



United States

Election Assistance Commission

“Back to the Future: Reducing Certification Cost and Impact Through Recognition Agreements and Equivalency”



BALL STATE
UNIVERSITY.

State Certification of Voting Systems Meeting

June 14, 2012

Ball State University Indianapolis



Background

Why “Back to the Future?”

(And no, this has nothing to do with Marty McFly,)

It sometimes does feel, however, that we are going back in time from 2012 to 1990 to discuss the same things... **reducing the cost of testing voting systems.**

- FEC’s 1990 Voting Systems Standards (VSS)- make testing more efficient & eliminate duplicative testing.
- FEC’s 2002 VSS.
- EAC Cost of Testing Summit, Denver, CO 2007.
- EAC Unified Testing Initiative Meeting Miami, FL 2009.
- State Certification Meeting Kennesaw State University 2011.



Are we in Violent Agreement?

Denver, 2007

Election Officials:

- Felt that the development of the EAC program increased the overlap between Federal and State Testing. Many of the election officials suggested that a matrix needed to be created showing the requirements of federal testing and State testing. The matrix could then be used to decide what tests are used by both and what tests would be best handled in the federal program instead of state programs.

Test Labs:

- Labs indicated that costs could be cut if the scope of the EAC's testing is understood by states and not required to be repeated by state testing.

Voting System Manufacturers:

- Pointed to duplicate testing as being a major contributor to cost. They suggested that the EAC must streamline their process to incorporate common state tests in order to improve the speed of testing and lessen the duplication of tests.



Denver, 2007

Conclusions & solutions:

- A matrix between federal testing requirements and state testing requirements needs to be created so that the overlap can be remedied and the amount of duplicative testing lessened.

Miami, 2009

Testimony of Steve Pearson, VP of Certification, ES&S

- “We believe that states should come to better understand and accept the value of the testing already being done at the federal level. A number of states actually require federal approval and then duplicate many of the same tests that were performed as a part of that federal level testing.... If those states accepted the federal level testing demands they already require as part of their certification process, enhancements to voting technology could occur far more timely. It would be our goal to see more states use the issuance of an EAC certification as the basis to grant state certification for use without further testing.”



Miami, 2009

Testimony of Kurt Browning, Florida Secretary of State

- “On a federal level, I would advocate testing firmware and software using reasonable minimum security standards and minimum hardware testing for durability, dependability and environmental conditions, such as temperature, water, and dust exposure. States should have the option to test equipment using their own state standards and state certification programs or to utilize the testing program established by the EAC for those states that do not have a robust certification program. That program could be more in-depth and modified to test for state specific requirements.”



Industry and Trade Barriers to Certification

Since the formation of the World Trade Organization (WTO) in 1995, U.S. and European officials have accelerated efforts to develop and apply three important trade promotion devices: **harmonization, equivalence, and mutual recognition**. In 1998, the U.S. negotiated a far reaching mutual recognition agreement with the European union covering six product areas: telecommunications equipment, electromagnetic compatibility, electrical safety, recreational craft, pharmaceutical good manufacturing practices, and medical devices. Because of their potential to reduce cost to industry, they have been heavily promoted on both sides of the Atlantic. The three trade promotion mechanisms are closely related but are not interchangeable.

- **Harmonization** takes two differing standards or procedures and converts them into one.
- **Equivalence** allows two differing standards or procedures to remain intact but treats them as if they were the same because in theory at least they produce the same or similar results.
- **Mutual recognition** are agreements between countries to recognize and accept the results of conformity assessments performed by conformity assessment bodies of the countries that are parties to the agreement.



Specific Industry Examples

IT Industry

- For most computer hardware, telecommunications equipment, and other IT product manufacturers, the most significant technical barrier in terms of cost is the need to undergo multiple conformity assessment procedures to meet duplicative government technical regulations based on the same international standards. These redundant requirements result in technical barriers to trade.
- Despite similar standards, countries have implemented redundant conformity assessment requirements and procedures to test to those standards. Although telecommunications equipment regulations in China, Mexico, and Brazil are all harmonized to IEC 950 and CISPR 22, the three countries require conformity assessment to be completed domestically to those same standards, even if they have been previously tested and certified to equivalent standards by other accredited labs or certification bodies in the United States or other countries.



Specific Industry Examples

Medical Device Industry

- Conformity assessment delays, duplication in testing, and excessive data requirements constitute the most significant technical barriers to trade in the medical device industry. Requirements that clinical testing of devices be repeated even when identical testing has been completed previously to gain approval in other foreign markets often result in unnecessary costs for medical device manufacturers.
- A study contracted by a major U.S. medical device trade association estimated Japan's conformity assessment system cost U.S. firms \$350 million from 2002-2005 and that U.S. firms will incur an additional \$1.2 billion in compliance costs from 2006–2010 (*Agress 2006, and AdvaMed/ACCJ 2005, 15*).



What can we learn from these examples?

There *is* real potential for using **recognition agreements**, and the **concept of equivalence** between states and the Federal certification program to significantly reduce time and cost.



Draft outline of recognition agreement between State(s) and EAC

The EAC will Draft an outline of a recognition agreement the purpose of which will be stated in a preamble such as:

PREAMBLE

Recognizing that this document constitutes an Agreement on Recognition in Relation to Voting System Conformity Assessment (Certification) between the United States Election Assistance Commission and the (STATE OF _____)

Acknowledging that carrying out the provisions of this document will further public confidence in the election process, and will lead to reduced costs for State and local election officials and voting system manufacturers,

The Parties agree as follows:



What else?

Additional Sections of the document would include:

- Purpose, Scope and Coverage.
- Transition Period & Confidence Building activities.
- Progress Reports.
- End of transition period and Equivalence Assessment.
- Operational Period.
- Transmission of Information & Reports.
- Preservation of Regulatory Authority.
- Date of Implementation, Amendments and Termination.



Conclusions

- If we agree that a significant characteristic of cost savings in voting system testing is the elimination of redundant forms of testing, the question becomes how best to accomplish this goal?
- In my view, this goal can best be accomplished by allowing the Federal government to do what it can do best; run a voting system conformity assessment program measuring applicant systems against national Standards/guidelines while at the same time incorporating State specific testing requirements in order to save both time and money. **This concept would then allow States to concentrate valuable resources in areas that are most critical to the needs of election administrators and voters:**
 - Acceptance testing- Determining if the voting system, as delivered, meet the State or jurisdictions contractual requirements?
 - Pre and Post election Logic and Accuracy (L&A) testing and auditing.



Comments/Discussion??

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