2011 Annual Report for the U.S. Technical Advisory Group (TAG)
To ISO 172 Optics and Photonics
TC/SC/WG/PC # and title

Please provide the information requested herein in accordance with the requirements contained in 2.5.5 Maintenance of Accreditation as found in the ANSI International Procedures.

1. TAG Administrator Organization Name: Optics and Electro-Optics Standards Council

2. Scope of the U.S. TAG:

   Standardization of terminology, requirements, interfaces and test methods in the field of optics and photonics.
   This includes complete systems, devices, instruments, ophthalmic optics, optical and photonic components, auxiliary devices and accessories, as well as materials. Optics and photonics are used in the meaning of generation, handling and detection of optical radiation including signal processing.
   Excluded:
   Standardization for specific items in the field of cinematography (ISO/TC 36), photography (ISO/TC 42), eye protectors (ISO/TC 94), micrographics (ISO/TC 171), fibre optics for telecommunication (IEC/TC 86) and electrical safety of optical elements, and general lighting.

3. Please attach current TAG membership list, including: Name, affiliation, voting status, interest category and complete contact information for each member, including the Chair and other officers: Attached, by SC

4. Please provide the definitions of interest categories applicable to TAG members

   General Interest
   Producer
   User/Industrial

5. Meetings:
Dates and locations (domestic and international) of all meetings of the TAG, TC and/or SC that took place in the past year:
- If no meetings were held, please explain:
- Dates and locations of all meetings of the TAG, TC and/or SC scheduled for the upcoming year: See individual SC reports, below

6. If applicable, this confirms the status of Head of Delegation Reports for the past year:
- Not applicable, no international meetings were held
- Reports have already been submitted to ANSI
- Reports are attached
- Reports will be submitted by ____________________________

7. Please list any problems encountered during the past year in the functioning of the U.S. TAG or U.S. TAG Administration, and any areas in which the U.S. TAG Administrator requires ANSI’s assistance. Note: for immediate assistance, please contact ISOT or psa@ansi.org. See individual SC reports, below.

8. Complaints/appeals:
- No complaints/appeals were submitted during this reporting period
- The following complaints/appeals were submitted during this reporting period: the status of each is described below:

- Yes, the results are attached
- No

10. Annual Compliance Forms: A TAG Compliance Form will be issued in January of each year. It must be returned in accordance with the established deadline to confirm that the TAG’s procedures are in compliance with the current edition of the ANSI International Procedures. Overdue Compliance Forms and Annual Reports from previous years, as well as any revisions to the procedures under which the TAG is accredited, are required to be submitted to ANSI as a condition of maintaining accreditation. If you have not already done so, please submit them now to psa@ansi.org.

Certification Statement

I, the undersigned, on behalf of the U.S. TAG to ISO TC 172 certify that the TAG has been operating in a manner that complies with all applicable ANSI and ISO Procedures.

Dave Aikens ________________________
(Name of TAG Administrator)

Executive Director
(Title)

Optics and Electro-Optics Standards Council
(Organization)

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ATTACHMENTS:

ANSI/OEOSC TAG to ISO/TC172/SC1 Annual report for 2011
ANSI/OEOSC TAG to ISO/TC172/SC3 Annual report for 2011
ANSI/OEOSC TAG to ISO/TC172/SC5 Annual report for 2011
ANSI/OEOSC TAG to ISO/TC172/SC7 Annual report for 2011

Excel workbook - Roster of ANSI/OEOSC TAG to ISO/TC 172, by SC.
ANSI/OESC TAG to ISO/TC 172/SC 1 Annual Report for 2011

Prepared by TAG/SC 1 Leader:  Dave Aikens

Number of Meetings Held during 2011:  1

Date:  October 11, 2011
Location:  Okinawa, Japan

Number of Meetings Scheduled for 2012:  1

Date:  October 2012
Location:  St. Gallen, Switzerland

List any significant accomplishments for ANSI/OEOSC TAG/SC 1 this year.

In 2011, SC1 published only one standard, ISO 14997:2011 which was a minor revision to bring this standard in alignment with the new notation standard for surface imperfections, ISO 10110-7. However at the same time, the committee has 17 active work items, many of which are quite substantial. Of these active projects, the US is leading six, and actively participating in another six. More important, perhaps, is that we are continuing to make progress on migrating ISO 10110 and its associated standards to be more applicable to the US optics industry. Of particular note is that the committee is willing to consider adopting parts of the American National Standard OP1.002 for surface imperfections into a new version of ISO 10110-7.

The most important standards projects under way at this time are:

ISO 10110-12/CD Aspheric surfaces. Amendment to add Forbes Q aspheres

ISO/PWI 10110-xx Material imperfections. New part to replace parts -2, -3, and -4 and reconcile with ISO 12123

ISO/PWI 10110-1 General. Major revision to expand notation for system drawings, merge with -10

ISO/NP xx New standard for specifying surface form measurements made by wavefront sensing

ISO/NP 10110-xx New part for the drawing standard for freeform optical surface descriptions
ISO/PWI 10110-6 Centring Tolerances. Major revision to accommodate freeform optics

ISO/NP 10110-5 Surface Forms. Major revision to allow asymmetric tolerances for freeform optics

In the coming year, US led projects are expected to result in five new draft standards at the CD or DIS level, and two new published standards.

List any problems encountered by the ANSI/OEOSC TAG/SC 1 during the year

We have struggled to accomplish our ISO related objectives due to a lack of experts able to devote the time and energy to supporting standards. Because SC1 (and SC3 as well) is not market-led, like many standards committees, but develops fundamental standards, it is very difficult to convince businesses they will benefit from supporting work in this area. Specifically, we continue to lack sufficient representation in the areas of electronic data transfer, environmental specifications and testing, and to a lesser extent optical metrology.

ANSI/OESC TAG to ISO/TC 172/SC 3 Annual Report for 2011

Prepared by TAG/SC 3 Leader: Gordon Boultbee

Number of Meetings Held during 2011: 1

Date: October 13, 2011

Location: Okinawa, Japan

Number of Meetings Scheduled for 2012: 0

Location: N/A

List any significant accomplishments for ANSI/OEOSC TAG/SC 3 this year.

Indicated abstain/no interest in a WG 1 NWIP for a test method for homogeneity of optical glasses by laser interferometry. (It will go forward as a WD anyway.)

Voted affirmatively on a WG 3 NWIP for a test method for refractive index of IR materials, and Dr. Hanssen provided extensive inputs. It will go forward as a WD. Dr. Leonard Hanssen and Gordon Boultbee agreed to participate.

Voted to confirm ISO 9211-3:2008 without changes.
Provided US comments on WG 2 project to ISO CD 9211-4 for Optical coatings — specific test methods. This is a revision to the document and incorporates a draft amendment. The US chairs this project.

The US (JDSU) supplied samples for a comparison test of the cheesecloth abrasion tester pad preparation methodology.

List any problems encountered by the ANSI/OEOSC TAG/SC 3 during the year
As of the date of this report, none of the IR materials suppliers or users who have expressed an interest in participating in WG 3 have joined OEOSC.

It is not a “problem” but TAG/SC 3 should provide the SC 3 Secretariat with information on whether the US would be interested in hosting a joint SC 1/SC 3 meeting in 2013. Currently Japan has agreed to host the SC 3 meeting in Japan in 2013 but the US has agreed to host an SC 1 meeting that year.


Prepared by TAG/SC 5 Leader: Lee Shuett

Number of Meetings Held during 2011: 1

Date: Sept 20-23
Location: NIST Headquarters; Gaithersburg MD

Number of Meetings Scheduled for 2012: 1

Date: September 4-7
Location: Zurich Switzerland

List any significant accomplishments for ANSI/OEOSC TAG/SC 5 this year.

- Four (4) standards were published since the 2010 meeting:
- Three (3) Draft International Standards were under review and two (2) potential new work items were presented by national delegations.
- Four (4) standards are under systematic review;
  - one was confirmed without change
  - three were assigned to working groups for revision at the SC5 meeting
- Five new work item proposals were accepted by SC5 and assigned to WG
  - Microscopes- with digital imaging displays
Microscopes
- Minimum requirements for binocular tubes
- Definition and measurement of illumination properties
- Optical funnel and light guide connector
- Endotherapy devices

List any problems encountered by the ANSI/OEOSC TAG/SC 5 during the year
Due to personnel changes during 2011, SC5 experienced turnover in both the Chairman and Secretariat positions. Since neither of these individuals had prior ISO meeting experience, the SC5 has lost some of its prior efficiency in meeting management and organizational efficiency. This will no doubt recover over time.
ISO/TC 172/SC 7 - Ophthalmic Optics and Instruments

Annual Report for 2011

Prepared by
Charles Campbell, SC7 US Delegation Leader

ISO/TC172/SC7 meetings in 2011

WG3 – Spectacle lenses – project groups met in Clearwater, Florida on June 17, 2011

WG7 - Ophthalmic implants – met in Brussels, Belgium on May 10 through 12, 2011 and in Vienna, Austria on September 15 and 16, 2011

WG9 – Contact lenses - met in London, UK on May 11 through May 13, 2011

WG10 – Devices for dioptric power measurement of lenses – met in Sydney, Australia on May 31 through June 2, 2011

Work of SC7 in 2011

During the course of the year the work of the various working groups, as represented by the documents prepared and voted on, was as follows;

NWIP (New Work Item Proposals) – 1
  WG3 – 1
  WG6 – 2

CD (Committee Draft) - 9
  WG3 agree- 1, agree with comment – 2
  WG6 agree with comment – 1
  WG7 agree -2

8
WG9 agree–2, agree with comment – 1

DIS (Draft International Standard) – 9
WG6 agree – 2
WG7 agree with comment - 1
WG8 agree- 2

WG9 agree with comment - 2
WG10 agree with comment – 1, disagree –1

FDIS (Final Draft International Standard) – 5
WG6 agree - 1
WG7 agree - 4

Systematic 5-year review – 4
WG6 – 2 confirm
WG7 - 1 confirm
WG9 - 1 confirm

It can be seen that the work of SC7 in 2011 includes work at all stages of the standardization process and similar to the activity of 2010. Only 4 issued standards came up for systematic review in 2011, the same number as in 2010.

Work by the various working groups within SC7

WG2 – Spectacle frames – Work, begun in 2007, on a new work item to create a standard for a spectacle frames electronic catalog and identification continued in 2011. This work is being done as a joint effort with WG8. The first part of the International Standard was issued this year.

WG3 – Spectacle lenses – The spectacle lens working group has project groups working on the revision of the International Standards; ISO 8980-3: Transmission specification and test methods, ISO 10322-1: Specifications for single-vision and multifocal lens blanks, ISO 10322-2: Specifications for progressive power lens blanks, ISO 13666: Spectacle lenses – Vocabulary, and ISO 14889: Spectacle lenses - Fundamental requirements for uncut finished. There also project groups working technical reports on Abrasion resistance of spectacle lenses and Short wavelength visible effects. All these project groups held meetings at the Clearwater meeting.

WG6 - Ophthalmic instruments and test methods – The active work in Working group 6 is on the revision of ISO 10938 – which now includes not only visual acuity chart projectors but other more modern methods of visual acuity testing plus an annex on correlating optotypes to the standard optotype – and the revision of ISO 15004-2: Light
hazard protection. In 2011 it was decided to standardize a new class of instruments – optical coherence tomographs – and this work will start in 2012.

**WG7 – Ophthalmic implants** – The working group continues to work on the revision of various parts of the International Standard for intraocular lenses with the view of incorporating requirements for multifocal intraocular lenses and accommodating intraocular lenses – types of intraocular lenses that the current standard does not cover. Based on some reported problems with endotoxins that inadvertently made their way in some IV fluids and subsequently caused some eye inflammation following their use in ophthalmic surgery, the FDA became concerned about the tolerances for endotoxins found on intraocular lenses following manufacture. This issue continues to be under review by the working group.

**WG8 – Data Interchange** – The first part of a three part standard for an electronic catalog for spectacle frames and their identification was issued as an International Standard this year. This work is being done as a joint effort with WG2. The second and third parts progressed through the DIS stage.

**WG9 – Contact Lenses** -

There were 9 project groups with in WG9 in 2011. The United States provided the leadership in 6 of these 9 projects.

4 projects dealt with various matters having to do with contact lens care products. Work continued in the area of care solution compatibility with contact lens materials due to introduction into the business of silicon hydrogel materials. In addition, due to ocular infections involving the acanthamoeba organism, much work has been devoted to devising an appropriate method of assessing the ability of various contact care solutions to provide protection against this disorder.

Work continued on the revision of several parts of the 4 part standard for contact lenses, ISO 18369.

**WG10 - Devices for dioptric power measurement of lenses** – the primary work of WG10, the revision of ISO 8598 – Focimeters. It has been difficult to get agreement on Part 1, which standardizes general purpose focimeters, and second and third Draft International Standard was needed. Although sufficient positive voting were received on the third draft it will be further discussed at the Milan meeting and undoubtedly there will be some changes made before it goes to the Final Draft International stage. The United States disagreed with third draft for several fundamental reasons. In the first place, this draft includes a requirement to calibrate focimeters that are exclusively used to measure contact with a test lens set that is known to exhibit a large amount of spherical
aberration for the higher powers. When this is the case, there is no single definable power for the lens over only reasonably sized aperture and so such lenses are inappropriate to use as standardized lenses to define dioptic power. In the second place, a special test of ability of automatic focimeters to measure astigmatism was incorrectly specified in the draft.

Due to lack of progress, it was proposed at the Sydney meeting to suspend work on Part 2 of the standard – the portion dealing with test lenses for focimeters – and to refer in Part 1 to the two existing International Standards for test lenses for focimeters. The initial plan was to include these standards in the focimeter standard as Part 2 and this would have been comparatively simple had the work been managed in a proper way. But since this was not the case, this consolidation has been delayed until some future revision of the focimeter standard. SC7 subsequently voted to accept this proposal.

It was also proposed at the Sydney meeting to disband the project group formed to create Part 3 of the focimeter standard on special purpose focimeter and to delete this work item thus deleting Part 3 of the standard. SC7 subsequently voted to accept these proposals.

**ISO/TC172/SC7 publications in 2011**

During 2011, 1 new International Standard originating in SC7 was published. It came from the WG8 working group.

**Other SC7 TAG activity in 2011**

Some time in the past Bausch & Lomb, Inc. contacted the ANSI central office directly on a matter associated with their on going difficulties in China with the dioptic power measurement of their hydrogel contact lenses and asked for help in presenting their case to officials in China. This did not come to my attention as leader of the U.S. TAG for ISO TC/172/SC7 until 2011 when Bausch & Lomb made an additional request that a vote be taken to establish the United States position on the calibration of focimeters used for measuring contact lenses. This request was made directly to the administrator of the U.S. TAG for ISO/TC172. It was then referred to Quido Cappelli, who is the sub-leader for the U.S. TAG for ISO/TC172/SC7/WG9 – Contact lenses. Mr. Cappelli was of the opinion that the position of the United States on this matter had been made quite clear at the combined ANSI/TAG meeting for contact lenses just held – an opinion that supported the view of Bausch & Lomb and that no vote was needed. After some discussion, in which I participated, it was pointed out that at the May 2011 Sydney meeting of WG10 dealing with standardization of focimeters the position of the United States had been recorded in writing and distributed to all national bodies via an updated comment sheet on the draft of the focimeter standard. Thus the official United States position was
already established in an official manner. Bausch & Lomb then withdrew their request for a vote and it was decided that the central ANSI office would send a letter to other national bodies pointing out our opposition to the special calibration requirements, the reasons for our opposition and asking them to join us in disapproving of the draft standard. I prepared a statement for the central ANSI office to use but do not know if it was sent to other countries. In the voting on the third Draft International Standard for general purpose focimeters only the United States and the United Kingdom disapproved.

Meetings for 2012

ISO/TC172/SC7, it working groups and project groups, will meet in Milan, Italy on March 12 through March 16, 2012.