USNC Conformity Assessment Policy Coordination Committee

MINUTES
Meeting/Teleconference
National Electrical Manufacturers Association
Rosslyn, VA
Tuesday, 10 September 2013

MEMBERS PARTICIPATING
Timothy T Duffy, Rockwell Automation (Chair, CAPCC, CAB Member, Council Member)
Lawrence B Farr, Eaton Electrical (TA 17A, Mbr ACOS)
Gordon Gillerman, (PT*) NIST
Lane Hallenbeck, ANSI
Steven Margis, UL, Vice Chair, USNC/IECEE
Evans Massy, Baldor Electric Co., Chair, USNC/IECEEx
Edward F Mikoski, Jr., ECIA, (Council Member)
Paul Moliski, Jr., Intertek, Vice Chair, USNC/IECEE
Stan H Salot, Jr, President, USNC/IECQ (Council Member)
Sam Sciacca, SCA Consulting (IEEE) (Council Member)
Joel Solis, NEMA, Secretary, USNC/IECEE and USNC/IECEEx
Joan E Sterling, Intertek Testing Services, CAB Alt Mbr, (Council Member)
Tony Zertuche, ANSI, Deputy General Secretary, USNC
Charlie Zegers, ANSI, General Secretary, USNC

GUESTS PARTICIPATING
Sonya Bird, UL (Council Member)
Bill Bryans, Electro-Federation of Canada
C P (Sandy) Butterfield (PT *), Boulder Wind Power, Chair, IEC/TC 88
Kenneth E Gettman, NEMA, (Vice Chair – TMC)
Lynne Gibbens, Standards Council of Canada, Secretary, Canadian National Committee
David W Johnson, USDOL-OSHA
George Kelly, Secretary, IEC/TC 82
Veronica A Lancaster, Consumer Electronics Association (TMC Member)
William G Lawrence, Jr., FM Approvals, TA/USNC TAG TC 31, (TMC Member)
James E Matthews, Corning Incorporated (IEC VP – SMB Chair)
Amy Phelps, NIST
Philip M Piqueira, GE (USNC President) (Council Member)
Kevin Robinson, USDOL-OSHA
The meeting was called to order by Chair Tim Duffy at 9:00 a.m. (EDT). He welcomed everyone to Rosslyn, VA and to NEMA HQ and thanked them for their participation. He expressed his appreciation to NEMA and particularly to Ken Gettman and Megan Hayes for their help and hospitality in sponsoring this series of USNC meetings. Mr Gettman provided logistical information to the participants.

This was followed by self-introductions.

1.1 Approval of the Draft Agenda

Mr Duffy invited suggestions for additions to the agenda and none were suggested. The Draft Agenda (USNC CAPCC 52A Revised) was considered approved as revised.

1.2 Approval of the Minutes – Meeting – 30 April 2013

The Chair called attention to the Minutes of the 30 April 2013 meeting (USNC/CAPCC 51) held at Dell, Inc., Round Rock, TX and asked if there were any changes or corrections. None were suggested and, as a result, these Minutes were considered approved.

2. CAPCC Membership Recruitment

Mr Zegers noted that the recruitment of new CAPCC members is on-going and will be a permanent element of the Committee’s program. The goal is to build Committee membership to
the maximum extent possible. As a result of the Strategic Objectives process, a number of related entities have been highlighted and an effort is underway to invite them to consider CAPCC membership. During, discussion Mr Bill Lawrence advised the FM Approvals was considering membership and Mr Sandy Butterfield suggested that the National Renewable Energy Laboratory (NREL) be invited to consider membership as well. Any suggestions for new members should be submitted to the General Secretary so that invitations can be extended.

3. Liaison Reports

3.1 Report of ANSI CAPC

Ms Sterling reported that the last meeting of the ANSI Conformity Assessment Policy Committee (CA) was held in May 2013 and the next meeting is scheduled for 30 September.

Mr Hallenbeck noted that Joan Sterling is currently serving as Vice Chair of CAPC. He also advised that the CAPC has been meeting jointly with the ANSI National Policy Committee, resulting in significant benefit. The next meeting will highlight Ms Charlotte Christin of FDA who will present “Discussion on the Release of Public Comment of FDA’s New Food Safety Rule.”

Mr Duffy reminded the participants that developing common ground with ANSI CAPC is a major element in the USNC’s Strategic Objective #5.

3.2 Report by Tim Duffy – Liaison ANSI ICAC

The Chair called attention to document CAPCC 54 (ATTACHMENT A) and provided a brief report on the CASCO documents that have been processed to the ANSI International Conformity Assessment Committee (ICAC) since 19 March 2013. This list includes a number of documents that were being processed under the Systematic Review procedure. Mr Duffy noted that ICAC had met the day prior to today’s meeting. He also noted a discussion of ISO/IEC 17020:2012 – Conformity Assessment – Requirements for the operation of various types of bodies performing inspections. Finally, he reported that the ISO CASCO was scheduled to meet in Beijing, China, two weeks prior to the IEC General Meeting in New Delhi.

3.3 Report from Lane Hallenbeck, ANSI VP – Accreditation Services

Mr Hallenbeck provided a brief up-date on the ANSI Conformity Assessment Policy Committee (CAPC) and on the ISO Committee on Conformity Assessment (CASCO), which he chairs. He highlighted the following:

- Goal is to raise the level of awareness and contributions of all the CASCO mirror committees
- CASCO Toolbox
• Increased coordination with ISO TCs/SCs, how there standards might be used in the standardization process

• Unbalanced participation to be addressed by decision to rotate annual CASCO meeting, in October 2012, Bogota, Colombia, next meeting October 2013, Beijing, China

• Tension between ILAC and CASCO Toolbox

• Activities of the Technical Interface Group, the Strategic Alliance and Regulatory Group which reaches out to government agencies and the Chairman’s Policy and Coordination Group which brings together WG Conveners and representatives of Liaison Organizations.

4. **IEC Governance Structure for Conformity Assessment**

Mr Duffy reported that at its meeting in June 2013, the IEC Council Board established a Task Force to develop a proposed structure for IEC conformity assessment activities based on nine CB recommendations and recognizing the work of CAB WG 10. Council document C/1813/DV titled, “Governance Structure for IEC Conformity Assessment” has now been circulated for vote at the IEC Council meeting in New Delhi. It was reported that the Council Board proposal that led to this Council document passed the CB vote with 11 affirmatives and 4 negatives (Brazil, Canada, France and US). It was further noted, however, that many of the comments that accompanied the affirmative votes mirrored many of the same comments that accompanied the negative votes suggesting that clarification is strongly needed. Messrs Piqueira and Matthews reported on and clarified the IEC Executive Committee’s and Council Board’s involvement in this process. Mr Duffy highlighted the recommendations in the proposal to establish the following groups:

- Business Watch Committee
- Board of Appeal (as needed not standing)
- Business Development Committee
- Rules Committee
- New System on Renewable Energy (IECRE) approved at June CAB meeting

Mr Duffy further reported that this CB proposal does contain the USNC proposal for permanent CAB membership for the Group A highest dues paying IEC Full Members including the US. However, the proposal adds the recommendation that the IEC President would be called on to appoint 2 of the 15 CAB members with no further information or rationale as to the basis on which this would be done. Another serious concern is the recommendation that disenfranchises CAB Alternate Representatives even when the National Committee’s Primary Representative is not in attendance at a CAB meeting. There is no rationale provided for this recommendation. The Chair highlighted a number of the other issues that are of concern to the USNC and CAPCC Officers who have reviewed the document such as, call for balanced CAB mirror committees,
During discussion, consensus was obtained on the following USNC positions:

- Support 15 CAB Members including those Automatically Appointed and those Elected and, if necessary, 2 Members nominated and appointed by the IEC President and CB without vote
- Remove “without vote” with respect to CAB Alternate Members
- Remove requirement that all Systems have the same management structure as dictated by CAB
- The proposal calls for the Rules Committee to approve the Rules of Procedures and Operational Documents of the Systems and the USNC questions if that Committee will have the expertise to approve such Operational Documents. The USNC position is to remove “and Operational Documents of the Systems” from the proposal.

During further discussion, it was reported that several of the FINCA National Committee registered very strong opposition to portions of document C/1813/DV at the meeting hosted by the USNC in Miami on 4 – 5 September. It was agreed that a position paper would be drafted within one week’s time to highlight the concerns with this proposal and that this paper would not only be submitted to the IEC Central Office but circulated to the other IEC National Committees via direct E-Mail contact and by the NC Secretaries’ Collaborative Tool.


5.1 List of Decisions/Confirmed Report – 10 June Meeting

Mr Duffy called attention to the List of Decisions from the 10 June meeting (CAB/1170/DL) and the Confirmed Report of that meeting (CAB/1171A/RM). He highlighted the following Decisions:

- **Decision 33/5** General Secretary’s guidance on Systems’ financial situations
- **Decision 33/7** Harmonization of the Basic Rules of the Systems
- **Decision 33/12** WG 11, Systems issues – Affiliate Conformity Assessment Status
- **Decision 33/14** WG 12, Energy Efficiency – Guidance to Introduce the Global EEE Labeling Program – Mr Duffy called attention to comments on this report submitted by the Association of Home Appliance Manufacturers (AHAM).
- **Decision 33/16** WG 15, Marine Energy – This includes elements of the new IECRE System.
• **Decision 33/18** WG 16, Systems Approach in CA – Workshop on Systems Conformity Assessment planned.

• **Decision 33/29** ITU: Initiative on conformity assessment and interoperability

### 5.2 USNC Proposal Concerning ISO/CASCO New Work Item Proposals

Mr. Duffy reminded the Committee that the USNC had submitted a proposal to CAB to add the IEC review of ISO/CASCO New Work Item Proposals to the CABPUB process. At the present time, while the IEC constituency is invited to consider and vote on draft CASCO documents it does not have access nor an opportunity to vote on NWIPs. CAB members have supported the inclusion of NWIPs in the CABPUB process as indicated in their support of document CAB/1127/DV. Mr. Zegers noted that recently it was realized that the Systematic Review of CASCO standards was also not included in the CABPUB process and, therefore, not subject to IEC review. The Chair suggested and it was agreed that it would be recommended to the CAB Chair and Secretary that this topic be added to the CAB’s discussion and consideration of this subject at its meeting in New Delhi.

### 5.3 CAB WG 10 – CAB Policy and Strategy

Ms. Sterling provided a brief status report on the WG particularly as it relates to the effort to reorganize CAB.

### 5.4 CAB WG 12 – Energy Efficiency

Mr. Duffy noted that this WG was discussed earlier with respect to a Global EEE Labeling Program and resulting reactions particularly those of AHAM.

### 5.5 CAB WG 16 – Systems Approach in CA

The current USNC Experts on CAB WG 16 are Ms. Sterling and Messrs. Duffy, Margis and Gillerman. The WG 16 met the day prior to the June CAB meeting in Geneva. Among its action items is the planning of a Workshop on Systems Conformity Assessment in the February/March 2014 timeframe and also the development of a companion document to the one developed by the related SMB AHG 35.

### 6. Building a Stronger National Standardized Network for Harmonization – Conformity Assessment – Bill Bryans, Vice President, Technical Services – Electrical, Electro-Federation Canada

Mr. Bryans provided the following Executive Summary for inclusion in this CAPCC meeting’s agenda.
“Essentially 100% of all electrical, electronic, appliance and information/telecom products could apply the same ‘net’ set of applicable standards, for testing and certification requirements to meet US and Canadian regulatory objectives. However, the SDO and CAB in our two countries are competitors and have too little incentive to coordinate development of, or acceptance of common requirements. There are also currently no incentives from the National Accreditors for mutual recognition of accreditations or process to encourage harmonization or acceptance for equivalency.

Of the $76B in US/CA cross border trade for our sector, we estimate at minimum redundant cost impacting trade averaging 30% of compliance costs, amounting to at least $500M per year, and likely more the $1B. This presentation will show sources of the redundant compliance costs associated with non-harmonized standards.”

Mr. Bryans presentation is provided as ATTACHMENT B. At the conclusion of his presentation, Mr. Bryans was invited back by the Chair to report to CAPCC the progress of this work.

7. Up-date on CAB/IEC TC 88 Certification Advisory Committee (CAC), Sandy Butterfield, Chair, IEC/TC 88, Boulder Wind Power

Mr. Butterfield provided a status report on the CAB/IEC TC 88 CAC and, particularly, on the establishment of the new WT CAC SC 22 – Wind Turbine Certification Advisory Committee Subcommittee 22. (ATTACHMENT C) He also spoke positively about the progress being made in the establishment of the new IECRE, IEC Renewable Energy System.


Mr. Kelly, international Secretary of IEC/TC 82, provided a status report on the TC’s activities in the area of conformity assessment. (ATTACHMENT D) He too spoke positively about the establishment of the new RE System.

9. 77th IEC General Meeting – New Delhi, India

9.1 Activities Anticipated for CAB Meeting - 22 October 2013, New Delhi

Mr. Duffy noted that a Draft CAB Agenda had not yet been received and, therefore, it is difficult to anticipate the issues that will be included, however, he expressed the belief that the most significant issue will involve the implementation of the IEC Masterplan 2011 and the potential reorganization of CAB. No other contentious issues have been noted and, if they are, CAPCC will be so advised.
9.2  **Election/Re-election of CAB Members for Three-Year Terms (2014-2016)**

Calling attention to document C/1806/DC, Mr. Duffy reported that there are four openings for CAB membership and nominations have been received from the following six candidates.

Election/re-election by Council of four CAB Members for three-year terms  (2014-2016)
Mr. Ian Forte  (Australia)
Mr. Marcos Aurelio Lima de Oliveira (Brazil)
Mr. Didier Bourges (France)
Mr. Ir. Mohamad Faudzi B Mohd. Yasir (Malaysia)
Mr. Victor Timko  (Russian Federation)
Mr. Tim Duffy *
* Completing Preliminary term at end - 2013

During discussion, consideration was given to the pros and cons of the candidates and, in addition to Mr. Duffy, one other candidate was selected for recommendation to USNC President Phil Piqueira for support.

9.3  **Nominations of Conformity Assessment Officers for the 2013 IEC Thomas A Edison Awards – CA**

Mr. Duffy called attention to the IEC Thomas A Edison Award – Conformity Assessment and noted that, for 2013, no nominations were made by the USNC. He encouraged careful consideration of this Award so that we are prepared to participate in the 2014 program.

9.4  **IEC 1906 Award Vis-à-vis Conformity Assessment**

Mr. Duffy also called attention to the IEC 1906 Award. “The aim of this Award is to recognize current achievement(s) that can be considered as a major contribution to furthering the interests of electrotechnology standardization and related activities. Specifically, the Award must be granted for exceptional, recent contribution related to the development – either technical or from an organizational point of view – of a specific work project.” The recipients are chosen by the IEC Technical Committee (TC) Officers, the Chairs and Secretaries. It appears as if the Award is totally designed for the standards side of the aisle, however, over the years some 25 individuals involved in conformity assessment have received the Award, apparently, without the knowledge of the IEC Central Office. Mr Duffy suggested that either this Award needed to be fixed or a similar Award for the conformity assessment constituency needs to be created. This issue has been raised with the IEC Staff.

9.5  **List of USNC Appointed Experts on CAB Working Groups**

Mr. Duffy called attention to the list of USNC Experts currently serving on CAB Working Groups  [ATTACHMENT E].
10. Status Reports of High Priority Issues for Each System

10.1 Report – President’s Task Force on Conformity Assessment Systems

Mr. Zegers reported that, as per the discussion at the last CAPCC meeting, it was agreed that the revised Procedures of the three Systems would first be sent to the Task Force for a brief review after which they would be circulated to CAPCC along with the comments received and then, if appropriate, to Council for vote. The Procedures were circulated to CAPCC on 13 May 2013 with a due date for comment of 10 June 2013 with an extension to 28 August 2013. By the due dates, no comments had been received, however, within the last few days, Mr. Margis indicated that he had comments that, he felt, should be considered. It was agreed that these comments would be circulated to the Task Force and a teleconference might be scheduled to address them, if need be.

10.2 IECEE and USNC/IECEE

Mr. Duffy provided a brief report on the IECEE System and the activities of the USNC/IECEE. His report is provided as ATTACHMENT F. He highlighted the following:

- Administration
- IECEE Recap
  - 2013 IEC Certification Management Committee Meeting – Vancouver
  - IECEE Scheme Gains Greater Global Acceptance
  - IECEE Executive Secretary – Pierre de Ruvo steps down. Kerry McManama nominated to take his place.
  - Restructure the PSF into Policy and Strategy Committee (PSC)
  - Nomination Process for IECEE Officers
  - Voting by Correspondence & Abstentions in Voting
  - Brazil’s Membership to be Reinstated
  - Potential Suspension of India
  - Smart Grid
  - Global Motor Energy Efficiency Program

10.3 IECEx and USNC/IECEx

Mr. Evans Massey provided a brief report on the IECEx System and the activities of the USNC/IECEx. His report is provided as ATTACHMENT G. He highlighted the following:
• Administration

• IECEx Annual Meeting
  - Elections
  - ExTAG Secretary Nomination
  - New Members Countries
  - New IECEx Service Offerings Under Consideration
  - Certified Service Facilities Scheme
  - Use of Mfg Generated Test Data

• Report on Action Items
  - Core Element 5

10.4 IECQ and USNC/IECQ

Mr. Stan Salot provided a brief report on the IECQ System and the activities of the USNC/IECQ. His report is provided as ATTACHMENT H. He highlighted the following:

• IEC IECQ Update
  - IECQ Organization Status
  - IECQ Certifications
  - Program/Scheme Development Activities
  - Financial Position
  - 2014 IECQ Management Committee Meeting

• Items of Interest
  - New IECQ Chair elected May 2013
  - IECQ CAS Conformity Assessment/Certification Program

• IECQ Working Groups

• USNC/IECQ Officers

• USNC/IECQ Organization Membership

• USNC/IECQ Joint Project

During discussion, it was agreed that Mr. Salot would make a presentation at the next CAPCC meeting on the subject of Danger to Life and Property – IECQ CAP Wages War Against Counterfeit Components.
11. Occupational Safety and Health Administration – David W Johnson, Director, Office of Technical Programs and Coordination Activities, USDOL - OSHA, Directorate of Technical Support & Emergency Management

Mr. Duffy introduced Mr. David Johnson and welcomed him to address the CAPCC meeting. Mr. Johnson provided an overview of OSHA’s Nationally Recognized Testing Laboratory (NRTL) program which recognizes private sector organizations to conduct safety testing and certification of various products types for use in the workplace. Currently OSHA requires NRTL certification for 39 different product categories with electrical products being the largest of these categories. Mr. Johnson reported that OSHA is currently in the process of updating its program initiating both short and long term initiatives to improve implementation and oversight of the program. He highlighted these initiatives. (ATTACHMENT I)

Mr. Duffy expressed his appreciation to Mr. Johnson for taking the time to be with the Committee today and invited him to return at any time to bring us up-to-date on OSHA and its initiatives.


Mr. Gillerman provided a brief update on the following issues:

- Standards Incorporated By Reference (IBR)
- FedRAMP – The Federal Risk and Authorization Management Program is a government-wide program that provides a standardized approach to security assessment, authorization and continuous monitoring for cloud products and services.
- Revision of OMB Circular A 119
- Cyber Security Framework
- NIST Guidance on Conformity Assessment (On hold until OMB Circular A119 Revision Available)

13. FINCA (Forum of the IEC National Committees of the Americas) (Argentina, Brazil, Canada, Chile, Columbia, Mexico and USA) (Philip M Piqueira, GE, USNC President)

Mr. Piqueira reported on the 2013 FINCA meeting which the US hosted on 4 – 5 September at the American Welding Society in Miami, FL. The 1st day of the meeting consists of discussing and sharing each National Committees positions on the various agendas for the IEC General Meeting, Council, Council Board, SMB and CAB. This year, on the 2nd day, two Panel
Discussions were held, one on Conformity Assessment chaired by Steve Margis and the other, Young Professionals in the Americas was chaired by Jonathan Colby, USNC Young Professional Leader from 2011. Reaction to both Discussions was considered excellent.

Next year’s FINCA meeting is scheduled for Chile, with Chile serving as Host and Secretary and the USNC serving as Chair.

Mr Duffy noted that in the USNC IECEx review and response to Core Element 5 they are already beginning to address regional related issues

14. **CAPCC Task Force on Conformity Assessment Communications**

Chair Duffy reminded the Committee that this Task Force was established at the meeting in Norwood, MA, in August 2012 but it has not, as yet, begun to function. The membership consists of the following with Gordon Gillerman, agreeing to Chair the group and Sonya Bird agreeing to provide liaison to the USNC Communications and Continuing Education Committee:

Gordon Gillerman (Chair)
Tim Duffy
Sonya Bird
Lane Hallenbeck
Joan Sterling
Charlie Zegers
Diane C Thomson, SES (Invited)

Mr. Gillerman noted his intent to have the group meet via teleconference prior to the next CAPCC meeting. He also noted that he was involved in planning a Webinar on Conformity Assessment for the Standards Engineering Society (SES), which is scheduled to take place on Wednesday, 16 April 2014. It is expected to take 2 hours with a ½ hour devoted to Q&A. He asked for volunteers to make presentations on the IEC Systems and Paul Moliski, Tim Duffy and Steve Margis names were offered, Mr. Zegers reported that the USNC C&CEC was also planning several Webinars in 2014 and it might be most effective if the two groups would collaborate and encourage each of their constituencies to participate.

During discussion it was agreed that the group, when it meets, should consider issues such as its scope and the audience that should be targeted for future communications and public relations efforts. The following items might also be considered:

- **USNC CAPCC Conformity Assessment Bibliography**

  Consideration might be giving to the question of whether or not CAPCC should maintain a CA Bibliography. As a related item, Mr. Zegers noted the document “The ABC’s of the U S Conformity Assessment System” developed by Ms. Maureen A Breitenberg, April 1997. Because this document is so highly regarded, he questioned if there was any
intention on the part of NIST to up-date it?

During discussion, it was suggested that the presentation Joan Sterling gave on Conformity Assessment to the SES meeting in Savannah be included. It was suggested that links to the documents in the Bibliography would make it more useful and should be considered.

- **Generic Power Point Presentation on Conformity Assessment**

Mr. Zegers called attention to the presentation given by Mr. Stan Salot as part of the USNC/Costa Rica Workshop in San Jose, Costa Rica in June 2013. This Workshop was part of the Mentoring Program that has been underway for some two years and it resulted from a joint planning effort by both countries. Those involved felt that the program was worthwhile and resulted in concrete benefits for both. In terms of the presentation, the USNC also has a Generic PP Presentation on the USNC and IEC which is available on its Website for contacts who want an overview of the structure and operations of the two organizations. It is felt that a similar overview of Conformity Assessment might be worthwhile. During discussion, it was agreed that this item might be pursued following the SES Webinar in April 2014.

15. **USNC Strategic Objectives Program**

Mr. Duffy reminded the Members of the following Core Element 5 of the USNC’s Strategic Objectives Program which has been assigned to CAPCC.

- **Core Element 5: Coordinating USNC positions on Electrotechnical Conformity Assessment (CA) issues which related to, or impact, the IEC global agenda**  
  **Champion: Timothy T Duffy**

He reported that several teleconferences have been held with the goal of adding specific details to the Strategic Objectives and Action Plans contained in document USNC/CAPCC 58 *(ATTACHMENT J)*. Assignments were made and, as was reported earlier, the USNC/IECEx has already reported the status of several items in the related Objectives. Mr. Duffy prompted a discussion of each of the items and invited additional comments received. He anticipated that a revised Core Element 5 report would be available for the next CAPCC meeting.

16. **Other Business**

16.1 **Affiliate Country Program – ACAS (Affiliate Conformity Assessment Status)**

Mr. Zegers reported that, at the FINCA Meeting in Miami, Mr. Amaury Santos, Manager of IEC’s Regional Center for Latin America, raised the issue of the Affiliate Conformity
Assessment Status. The question is what might the CAPCC due about this subject. Mr. Margis expressed the position that this subject should be given very careful consideration and Mr. Zegers suggested that the USNC Mentoring Program may have a role to plan. The Committee was asked to review the document carefully and to submit any thoughts and comments that may have.

16.2 Future Agenda Topics

Mr. Duffy reminded the Committee that we are always looking for suggested agenda topics for future meetings. Please don’t hesitate to let the Officers know if there are topics that you would like to see on a future CAPCC agenda.

17. Next CAPCC Meeting/Teleconference

It was agreed that the next CAPCC Meeting would be held on Tuesday, 21 January 2014 at the Small Business Development Center, Central Arizona College, Casa Grande, AZ, in conjunction with the next TMC and Council meetings.

18. Adjournment

Mr. Duffy expressed his appreciation to all participants and particularly to Lynne Gibbens and Bill Bryans for being with us. The meeting was adjourned at 3:40 p.m. (EDT)

Respectfully submitted,
Charles T Zegers
General Secretary, USNC/IEC
22 November 2013