers by reducing the cost of getting a product approved and reducing the time to market.

The MRA, a voluntary agreement, has fostered the expansion of technology and the access to competitively-priced products amongst partner countries by reducing barriers to trade. Just as APEC continues to pursue its goals of "stability, security and prosperity," the APEC TEL MRA Task Force continues to meet twice a year to discuss and develop additional arrangements, work out MRA issues and create bonds of friendship that reaches across the oceans.

According to APEC's guiding principles (emphasis added):

"...rules and procedures affecting the acceptance of goods and services between economies and markets should be harmonized as far as possible **on the basis of international standards** where appropriate. The development of mutual recognition arrangements for standards and conformity assessment results, and continuing cooperation on technical infrastructure development, are encouraged. These can help reduce administrative and compliance cost of business in **obtaining access to international markets.**"

Manufacturers, exporters, distributors, regulators and, ultimately the consumer are all potential beneficiaries from the MRA. Lord John Edgecumbe Shazell, Immediate Past President of the Association of Telecommunications Industry of

Singapore (ATiS), said: "The association has received positive feedback from its members, who comprise equipment manufacturers, value-added resellers and conformity assessment bodies. The MRA is a positive step in improving the process of trade in telecommunications equipment - much simpler, faster and cheaper."

From the outlook of international manufacturing and trading companies, the MRA has reduced the number of hurdles for approvals, provided local access for exporting entities (by allowing in-country testing) and created the incentive to design products to international standards.

In addition to trade, the MRA can help fosters creative solutions for a world increasingly dependent on communications technologies. Access to markets for new products spurs innovation as new devices are placed on the market more quickly. Consider the cell phone: the latest and greatest only lasts a few months before it is eclipsed by devices with new features. The world markets become easily-accessed testing grounds for new devices. This spawns demand and creates an appetite for competitive and derivative products (such as accessories or other products based on these available technologies). This is particularly true in the telecommunications/wireless sector.

The History of Mutual Recognition Arrangements

Bilateral MRAs have been around in several sectors since 1995 when the World Trade Organization (WTO) was formed. However unlike earlier MRAs, such as the US-EU MRA, the APEC Tel MRA was not simply a bilateral agreement but rather an agreement that could be implemented between the 21 APEC countries (not all countries use the MRA currently). Through the implementation process of the APEC TEL MRA, countries agree to the mutual recognition of conformity assessment results (testing and/or certification) and, to some degree, streamline the conformity assessment process.

The APEC TEL MRA was endorsed in June 1998 at TELMIN 3. Implementation of the TEL MRA began in July 1999. The agreement covers the following types of telecommunications equipment:

- Equipment subject to Electromagnetic Compatibility
- Terminal attachment
- Equipment Radio equipment

Although the APEC Tel MRA was the first multilateral MRA, the actual implementation is a voluntary bilateral process with developed countries being the most active in implementation.

Trade and the MRA

APEC, with its 21 member countries, accounts for 44% of world trade and 54% of global GDP, according to the Office of the U.S. Trade Representative (USTR). Total APEC trade with the world accounted for \$9.4 trillion in 2008. Trade with the US alone accounts for more than \$1.5T. (<http://www.ustr.gov/countries-regions/japan-korea-apec/apec>)

Considering that the APEC region accounts for a large source of electronics devices, the amount of trade affected by the TEL MRA is enormous. Some summary statistics for trade within APEC and the TEL MRA partners are as follows:

Trading Partners	Trade (Billions)
US-Canada	US\$560
US-China	US\$470
US-Chinese Taipei	US\$60
US-HK	US\$30
US-Singapore	US\$39
US-Australia	US\$33
US-Korea	US\$82
US-Vietnam	US\$16
US-Japan	US\$204
Australia-Singapore	AUS\$19
Australia-APEC	AUS\$149

Canada

Canada has been a strong supporter of the MRA and is an early adopter. Industry Canada, the regulatory body overseeing telecommunications approvals, began implementation of the MRA in July 1999. Like most of the economies participating in the MRA, Industry Canada had to revise and update its legislation and regulations and develop new procedures in order to implement the agreement. These efforts took longer than expected. However, the result has been an up-to-date and modern regulatory regime in Canada which permits conformity assessment to be performed by private or foreign conformity assessment bodies.

Prior to the MRA being in place, it was necessary for manufacturers to take their products to, and test products locally in Canada. This route incurred extra costs and time to market. According to Stewart Beck, Director of Certification for Nemko Canada, “third-party conformity assessment service providers have long been offering testing services for their local markets. Since the advent of Mutual Recognition Agreements and Arrangements, the private sector has been able to expand its scope of services to suit clients’ needs.”

From the third party Conformity Assessment point of view, the advent of the APEC TEL MRA has opened up doors to new markets. This has allowed service organizations such as Conformity Assessment Bodies to offer additional services to their clients and hence save manufacturers time and money in getting new products into their chosen markets.

Internationally accepted accreditation is the cornerstone of mutual acceptance and thus central to the implementation of the APEC TEL MRA. Through the MRA process, manufacturers and Conformity Assessment Bodies (CABs) benefit from direct contact with international regulators which allows them to better understand local regulations and then implement them within the testing and certification services recognized by the MRA economy. The Phase I and Phase II procedures have worked well because testing and certifications are acceptable for market entry. In return, other MRA economies have benefited by being able to get their third party CABs accepted in Canada.

Singapore

Singapore is a dynamic nexus for trade. Aside from its unique role in the history of Southeast Asia, Singapore leads the region in urban and technology innovation. According to Mr. Leong Keng Thai, Deputy Chief Executive & Director-General (Telecoms), Infocomm Development Authority of Singapore (IDA), there are still vast opportunities for the growth of businesses in APEC. "Therefore, it is important that we continue to strengthen our competitiveness by eliminating technical barriers to trade and simplifying regulatory processes."

Implementing the MRA has been a priority and a big success. The benefits are clear. James Wong, Technical Regulations Engineering Program Manager for South & South-East Asian Countries, Hewlett Parkard said: "We expect our local operations to benefit significantly in terms of time and cost. MRAs are the best that can happen to us."

Time-to-market is a big priority in an increasingly competitive environment. "Economic challenges in the recent years have made companies re-think about the way they do business. The MRA allows companies to have the first mover advantage," said Mr. Darwin Ho, Executive Council Member of the Association of Telecommunications Industry of Singapore (ATiS).

This drives the conformity assessment process directly. "The MRA preparation encouraged certification bodies to streamline their existing certification processes. The MRA also promotes the exchange of best-practice information on certification among participating economies," said Mr Richard Hong, Senior Vice President, Industry Service for TUV SUD PSB PTE LTD. In the end, these "best practices" means safer and more effective products for consumers.

Hong Kong

Hong Kong has implemented Phase I of the MRA with Australia, Singapore and Chinese Taipei since 1999 when the MRA scheme was initially launched. It has also reached full implementation of MRA with the US and Canada in 2005 and 2008 respectively. In the period from July 2008 to June 2009, 440 test reports were issued under the framework of the MRA. The key benefits to Hong Kong stakeholders include reduced time for approvals and cost savings. Benefits of “local service” mean that products can be tested once for multiple markets.

The process sharpens competition in the testing market as well, allowing additional service providers to enter the market. Competition drives innovation and lower costs. For conformity assessment service providers participating in an MRA boosts the reputation and confidence, leading to a market advantage and international exposure.

Hong Kong stakeholders report that this has opened the door for more business opportunities as market access is improved. In addition, compared to ten years ago, the regulations for foreign markets have become more transparent. This eases the burden on the manufacturer and the test laboratory. Confusion about foreign requirements has been a long-standing issue in the conformity assessment industry although there are still hurdles to overcome.

The United States

The US has implemented Phase I of the MRA with Australia, Canada, Chinese-Taipei, Singapore, Korea, Hong Kong, and Vietnam. Phase II of the MRA has been implemented with Canada, Singapore and Hong Kong.

In the US, the FCC serves as the regulatory authority that can recognize foreign CABs under the MRA. The National Institute of Standards and Technology (NIST), an agency under the U.S. Department of Commerce serves as the MRA Designating Authority. In this role, NIST designates US CABS for MRA partners.

As of December 31, 2009, 77 US CABs (some at multiple locations) were recognized by one or more of the MRA partner economies, for a total of 228 Phase I testing lab recognitions and 20 Phase II certification body recognitions.

In a 2009 NIST survey of US CABS, the key benefit of CAB participation in the APEC TEL MRA recognition process was being able to provide their clients with “one-stop” regulatory services accepted by multiple economies. Manufacturers prefer the convenience of using a local laboratory where communications can be frequent and often in person, and there are fewer language barriers. The reduced time to market and reduced costs were also cited as key benefits

The US implementation of Phase II is complementary to the Telecommunications Certification Body (TCB) process implemented by the FCC. Since June of 2000, privatization of the certification of radio devices has streamlined equipment authorizations for thousands of devices. The explosion of wireless technologies worldwide is an indicator of the breadth of this program. MRA partners have successfully groomed local certification bodies to service manufacturers in participating economies. This has been supported by various agreements on accreditation in which Conformity Assessment providers are audited to the same requirements (under the International Laboratory Accreditation Cooperation ILAC, for example). This, theoretically, levels the playing ground for Conformity Assessment and approvals.

Chinese Taipei

In the past ten MRA years, Chinese Taipei has actively participated in Phase I Procedures for Mutual Recognition of Testing Laboratories and in Phase II Procedures for Mutual Recognition of Certification Bodies. Chinese Taipei has implemented the MRA with 5 economies in Phase I: Australia, Canada, Hong Kong, Singapore and the United States. Phase II has been implemented with Canada. Chinese Taipei has recognized 18 telecommunications laboratories, 105 EMC laboratories and one Certification Body in other APEC Economies. In addition, there are 11 Chinese Taipei laboratories recognized by other economies.

Recognizing that all stakeholders benefit by the APEC TEL MRA, the MRA process has worked well for Chinese Taipei as end users can employ state-of-the-art telecommunications products and manufacturers can access the global markets with greater ease and less cost. In the next decade, under the APEC TEL MRA, Chinese Taipei supports an MRA dealing with Equivalence of Technical Regulations (ETR); this would benefit users of the MRA by minimizing the need for re-test of devices. Chinese Taipei also supports the implementation by more economies to increase the access to laboratory and CB services.

Mr. Nigel N.L. Jou, Chief Executive Officer (CEO) of the Taiwan Accreditation Foundation (TAF) said: "The telecommunication industry plays a very important role in Taiwan export market. In 2009 over 60% of Taiwan's production of telecommunications products were exported to world markets. The MRA is a very positive solution to provide significant time and cost savings for manufacturers and customers. To work towards further development of a New MRA (e.g. EE MRA), APLAC (Asia Pacific Laboratory Accreditation Cooperation) also appointed me to be subcommittee chair of APEC TEL MRA Task Force. In the coming years, I deeply believe "The MRA of Equivalence of Technical Requirements" (ETR in short) will continuously to strengthen and benefit the stakeholders in the APEC TEL region.

Mr. Roger Sheng, Manager, Telecom Technology Center (TTC) points out the benefits to manufacturers and the laboratories: “As a government funded non-profit independent lab in Chinese Taipei, we have witnessed how the APEC MRA helps the domestic Telecom manufacturers. Most of our customers are small businesses and it is hard for them to have a representative located in other economies for approvals. With the APEC TEL MRA, small businesses can access the Asia Pacific markets faster and easier. To meet client requests for better and faster testing and certification services, labs in Chinese Taipei have the opportunity to develop new testing technologies, to set up state-of-the-art testing facilities and build up a robust testing/certification ecosystem in Chinese Taipei.”

Increased efficiencies and linkages in trade are a net benefit of the MRA as Mr. Steven Chuang, Director, Certification Department of Compliance Certification Services (CCS) notes: “The concept of a ‘Global Village’ is not only an ideal but is becoming a reality.” One asks: how has the MRA been a factor? “In the past, due to the specific requirements from different countries, laboratories were forced to generate additional reports and documents specific to those countries. This wasted a lot of time and cost. The MRA has helped advance the development of a Global Village and saving resources that are better expended elsewhere.”

Korea

Korea has actively implemented Phrase I of the APEC TEL MRA on conformity assessment for telecommunication equipment with the following economies: Canada (1997), the US (2005), Vietnam (2006) and Chile (2008). Korea polled 347 organizations involved in exports, imports, sales and test labs. Of the respondents, an overwhelming majority (73%) recognized and utilize the MRA with the major benefit being the reduction of time-to-market (estimated at 3.3 week, average) and an average cost savings of \$2650. Queried on the notion of moving onto Phase II, respondents were nearly unanimous (at 97%) that it would provide further benefits.

Currently, Korea plans to implement Phase I with Singapore, based on a Free Trade Agreement (FTA) signed in 2004. Phase II implementation with the US would follow ratification of a FTA with the US.

Next Steps and Future Planning

The MRA Task Force of APEC TEL is currently working on fleshing out the operational details on an MRA for the *Equivalence of Technical Requirements* (ETR) of telecommunications equipment. This new MRA complements the MRA for conformity assessment and is being developed to further reduce technical barriers to trade and ease compliance for manufacturers.

The ETR was approved by APEC TEL MRA Task Force in September 2009. It complements the existing TEL MRA on conformity assessment with its basis directly related to the principal aims of the APEC cooperation.

“Where rules and procedures differ between trading partners, two trading partners, by mutual agreement, could perform an assessment on the outcomes which each of the two systems is aiming to achieve. As a result, agreement can be reached that there is sufficient equivalence of outcome to accept that assurances from one partner are adequate to satisfy the other's needs, without the industry or authorities following every step laid down in the second partner's law.” (From the 6–7 June 2001 record of the Meeting of APEC Ministers Responsible for Trade (MRT))

As with the TEL MRA, the ETR will be implemented on a voluntary bilateral basis.

Summary

On whole, the TEL MRA has benefited many stakeholders. At the top of any cooperative process is the public, which includes consumers, regulators and producers. Safe, effective products that contribute to the well-being of the public are in the best interest of all parties. Reaching agreement on processes drives the development of products to a common level, providing more sophisticated devices that in the end, connect our world.

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