



*Consejo de Armonización de Normas Electrotécnicas de las Naciones de las Américas  
Council for Harmonization of Electrotechnical Standards of the Nations of the Americas*

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**Address given by Tim McNeive, CANENA President  
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Good morning and thank you for the opportunity to join you in this forum today. I want to especially thank NEMA, the National Electrical Manufacturer's Association, who offered me their slot on the agenda to talk to you about the success story of CANENA. I think that speaks volumes of NEMA's perception of the value of the CANENA facility for carrying out their standards harmonization priorities.

In anticipation of the signing of the North American Free Trade Agreement (NAFTA), CANENA was founded in 1992. CANENA is a Spanish language acronym that originally translated as the Council for Harmonization of Electrotechnical Standards of North America. The original goal of CANENA was to foster the harmonization of electrotechnical product standards, conformity assessment test requirements, and electrical codes between Canada, Mexico and the United States. In 2002, the translation of CANENA was officially changed to Council for Harmonization of Electrotechnical Standards of the Nations of the Americas effectively opening our facility for harmonizing standards throughout the Western Hemisphere.

By the time CANENA was founded, a significant degree of cooperation in reducing differences in electrotechnical standards between interested industries in Canada and the United States had already begun following the U.S.-Canada Free Trade Agreement of January, 1989. This early cooperation extended to our trade associations, NEMA and Electro-Federation Canada. Few of our industry's product sectors at that time, had experience in multinational standardization so processes were not in place. Clearly, the two countries share a very common electrical distribution infrastructure and system for electrical safety based on consensus standards, but still, these early efforts were successful only through extreme diligence and a clear view of the economic benefit that would result.

Through the early experience between Canada and the U.S., our industries also successfully encouraged closer cooperation between the competing Standards Developers and Certification Organizations. In case you hadn't noticed, free trade stimulated competition in these areas as it did in the commercial manufacturing sector.

So, with the expected completion of the NAFTA pact, many of the same industry members in NEMA and EFC, along with Mexican industry members, formed CANENA to explore a model for cooperation in standards in order to hit the street running once tariff barriers to trade were removed as scheduled by the agreement. In January, 1995, the founding of the World Trade Organization and its emphasis on international standards as the basis for open markets and free trade had an immediate and irreversible impact on our approach to multinational standards harmonization. Even though Mexico and many other smaller economies in our hemisphere have electrical distribution infrastructures comprised of U.S. and Canadian standard electrical components, and several countries base their systems for electrical safety on our National Electrical Code, national metrology laws in many of these countries have been written to permit consideration of only “international standards”. For electrical products, International Electrotechnical Commission (IEC) standards were prescriptively interpreted in this legislation as “the” international standards. The pressure to address compliance with IEC standards was, and continues to be, evident not only as a pending requirement for market access in prospective emerging markets, it is also present here in the United States and in Canada. Membership in the WTO has brought pressure to bear on our government trade negotiators when asked “why American or Canadian National Standards for electrical products are not IEC standards?”, and “when will they be?”.

CANENA, like NEMA, is product sector driven. The standardization priorities are set by the consensus of industry participants from the countries involved. The ultimate objective of CANENA, established at its founding, is to have one standard for a product for all participating countries, so a manufacturer can submit his product to a nationally recognized testing laboratory in any one of the countries, and, upon successful completion of the testing, have unimpeded market access in all countries. This “one standard, one test, accepted everywhere” mantra continues to be repeated around the world. It is not unique to CANENA.

The founders of CANENA, recognized some fundamental realities that ultimately resulted in the approach our sector Technical Harmonization Committees would take in establishing their scopes and early work programs. These early work programs drove development of processes and procedures and an administrative infrastructure that have continued to evolve for fourteen years.

Those realities include:

1. IEC standards will continue to be preferred electrotechnical standards.
2. North American standard products are not adequately represented in IEC standards of the same scope. These IEC standards are often “euro-centric” in test methodology and in some cases, design prescription.

3. All IEC standard products are not proven to be compatible in North American electrical distribution infrastructures to provide an equivalent degree of safety or performance.
4. The near-term return on investment for technical standardization will come from harmonizing existing national standards within the region. In the interim, industry technical experts need to become active participants in IEC through their respective National Committees.
5. Harmonization of existing national standards within the region is a logical first step toward technical influence in existing IEC standards of the same scope.

I want to spend the next few minutes talking about CANENA's evolution and how CANENA has been successfully used by NEMA product sectors to advance their market competitiveness in the regions of the Americas. While we are here to talk about successes in accessing emerging markets through standardization, let's not lose sight of the fact that our domestic markets too have been very dynamic as the result of globalization. I think the result of many CANENA harmonization programs and the integration of CANENA THCs into the fabric of our national standards development systems have produced better standards and, at least temporarily, expanded a dwindling pool of volunteer technical resources to continue to maintain the harmonized standards.

### **CANENA is not a Standards Development Organization**

The CANENA Council is a volunteer, member organization without any official mandate from governments. Members-in-good standing pay dues of \$150.00 USD annually to support a very modest, volunteer administrative budget of about \$25,000 USD per year. The largest component of this budget funds the Council's Annual Meeting, which we consider a vital resource for our members. All participants in CANENA Technical Harmonization Committees and Subcommittees and members of the Executive Committee are required to pay dues. Only representatives of participating standards development organizations are dues exempt, non-voting members of the Council. In addition, a THC can invite special experts to participate in focused Working Groups. These experts are not required to pay dues and are not Council members.

CANENA THCs are autonomous in the conduct of their work programs and organization within the limits of published processes and procedures.

CANENA's Executive Committee oversees the technical activities and harmonization procedures in support of the member initiatives. The CANENA bylaws were recently amended to make clear that the members-in-good standing from each country are entitled to petition for representation on the Executive Committee. That voting representation is by an elected CANENA Vice President. Non-voting representatives from each participating standards development organization also participate actively on the Executive Committee.

Very importantly, CANENA does not publish or sell standards. The consensus of a CANENA THC, the result of its work, is reflected in the final draft harmonized standard they deliver into the official national standards processes through each participating SDO. The participating SDOs are active members of each THC. They ensure that periodic technical reviews are conducted by experts in their own committees to help promote fluid and simultaneous adoption according to national procedures. The intellectual property rights to harmonized standards remain the property of each participating national standards developer in accordance with their own mutual agreements.

The voluntary nature of standards initiatives and Council membership, and the indirect interaction with the official national standards development processes is what makes the CANENA model completely unique.

What makes CANENA work? As I considered this question, it occurred to me that the very electrical distribution system that our electrotechnical standards and installation codes support, is a system of unique cooperation. It is an infrastructure that has evolved through both opportunity and necessity, and for the most part, in our region, is one of the least regulated systems serving the general public. Similarly, CANENA was formed out of opportunity resulting from a negotiated trade agreement between nations. Our voluntary, industry initiated sector harmonization activities evolved to grasp the opportunity. And I think today, with severely diminishing technical resources employed in technical standardization, forums like CANENA have become a necessity, providing critical mass and necessary breadth of technical knowledge and views to support electrotechnical standards development and maintenance at all levels, nationally, regionally and even internationally to an extent. The voluntary nature of CANENA's membership, our very modest administrative infrastructure and the autonomy of our THC's to plan and carry out their work programs, too is self-regulating.

CANENA's facility and processes are quite dependent. Again, CANENA is analogous to our electrical distribution systems in this regard. Both are reliant upon generation and delivery of consistent cycles of energy and low resistance connections between the systems' components to support the system efficiency and to serve diverse uses. The motivation for CANENA harmonization programs is purely and simply economic benefit. Those who can visualize or quantify a return on their investment supply the energy for the system. It is not practical to assume that each investor in the process benefits in the same way. But it is imperative that each investor does realize a benefit.

Obviously, there would be no CANENA if not for its members. Council membership at the end of 2005 was nearly 200. It is the continuous, active participation by those electrical industry product sectors in each country that is the catalyst for CANENA's activities. It is natural that the majority of CANENA members are manufacturers. Manufacturers are positioned to reap the most direct economic benefit from trade agreements between nations and their investment in the standardization process. The reduction in different technical requirements from country-to-country represented by harmonized standards, helps to level the competitive playing field without compromise to safety, for anyone. Manufacturers and other industry stakeholders also benefit by effectively reducing the time previously dedicated to participating in separate, national standards development processes. Most often, the manufacturer members of CANENA are also active members of industry trade associations in their countries. And, while those trade associations have no official status within CANENA, we acknowledge their importance to the ongoing success of CANENA and continue to seek a cooperative and complementary relationship at the administrative level.

The CANENA model for standards harmonization would be impossible without the cooperation and open communications that have evolved with its participating Standards Development Organizations. Both at the working level of our Technical Harmonization Committees and at the administrative levels, ANCE, CSA and UL have steadfastly supported CANENA's industry driven harmonization initiatives. This voluntary alliance with and between national SDOs is both unique and imperative to CANENA's success.

### **Transparency, Cooperation and Communication**

A cornerstone of CANENA is transparency. Several years ago, we successfully completed formal liaison agreements with CENELEC, the European electrotechnical standards development organization, and IEC. These agreements facilitate exchange of information on technical activities and policies affecting the efforts of both organizations. CANENA THC nomenclature is aligned with IEC Technical Committees to the extent possible so that IEC National Committees can easily access the status of our work programs and activities. And, all standards are drafted in IEC format according to procedures mutually adopted by ANCE, CSA and UL.

As I said in my opening address at this year's CANENA Council Meeting, while all indications point to the increasing value of CANENA, "we are aware of undercurrents within the larger standardization community that question the Council's role and its interface with official standardization entities throughout the regions of the Americas. I like to think that this is an indication of the growing perception that CANENA has indeed become relevant and recognized, although perhaps still misunderstood."

One of our most important results in recent times is the 2006 publication of a comprehensive Cooperation and Communication Strategy. In a nutshell, this document describes how CANENA will ensure that our role remains complementary with identified, official standardization entities in countries affected by the work programs in CANENA. As CANENA has evolved, the official entities responsible for electrotechnical standardization, principally in Canada, Mexico and the United States, have become increasingly interested in understanding the Council's role. Rather than try to address particular concerns as they arise, the Executive Committee decided that a comprehensive strategy was necessary to ensure we touch all of the bases in our normal course of activities. We realized that since CANENA members are well positioned within the standards infrastructure in their home countries, they are best suited to provide either formal or informal liaison to help communicate and measure CANENA's complementary role.

CANENA's Annual Report, our bylaws, procedures, the Cooperation and Communication Strategy, our formal cooperation agreements, committee directories and work program status are all publicly available at [www.canena.org](http://www.canena.org).

### **CANENA Continues to Change**

While it's obvious that electrotechnical standardization in the Americas remains dynamic, I think you can begin to see that, with very moderate administrative resources, CANENA's role continues to evolve. What I think is important for you to realize is that CANENA has continued to change to meet the priorities of its members. Changes over the past three years have seen a marked acceleration in completion of standards harmonization projects. Our THCs are getting better at managing these projects and are beginning with more realistic expectations. We're benefiting from continued close cooperation between ANCE, CSA and UL who constantly refine their harmonization procedures and are solidly behind the industry driven initiatives. The fact is that many of the North American standards for the highest volume electrical distribution system components have achieved some degree of harmonization. To date, 42 electrotechnical standards have been harmonized through CANENA processes, 17 in just the past two years. Many THCs are now well into a second round of harmonization and often simultaneously, acting integrally with the national Standards Development Organizations in maintenance of the standards they first harmonized. Hot topics today are: establishment of mutually agreed maintenance cycles, and expanding scope to consider IEC standards, many for the first time. CANENA involvement in the maintenance of harmonized standards cannot be seen as an impediment to this process nor be restrictive to expediently implementing changes to harmonized standards necessary to accommodate for safety and changing technologies.

As the NAFTA agreement was the catalyst for CANENA's initial surge of technical activities, the negotiation and completion of many bilateral and multilateral trade agreements in recent years throughout the region of the Americas has sparked interest in CANENA from electrotechnical industry sectors in countries within the region beyond North America. The increasing scope of IEC standards in CANENA activities is certainly seen as progressive by standards developers in countries like Costa Rica and Colombia who have recently joined CANENA. Of course, many of these standards developers are government entities. In a 2005 survey conducted by COPANT, the Pan American Standardization Commission, harmonized regional standards were reported nearly as high a priority as harmonized adoption of IEC standards within the region. In an address to the CANENA Council in 2005, Sr. Carlos Rodriguez, Executive Director of INTECO, the national standards development organization in Costa Rica, said that his country realizes that their national standards must reflect the products they use and indicated that international standards must become inclusive in order to be relevant. This sentiment seems to be growing within the region. Our regionally harmonized standards are growing in value in this regard. This emerging trend is very timely considering the Central America Free Trade Agreement, known as CAFTA Plus the Dominican Republic, which is now pending confirmation.

Foreseeing the increasing emphasis on IEC standards in CANENA work programs, in 2003, an international forum was added to the agenda of CANENA's annual Council meeting program. The topic of "Global Relevance" was the discussion topic that year. With CANENA members who are very involved in the IEC national committees in their home countries, this venue seemed like a natural forum for a discussion on the newly published IEC guidance. Like fostering harmonized standards, fostering a harmonized interpretation and approach to the global relevance philosophy among the multinational CANENA membership, seemed a realistic role for CANENA. This concept has begun to grow to the point where reaching multinational consensus on national deviations to IEC standards is now the scope of several CANENA THC work programs. In this year's international forum, we focused on several IEC standard based work programs being conducted in CANENA. Participants were given the opportunity to discuss the appropriateness of CANENA's role with respect to IEC standards and necessary coordination with the national committees.

In the region of the Americas, COPANT has been spoken of as the expected center for standardization upon completion of the long-anticipated Free Trade Area of the Americas (FTAA) Pact. COPANT CT-151 is the designated technical committee with electrotechnical standards in its domain, and CT-152 for energy efficiency. Lacking the structure of the FTAA agreement, these two technical committees have not to-date, achieved much traction. CANENA's Executive Committee has however been diligently monitoring the developments in COPANT CT-151 and designated a representative at the COPANT General Assembly Meeting annually. Concurrently, we have been learning more about the activities of AMN, the Mercosur Association for Standardization, and in particular the Mercosur Sectorial Committee of

Electricity of AMN. Similar to CANENA, this organization in the Mercosur countries of South America (Brazil, Argentina, Uruguay and Paraguay) have been actively harmonizing electrotechnical standards. Unlike CANENA, AMN has a mandate from the governments in their participating countries and their singular focus is based on IEC standards. Until only recently, CANENA and AMN have been more than geographically polarized.

Discussions within COPANT over the past couple of years have raised a sense that there may be a role for regional standards “refineries” like CANENA and AMN in the eventual success of CT-151.

I think it is important to consider, that the strategic significance of COPANT and CT-151 is not a matter directly for CANENA but rather for the countries that are COPANT members. Presumably, if there is a role for CANENA, it will be as a component of mutually beneficial national standards strategies and trade policies. Electrotechnical industry members and other stakeholders have the input to that strategy in the United States through ANSI while CANENA is but a potential facilitator for implementing those strategies.

Thank you for this opportunity to share with you the success story of CANENA. I think you will agree our model is quite unique and has shown an incredible ability to evolve with the changing standardization priorities presented by industry members. The increasing scope of IEC based standards projects in CANENA indicates our members envision a broader role for CANENA. It is my belief that CANENA will remain relevant as long as we retain our focus, communicate a complementary role with other regional standardization entities and are able to attract a succession of volunteer leadership and technical participants to support industry’s commitment to standardization.