

**MINUTES  
CIE Division 3 Meeting**

**8:30 am to 13.00 pm, Friday, March 19, 2010**  
CIE Central Bureau, Vienna, Austria

Abbreviations:

DD – Division Director  
AD – Associate Division Director (/E – Electric Lighting; /D – Daylighting)  
DS – Division Secretary  
DE – Division Editor  
NC – National Committee Representative for CIE Division 3  
TC – Technical Committee  
TCC – Technical Committee Chairman  
TCM – Technical Committee Member (/C – corresponding)  
ToR – Terms of Reference

List of Attachments:

Attachment A: ISO TC163/SC2 Liaison Report  
Attachment B: IESNA Liaison Report  
Attachment C: International Dark-Sky Association Liaison Report

**1. Opening of meeting**

The Division Director, Prof. Jan Ejjhed, opened the meeting by noting that when he started attending Division 3 meetings they took 1.5 days, and now we would accomplish our business in ½ day. He thinks this is a sign of progress.

He introduced Martina Paul, General Secretary of the CIE, who gave a welcome to the Central Bureau (CB). Martina announced that CB is thinking of reducing the amount of its office space, so that this could be the last meeting of D3 in this room. Except in its office space, CIE is growing, for example by adding new Associate National Members (e.g., Taiwan, which would be permitted to be an associate member for more than 2 years [because of the One China policy]). Other countries considering joining are Malaysia and other developing nations. The new subsidiary CIE Scientific Services hosted a successful conference “Lighting Quality and Energy Efficiency” this week, and the plan is to have more conferences like this on similar topics around the world.

**2. Approval of agenda**

Unanimously approved.

**3. Attendance**

The DS circulated a sign-up sheet; and asked whether anyone held a proxy for an NC members who was not present (Lou Bedocs indicated he held the proxy for the UK). The following is the list of people who signed the sheet, with their roles within the division.

<b>Name</b>	<b>Country</b>	<b>Role</b>
Jan Ejhed	Sweden	DD3*
Jennifer Veitch	Canada	NC*, DS3*, TCC3-34, TCC3-46
Martine Knoop	Netherlands	NC*, TCM3-45, TCM3-46, TCM3-48, TCM3-49, TCC3-xx
Peter Dehoff	Austria	NC*; TCM3-46; TCC3-49
Grega Bizjak	Slovenia	NC*
Matej Kobav	Slovenia	TCM3-47
Stanislav Darula	Slovakia	NC*; TCM3-37; TCM3-39; TCM3-49
Anna Pellegrino	Italy	NC*; TCM3-34; TCM3-39; TCM3-49
Fabio Bisegna	Italy	TCM3-42; TCM/C3-46
Peter Thorns	UK	DE3*
John Selander	USA	IESNA Liaison Officer
Leyla Dokuzer Öztürk	Turkey	NC*
Yasuko Koga	Japan	NC*; TCM3-46; R3-13; Liaison to ISO TC205
Christoph Schierz	Germany	NC*; TCM3-46
Yoshiki Nakamura	Japan	AD3/E*
Werner Osterhaus	Denmark	NC*; TCC3-39
Arnaud Deneyer	Belgium	NC*
Lou Bedocs	UK	NC proxy*; TCC3-43; Liaison Officer

\* With voting rights.

#### **4. Apologies for Absence.**

The following individuals had previously sent their regrets at being unable to attend the Division 3 meeting:

Julian Aizenberg, RU; Geoff Cook, UK; Michael Donn, NZ; Dominique Dumortier, FR; Robert Henderson, SA; Erlend Lillelien, NO; John Mardaljevic, UK; Terry McGowan, US; Karen Pero, CA; Piotr Pracki, PO; Jan Petter Skar, NO; Yoshiaki Uetani, JP.

#### **5. Approval of minutes of the Division 3 meeting, June 1, 2009, Budapest**

There were no changes to the minutes. Mr. Bedocs and Prof. Ejhed both commended them as being very complete and very good.

The minutes were accepted by consensus.

#### **6. Division membership changes - welcome new members**

The Division welcomed its two new National Committee representatives and new Liaison Officer:

Michael Donn, NZ  
Werner Osterhaus, DK

John Selander, US — liaison to IESNA

## **7. Division Director and Associate Directors' Reports**

**DD report:** Prof. Ejhed said that we have 13 TCs, 5 on daylighting and 8 on electric lighting, and of these two are to be closed. We have some proposals for new TCs also. He is happy to say that except for the ones to be closed, the TCs are active. This is good for the future; we need to take decisions on how to improve, but overall we have gone through a good period of renewal – closing the inactive groups and creating a platform for new initiatives.

**AD/Electric:** Dr. Yoshiki Nakamura gave a short report:

The CIE conference this week shows the need for and interest in advancing technology; it good timing for us in Division 3 to have a new focus on energy-efficiency, new sources, and wellbeing. LED and OLED attract a great deal of international attention. This attention is mainly because they possibly offer energy efficient lighting in future. Namely new light sources and energy efficiency are closely related. LEDs are realized in some real lighting installations and the frequency of their use will certainly accelerate. Now we should think that LED has proceeded to application stage from trial stage. Therefore it is good timing that we established new TC “Lighting quality measures for interior lighting with LED lighting systems” chaired by Dr. Knoop. However, there are other relevant movements internationally. One is IEA Annex 4E-SSL 2010-2013 “Solid-State Lighting”. The purpose would be “Rating of LED Lighting systems for lowest possible energy consumption and highest possible visual quality for users”. As this would deal with quality of lighting, I recommend a liaison or some connection between the two. Furthermore there might be more activity moving internationally which look like unrelated but actually related to our TC. We should watch every direction.

OLED is just started, so its measurement procedure would be of great importance now at the first stage but will soon move to next stage, application. We should prepare for it.

Energy-efficiency is not about hardware only, but about better planning of entire luminous environments. Therefore we need to focus on integration of daylighting and electric lighting in lighting design. To integrate them we should establish lighting design procedure applicable to different adaptation level. The activity of TC 3-45 may give some suggestion.

Lighting for well-being is dealt with TC 3-46, but may take attention to energy saving lighting. The minimum lighting levels that would be pursued for energy savings, might lead to deteriorated well-being.

**AD/Daylight:** Dr. Dominique Dumortier

Dr. Dumortier, with regret, wrote in advance to express his wish to resign the position of Associate Director – Daylight, effective at the Vienna meeting. His research and teaching responsibilities prevent him from having time to perform well this volunteer task.

*Moved [Knoop/Bedocs]: That Division 3 express its thanks to Dr. Dumortier for his years of service to Division 3 in this role. Unanimously agreed.*

*Action item: DS to write a letter of thanks to Dr. Dumortier.*

Prof. Ejhed commented that D3 is the only CIE division that considers daylighting. He thinks this is a very important part of D3 and needs further development. We need to take new initiatives in this field, especially to consider the integration of daylighting and electric lighting. This is not to forget the scientific work on daylighting but we need further daylighting application work.

Mr. Dehoff asked “How do we make sure we can achieve input into energy-efficiency and standards?” CIE is not really active here, but we need to figure out how to do it. Ejhed replied the tradition is to have a reportership and then a TC, which is logical but slow. It helps to have a focused TC so that it can complete its work and then move on. (See below for later discussion on this topic.)

### **8. Division Secretary’s Report**

DS 3 reported: During December 2009 –January 2010, Division 3 conducted an e-mail ballot to vote on two motions regarding TCs. Both passed, as has previously been announced to the Division. They are recorded below. Both were approved by the Board of Administration at its meeting 2010-Mar-13 in Vienna. The motions were:

#### **Motion 1 Revision to Terms of Reference for TC 3-48**

Moved (Thorns/Veitch) — PASSED

That the Terms of Reference of *CIE TC 3-48: CIE standard method of UF table calculation for indoor luminaires* be modified to say the following (new text to be added shown in bold underlining):

*Terms of Reference:* To produce a CIE standard **methodology** for the calculation of utilization factor (UF) tables for indoor luminaires.

Rationale: The committee members believe that a standard should be written by representatives of national standards bodies. Most members of this TC are experts, but are not official representatives of national standards bodies. Therefore, they propose this change to their Terms of Reference to clarify their intent for the result of their work.

#### **Motion 2 — Proposal for a new TC on LED lighting systems**

Moved (Knoop/ Veitch) — PASSED

That CIE form a new TC in Division 3, described as follows:

TC 3-XX: Lighting quality measures for interior lighting with LED lighting systems

Terms of reference:

- To review relevant CIE publications and standards to evaluate the suitability of existing lighting quality measures when applied to tertiary (commercial) interior light-emitting diode (LED) lighting systems. To identify the gaps and weaknesses in existing quality measures, exhibited in one of two ways: either the criterion is valid, but the evaluation method is not (e.g., colour rendering) or a new criterion needs to be taken into consideration (e.g., overhead glare, binning).
- To prepare a Technical Report, which will include the findings of the review and recommendations for new lighting quality measures and evaluation methods. as well as suggestions for new research if appropriate quality measures and evaluation methods are missing.

A close cooperation is foreseen with TC1-69 “Colour rendition by white light sources,” Division 2 (New TC on LED and SSL terminology?) and TC4-47 “Application of LEDs in transport lighting and signalling”.

Chair:  
Martine Knoop (NL)

Initial members:  
Karin Bieske (DE)  
Peter Dehoff (AT)  
Naoya Hara (JP)  
Terry McGowan (US)  
Etsuko Mochizuki (JP)  
Peter Thorns (UK)

Corresponding members:  
Peter van der Burgt, Wendy Davis (Div 1, TC 1-69)  
Janos Schanda (Div 2, TC on LED and SSL terminology)  
t.b.d. (Div 4, TC 4-47)  
Erhan Dikel (CA)

## 9. Technical Committee Updates:

*TC 3-25 Co-ordination of the IDMP and its data (D. Dumortier)*

*From the Budapest minutes: Action for DS/DD3 : Ask the BA to consider the creation (if necessary) of a formal mechanism for the creation and maintenance of ongoing activities like this one.*

DS reported: I contacted the BA. It is OK to have a TC that is ongoing; it doesn't produce a report but does produce a database.

TCC reported by e-mail: The IDMP web site can still be found at <http://idmp.entpe.fr>, it is a piece of history, also regarding web standards! I have tried to update the list of the running IDMP stations and to gather all the measurements made by the IDMP stations. This has been a time consuming task because people have left and many of the sites do not publish their data on the web. You need to keep bothering people to get information and data.

In the European project MESOR, we used some of the IDMP station measurements that I could obtain to validate estimates from satellite images, but we do not have all the data that has been produced by the network.

ENTPE IDMP station should include spectral measurements this year (<http://idmp.entpe.fr/vaulx>). For radiation measurements, there is a network similar to IDMP which is called Baseline Surface Radiation Network (<http://www.gewex.org/bsrn.html>).

We need someone with time to manage the network, get in touch with new people measuring daylight. I have done it in the past but I cannot do it anymore.

Given Dr. Dumortier's resignation, there was discussion about how to identify a new TCC. No one wants this activity to end. Prof. Darula suggested that Prof. Norio Igawa of Osaka City University might be suitable. He has recently established an IDMP station. Although he will retire in 3 years he has younger colleagues who might take over. Dr. Koga agreed. She will contact Prof. Igawa to talk about it and will copy info to the DS and Dr. Darula.

*Action: Dr. Koga to contact Prof. Igawa. DS to run an e-mail ballot if Prof. Igawa agrees.*

*TC 3-34 Protocols for describing lighting (J. Veitch)*

TCC reported in person: Final revisions are underway. The document will go to TC ballot very shortly. This has taken longer than expected for personal reasons and because the document is very long, but this really is the last stage.

*TC 3-36 Use of satellite images to derive daylight data (D. Dumortier)*

TCC reported by e-mail: I recommend that we close this TC. This task has been linked to the IEA Task 36, "Solar resources". I thought we could investigate and validate new methods to derive daylight information from the satellite images: for instance a direct method combining  $V_{\lambda}$  and spectral irradiances produced by an atmospheric model fuelled with information derived from the satellite: not only cloud cover but also aerosol and water content. We had begun to work on this within the European Heliosat-3 project. Unfortunately, I was about the only one within the IEA Task to be interested in the method and in daylight information. Since IEA money has been scarce, it has gone to further validation of solar radiation databases from satellites and to the development of solar radiation forecasting methods. This means that the only way to obtain daylight information from satellite images is still to apply a luminous efficacy model on the solar radiation derived from the satellites. This is what has been done for the SATEL-LIGHT server ([www.satel-light.com](http://www.satel-light.com)). It has been documented and reported by Yasuko Koga in the report which preceded the creation of this TC.

Moved [Koga/Osterhaus]: That TC 3-36 be closed, as recommended by the TCC. Unanimously approved.

*Action: DS to inform CB and TCC of this decision.*

*TC 3-37 Guide for the application of the CIE general sky (D. Dumortier)*

Dr. Darula reported that he had (as he had promised in Budapest to do) attempted to contact Dr. Dumortier to encourage him to take up the work again. He got no reply from Dr. Dumortier.

On March 10, 2010, the DD3 wrote to the TCC to inform him that this TC would be closed at the Vienna meeting, as had been decided in Budapest.

The TCC replied by e-mail that he thinks that the committee has done good work that is very close to completion, and that it would be unfortunate to close it when it is so close to being finished.

Prof. Ejhed recommended at the meeting that we close this TC but then later we will open a new TC based on this.

There was discussion about why we wouldn't just replace the TCC. Prof. Darula explained his attempts to contact the TCC and others involved but got no responses. He said that we need new TC members – these ones are not engaged. There have been some changes over time so that the existing text could be used, but the final result is not going to be quite the same as originally envisioned.

Prof. Ejhed said that in view of all this, we need to start over with new ToR and new members, and also we need to follow through on our Budapest decision. It would be better to close this one and start fresh.

Mr. Bedocs thinks that closing the TC is messy. He thinks that it is slower to start a new TC, and that instead we should just change the TCC so as not to lose the material that has already been produced.

Prof. Ejhed says that Prof. Darula would be the link to ensure that the old material won't be lost.

*Motion [Veitch/Bizjak : That TC 3-37 would be closed, and the material moved to a new TC (to be created). In favour 8 / against 0 / abstain 4. PASSED.*

*Action: DS to inform CB and TCC.*

*TC 3-39 Discomfort glare from daylight in buildings (W. Osterhaus)*

TCC reported in person: The committee met in Vienna. It has a document that sets out the goals for a design guidance document, but the group cannot do the full thing that they had planned. They want to change the ToR for this TC so that they produce one report only, by 2011, and then later they will request a new TC with the part that they are cutting out now.

Mr. Bedocs commented that they (UK) were hoping for some recommendation for how to estimate daylight glare and they are disappointed that they won't get it in this report in time for their upcoming daylighting standard. A measure or formula or prescriptive solution, delivered quickly, is what they wanted "a daylight UGR". Dr. Veitch commented that she likes the proposal because it might allow the TC to complete its work rather than dragging on further. Prof. Ejhed agreed, it's important for things to be

coming out. Mr. Bedocs commented that we have to live with that situation, but we do need to develop tools even if they are temporary – to do more than just say “daylight is important”. Prof. Osterhaus said yes, it’s frustrating for him too. Prof. Ejhed commented that CIE TCs don’t do research, they summarize what is known. What is lacking is the research material for a good standard on this topic – the research itself isn’t going to come from CIE itself.

Mr. Bedocs said that the opening sentences of the existing ToR would likely do what he wants. Prof. Osterhaus said yes, that is the idea. However, Mr. Bedocs also wants a ranking or evaluation of the discomfort glare assessment methods. After discussion, a motion was voted:

*Moved [Osterhaus/Veitch] that the ToR be changed as follows (new text underlined, text to be removed is in strikeout):*

*To review existing discomfort glare assessment methods with respect to their suitability to daylight glare. To identify strengths/weaknesses and threats/opportunities in these existing methods. To make a recommendation on a provisional method for daylight glare assessment. To identify additional parameters that might influence the perception and assessment of discomfort and glare from daylight. To develop proposals for possible research directions and projects suitable to advance the understanding of these parameters. ~~To propose guidance document directed towards the building industry (architects, lighting designers, etc.) and property owners/users on how to avoid discomfort glare from daylight (deliverable). Depending on funding, propose potential alternative assessment methods for discomfort glare from daylight (possible deliverable).~~*

Unanimously approved.

*Action: DS to inform CB and to ask for BA to approve this change.*

*TC 3-42 Indoor work space application guide (K. Pero)*

The TCC reported by e-mail that she is still in the early stages of re-forming the committee and assigning tasks. She welcomes expressions of interest from individuals with a genuine commitment to contributing to the writing of the guide.

*TC 3-43 Determination of discomfort glare (L. Bedocs)*

TCC reported: There was no meeting of TC 3-43 since the last plenary but I hope members having received my last report are aware of developments. Progress, however, has been made with the new draft. Following the discussions between the TC3-43 Chairman, Div 3 Officers, CIE VP Technical and Publications and the CIE Technical manager on the 27<sup>th</sup> May 2009 a way forward on the possible publication of this work was agreed. The main request was to recast the standard as a Technical Report. All the content has been preserved and the Geometric Factors borrowed from the CEN standard have been replaced with new calculated values. These factors for

each glare room and luminaire arrangement are now based on data from CIE reports 40 and 52. The draft report was sent to the Technical Manager on the 17<sup>th</sup> December 2009 but due to excessive demand on his time for the CIE March 2010 conference no progress was made till end of Feb 2010. Some further technical and editorial queries have been raised by the TM and these are awaiting my action. This report is having a very difficult birth but I hope that one day this valuable report will reach the outside world.

*A later discussion resulted in a change to the ToR of this TC -- see below.*

*TC 3-44 Lighting for older people and people with visual impairment in buildings (G. Cook)*

TCC reported by e-mail: Following my summary report of May 2009 there has been no progress on any of the work of the TC, although there has been some communication regarding the CIE *Guidelines on accessibility* and I have been asked to review a section of the draft guide when that becomes available.

The main reasons for this lack of progress are my extensive involvement in the authoring of two UK standards publications. The first is the authoring of BS8493: 2008 *Light Reflectance Value (LRV) – Method of test*. The second is my involvement in the authoring of BS9300: 2009 *Design of buildings and their approaches to meet the needs of disabled people* which was published around a year ago. Both of these standards have initiated another working group which is addressing the needs of people who are disabled when using the external environment. This work is ongoing and is taking up some of my time. In addition I am considerably involved in the review of ISO 21542 *Building construction – Accessibility and usability of the built environment* which is being carried out by BSI. This work is at the review of UK comments stage and this is going to occupy me through all of next week (the week of March 15, 2010), which explains why I cannot be at the Vienna meeting.

From the activities described above it has become clear to me that I am unable to make the necessary contribution to the work of TC3-44. It is unreasonable to expect Division 3 to continue to recognise a contribution which is not making the required progress. Therefore, and with some regret, I wish to step down from that role. I am prepared to operate as a communicating member and make what contribution I can.

This work is of real interest to several members of Division 3 and it is hoped that someone would come forward to lead the TC. I offer my apologies to the Division for not being able to lead this work to a successful conclusion.

DS added: Dr. Yukio Akashi has volunteered to take over the Chairmanship of TC 3-44.

*MOVED [Pellegrino/Bedocs]: That the TCC of 3-44 be changed from G. Cook to Y. Akashi. Unanimously approved.*

*Action: DS inform CB and ask for BA approval; also inform Drs. Cook & Akashi.*

*TC 3-45 Luminance based design approach (Y. Nakamura)*

TCC reported: I distributed the first draft of the report, and we discussed it 18<sup>th</sup> March, with 6 members. The report is 90% complete. According to the discussion the previous day, I will edit the report and get the draft out in 2 months to the TC-S (P. Thorns) for editing in English. Their next meeting will be in Sun City and he hopes this will be the last meeting.

*TC 3-46 Research Roadmap for Healthful Interior Lighting Applications (J. Veitch)*

TCC reported: The TC met in Vienna on March 18, with ~ 5 members and observers. We have established a liaison with the CEN TC169 ad hoc working group, and its leader is now a member of this TC. At the Vienna meeting, we discussed the outline and fleshed out its contents. In the coming weeks we will assign writing tasks to TCM (by e-mail to include those who were not present in Vienna) with the aim of having a complete draft for Sun City. In addition we want to hold a joint D3-D6 workshop there to discuss the contents.

*TC 3-47 Climate-Based Daylight Modelling (J. Mardaljevic)*

TCC reported by e-mail: The committee met twice in 2009, in May at the VELUX symposium and in September at Lux Europa. They have had several teleconferences that have advanced the work, which overlaps with a project by the US-based consultants Heschong Mahone daylight metrics. TC members have been adding material to the TC wiki, and a teleconference for the TC will occur shortly.

*TC 3-48 CIE standard method of UF table calculation for indoor luminaires (P. Thorns)*  
(Note above re: revision to the ToR for this TC.)

The TC met in Vienna, and discussed the initial document, which details the calculation methodology to produce UF values. Whilst most of this is standard algorithms this does give a common basis for discussion. Specific issues they discussed were:

- The information to be in the final document. E.g. methodology plus tables of pre-calculated factors plus ....?
- The criteria for placement of luminaires for varying SHR values when producing the UF table. The also has implications on whether this calculation methodology will produce values that agree with other UF calculation systems

These issues were resolved in Vienna. They hope to have completed the 1<sup>st</sup> draft by their Sun City meeting, as planned. The small changes required can be quickly resolved after that.

*TC 3-49 Decision Scheme for Lighting Controls for Tertiary Lighting in Buildings (P.*

*Dehoff)*

TCC reported: TC 3-49 was founded 2009 during the Budapest meeting of CIE. It has about 20 members.

The TC had held a short meeting during the Lux Europa conference in Istanbul (Sept 2009) with almost all members. The target of the TC work was agreed:

- Offer guidelines in order to balance lighting quality, user comfort and energy efficiency in lighting controls solutions for tertiary lighting in buildings (i.e. for commercial, institutional and industrial buildings).
- Work on a decision scheme with focus on the user requirements (visual comfort, performance, personal control) to determine the most applicable control solution, including the consequences for possible savings. In this, it needs to be assumed that there are no technological or financial hurdles.

The first phase of work: Input on all lighting control strategy (literature, influential parameters, ...) from the majority of committee members. The main topics of interest among the committee members seem to be daylight harvesting and personal control.

The first official meeting was March 18, 2010 in Vienna. 26 people are interested at varying levels. Material has been collected from members and some thoughts have been developed on a decision scheme; these were reviewed at the meeting. They have expanded their list of information wanted for the document. There will be a meeting, maybe by WebEx, in autumn 2010 so that there can be an interim report for Sun City. Final report date not set, but they want it to be quite fast and hope to be done by 2012.

Prof. Ejhed commented that it's good that so many are interested but one has to be careful to encourage people to be really active. Mr. Dehoff noted that many of the members seem to be really committed to doing things – even if it's difficult to handle so many kinds of inputs. Prof. Ejhed commented on the value of having worldwide participation. Mr. Dehoff agreed, and noted that they had no Asian members – but Dr. Koga volunteered to be a corresponding member on the spot. She can probably provide some information.

*TC 3-xx Lighting quality measures for interior lighting with LED lighting systems (M. Knoop)*

The BA approved the TC only last Saturday, March 13. There was an informal meeting of 4 people on March 16, and a workshop at the conference on March 17 as a start. TCC is making contact with Dr. Fontoynt's IEA task also, and looking for other links to be made. She plans for a first draft next year in Sun City.

## **10. Reportership Updates**

*R 3-13 International Lighting Vocabulary (Y. Koga)*

Board Ballot for DS 017.1/E:2009 "ILV: International Lighting Vocabulary" was conducted from 23 April to 23 July 2009. There were some comments submitted by Division 3 representatives and for a discussion in collaboration with VPT Janos Schanda and VPP Teresa Goodman, a WebEx meeting was held on 5 October 2009.

CIE DS 017.2/E:2009 "ILV: International Lighting Vocabulary" (draft for NC comments, official version) was published in December 2009. The front cover of the

draft standard says that NC commenting begins on 2009-12-01 and ends on 2010-06-01. NC voting should follow.

*R 3-24 Overhead Glare (T. McGowan)*

The report was received shortly after the Budapest meeting and was circulated to the Division. Discussion of whether or not to open a new TC will occur under “Future work”, below.

*Moved [Knoop/Ejhed] to close R3-24 and express thanks to the reporter. Unanimously approved.*

*Action: DS to inform CB.*

*R 3-28 Lighting requirements for night-shift workers (M. Knoop)*

Dr. Knoop reported that she had sent material to TCC 3-46 for that report. She feels it's too soon for lighting requirements to be set for most applications. The reporter is following work of TC 6-63, which is only really getting under way, but she thinks that the R 3-28 work is done. Dr. Veitch commented that she hadn't understood that the material she received was to stand as the report for R3-28, therefore she had not circulated it.

Prof. Osterhaus said it's important for a reportership to set out requirements for what's needed – within our understanding. Not to answer the questions.

Dr. Knoop said she will try to have a final report for Sun City and then consider how to wrap up the reportership. Mr. Bedocs thinks she has already done her work and wants to see her report and have the reportership closed.

*Action: Dr. Knoop will send the material to DS again, for circulation to the Division.*

## **11. Liaison Officers' Reports**

Prof. Ejhed observed that there is a new CIE set of guidelines for Liaison Officers, which he will circulate.

*CEN TC169 – Light and Lighting – L. Bedocs*

The next plenary of this TC will be on 11/12 Oct 2010.

The production of standards is devolved to the 11 Working Groups and below is a brief status report on current activities.

WG1 – Terms and Definitions – The enquiry on the revision of EN12665 was completed, comments dealt with and plans for final vote being made. Some definitions of terms in this standard will not be the same as in CIE17.

WG2 – Lighting of work places – The enquiry on the revised EN 12464-1 was completed at the end of Feb 10 and the WG is meeting to review the public comments at the end of March 2010.

WG3 – Emergency lighting – Started the revision of EN 1838 and will include the ISO safety signage formats. Also mandated to develop guide on emergency lighting activity areas and required actions during emergency in line with the CP directive

WG4 – Sports lighting – Reviewed the FIFA handbook and produced report listing the conflicts with EN 12193 and the consequences are to be raised with FIFA

WG5 – Road lighting – The JWG TC169/226, commenced the revision of all parts of EN 13201. Also formed a TG to deal with energy efficiency measures in road lighting

WG6 – Tunnel lighting – Stopped work on tunnel lighting standard and started on evacuation lighting needs of tunnels ( for over 500m we have mandate by Directive)

WG7 – Photometry – The draft on photometry tests with T5 lamps is cleared by WG and being prepared for CEN enquiry, the work on light meters awaits CIE TC 2-40 results, the angular spacing in goniophotometry will be dealt with in the revision of EN 13032-1 and will also cover the special conditions for photometry of LEDs.

WG8 – Exposure to incoherent radiations – The pre-work on non-electrically created radiation emission is complete and commencing work on standard. The proposal to offer the CEN standards for ISO or CIE adoptions so far failed.

WG9 – Energy requirements for lighting in buildings – The corrections required to table F1 in English and French versions is out for comments and TC agreed to publish it as addendum. New work requested by Germany to link the  $P_N$  calculation to illuminance and new annex on “responsive facades” is under consideration.

WG10 – Characterisation of optical materials – the pre-work on “Performance of reflecting surfaces for luminaires” is complete and started drafting the standard.

WG11 – Daylighting – The new WG formed to harmonise the various daylighting standards now in use with EU member states.

Mr. Bedocs highlighted the above new WG. Two groups are locked in debate: those who like the old metrics and those who like climate-based modelling. The aim is to have a harmonized standard across Europe.

#### *ISO/TC159/SC4 – Ergonomics of Human-System Interactions – L. Bedocs*

The main activity is in updating of the multi part standard ISO 9241 dealing with hardware and software components of interactive systems is continuing.

A new liaison will be needed as Mr. Bedocs will retire in 2011. This group deals with display screens among other issues.

Mr. Dehoff asked what other ISO committees deal with lighting. Mr. Bedocs remarked that ISO has others, but no single committee deals with lighting. It is subdivided – e.g., see TC159/SC5 and TC205 WG7.

#### *ISO/TC159/SC5 – Ergonomics of the Physical Environment – L. Bedocs*

Progressing of the standards development for Integrated environments and Environments for people with special requirements is on going

ISO/DIS28803 is out for voting; it includes lighting for people with visual problems, drawn from another ISO document. If you are interested, contact your ISO NC for

copies. It will be parallel voted in CEN so for Europe it will be important as it will become mandatory.

*ISO TC163/SC2 – Thermal performance and energy use in the built environment / Calculation Methods (Daylight) -- Y. Uetani*

See attached document, Attachment A.

Prof. Darula updated the information to say that there is a working group dealing with dynamic fenestration led by Jan deBoer, just starting. Dr. Deneyer said that there is some disagreement with his methods, so there's active interest in this area and people are debating these issues.

We all commented that we need to understand these issues and organizations better, because the information these groups are working on need to be coordinated with our activities. Mr. Bedocs commented that we have a policy issue – we need to understand better how things are working. As a general thing CIE might do better to work on joint committees with ISO to develop standards rather than to just pass documents along and expecting ISO to adopt them. We need better coordination.

Mr. Dehoff commented that it's an urgent matter to have better connections to ISO and more information than short reports from the specific liaisons. Within CIE we also need a stronger energy efficiency expertise.

*Action: DD3 to engage with VP-Standards to communicate that we need a better cooperation with the relevant ISO committees. This needs to be more structured*

*ISO TC205/WG7 — Indoor Visual Environment — Y. Koga*

ISO TC205 is creating a system of International Standards to address the built environment. The main areas of work covered by ISO TC205 are: (1) design of energy-efficient buildings, (2) building control systems design, (3) indoor air quality, (4) indoor thermal environment, (5) indoor acoustical environment, (6) indoor visual environment.

They held a meeting in Kyoto from 17 to 19 November 2009. They have confirmed liaison relationships and appointments of liaison officers including liaison with CIE. Dr. Yasuko Koga was appointed liaison officer between ISO TC205 and CIE at Delft Meeting (10-12 November 2008). [DS: Division 3 confirmed this in Budapest in 2009.]

ISO TC205/WG7 "Indoor Visual Environment" has just finalized ISO/CD 16817 "Building environment design - Indoor environment - Design process for visual environment". It will be put to a ballot shortly in ISO TC205. The document has no numerical criteria for lighting but references CIE documents. YK will circulate it for comments via the DS to coordinate comments.

The next meeting of ISO TC205 will be held in Sydney from 15 to 17 November 2010.

*Action: Dr. Koga to send document to DS for circulation to D3 members, and Dr. Koga will coordinate reactions on behalf of the Division.*

*Illuminating Engineering Society of North America – J. Selander*

Prof. Ejhed welcomed Mr. Selander as our new official liaison officer. Mr. Selander is also only the 2<sup>nd</sup> formally appointed IESNA Board liaison officer to an outside society. This is something the IESNA is doing more of (the other is with ASHRAE, the American Society of Heating, Refrigerating and Air-Conditioning Engineers). See Attachment B for Mr. Selander's written report. Highlights: IESNA is hiring a public policy director to coordinate legislative issues for USA, Canada, and Mexico, as it's been noticed that IESNA is not having the influence it thinks it should have. Not that the society will do any lobbying but that it wishes to raise the profile of lighting issues in these countries.

Prof. Ejhed commented that there is a lot of parallel activity in the CIE and IESNA, important to have cooperation to prevent wasted volunteer effort. Mr. Selander offered to circulate his document on IESNA publications, for circulation to D3 members. Mr. Selander also had begun to talk with CIE-P about other ways to engage the two organizations.

There was some discussion concerning the possibilities of linking to the energy expertise that exists within IESNA, as a way to expand that expertise within CIE. (Note that IESNA has a joint committee with ASHRAE that establishes lighting energy limits for North America, ASHRAE/IES 90.1 – an example of what CIE might try to do with ISO.)

*Action: DS to get documents from Mr. Selander and circulate them.*

*International Dark Sky Association: T. K. McGowan*

The DS read extracts from Mr. McGowan's written report (Attachment C), and recommended that individuals contact Mr. McGowan if they have any comments.

*Professional Lighting Designers' Association – J. Ejhed, informal.*

*From the Budapest minutes: Action for DS :Follow up with CB to find out about a permanent liaison officer*  
DS reported: I spoke yesterday with Martina Paul. CIE and PLDA have had a Memorandum of Understanding since 2008. They are in regular contact and hold coordination meetings. Giorgio Passidis (Greece) is the official PLDA liaison to CIE, but how that will work with the individual divisions is not yet clear.

*International Association of Lighting Designers – Awaiting new liaison officer.*

*From the Budapest minutes: Action for DS :Follow up with CB to find out about a permanent liaison officer*  
DS reported: I spoke yesterday with Martina Paul. CIE has asked IALD to have a MoU and Ms. Paul had a telecon with them, but there is as yet no concrete outcome.

*Society of Light and Lighting – (G. Cook, informal)*

Mr. Bedocs reported verbally that 2009 was a big year as the SLL centenary. Two books were published, one being a handbook – SLL was pleased that IESNA reviewed

it in LD+A. The second was a history of lighting in the UK (also reviewed in the IESNA journal *Leukos*, and an article published there). The big issues in the UK are LED matters, for which there is a broad Lighting Forum UK to agree on a simple specification for selecting and specifying LED systems, to end the use of unverifiable claims. They want to set out the information that designers should specify from suppliers. The draft version is available on both the SLL and Lighting Industry Federation web sites. SLL will revise the Lighting Code for publication in 18 months as a book and as a CD. They are also planning the next SLL technical conference likely in Cambridge in 2012, April or September. Look to the web site for recent publications. A lighting guide for daylighting is a major topic of attention right now.

Prof. Ejhed noted positively the importance of daylight in the SLL. Mr. Bedocs said there is a law requiring daylight access but is worried about the energy requirements making good daylighting hard to achieve.

DS reported that she had suggested to CB that it would be helpful to have a formal liaison arrangement with SLL and IEIJ, as for IESNA, and Ms Paul agreed to look into it.

*Action: DS to provide contact information for SLL and IEIJ to CB.*

*Illuminating Engineering Institute of Japan (IEIJ): Y Nakamura, informal.*

The international LED lighting fair was held prior to their conference, with big attendance.

The following new research committees related to Division 3 have been established in the IEIJ.

- (1) Preparation committee for IEIJ standard on effect of light on bio-clock
- (2) Research committee on visual effects of LED illumination
- (3) Research committee on OLED illumination guideline

*World Meteorological Organisation (WMO) – None.*

*From the Budapest minutes: Action for DS: Follow up with CB to find out about the possibility of establishing a liaison officer.*

DS reported: I spoke yesterday with Martina Paul. She said that invitations and requests to the WMO to become a partner for CIE 2010 were never answered. However, Ann Webb is our contact person there as being Chair of one of its scientific committees.

*International Energy Agency*

*From the Budapest minutes: Action for DS: Follow up with CB to find out about the possibility of establishing a formal liaison with the International Energy Agency.*

DS reported: I spoke yesterday with Martina Paul. A liaison to the IEA (Energy Conservation in Buildings and Community Systems (ECBCS) Programme, [www.ecbcs.org](http://www.ecbcs.org)) is in development via Liisa Halonen & Marc Fontoynt. However, it will probably be more efficient to go through the ExCo chairman of that group, Dr. Morad Atif, who is the Director of the research group in which the DS works.

*Action: DS to follow up on MoU and put Dr. Atif in contact with Ms. Paul.*

*World Health Organization:*

*From the Budapest minutes: Action for DS: Follow up with CB to find out about the possibility of establishing a formal liaison with the World Health Organization.*

DS reported: I spoke yesterday with Martina Paul. There has been no progress on this. Martina Paul will follow up.

**12. Review of Division 3 publications (Review of items from 2009)**

CIE #	Title	Year	2009 Status / Suggestion	2009 Comments and Decisions	2010 Update
49	<p><b>Guide on the emergency lighting of building interiors</b>                      DE: Publication out of date with respect to numeric values and terminology quoted in CIE S 020/E:2007. Suggest making this publication obsolete as most information is present in the standard. (Only noticeable absence is the brief section 8 on maintenance.)</p>	1981	DE: Withdraw	<p>Dr. Veitch asked whether we know enough to decide the question today. Mr. Bedocs confirmed that CIE 49:1981 is in conflict with S 020/E:2007.</p> <p><i>Action: DD3 and AD/E to review and make recommendations for action.</i></p>	<p><i>Response:</i> DD3 and AD/E agree that this guide should be withdrawn and a new one prepared. In that case, we would need to form a new TC with a TCC who is committed to completing the task in a timely way.</p> <p><i>Moved [Bedocs/Osterhaus ] to withdraw this publication.</i>  <i>Vote: unanimous. Action: DS. inform CB.</i></p> <p>AD/E commented that the work in this area should be coordinated with TCs in Divisions 4 and 5. LB commented that he was involved in its creation; it's a guide, vs the D5 output which is a standard. the question for a new TC is what its type of output should be. A new TC should (he thinks) retain the guidance bit. It perhaps be included as a component of the TC 3-42 report.</p> <p><i>(Action: DS pass this request to TCC 3-42.)</i></p>

<p><b>97/2</b></p>	<p><b>Maintenance of indoor electric lighting systems</b>          This document has been recently updated and is an invaluable reference for the calculation of maintenance factors for indoor schemes. Widely referenced by other documents it can be kept as is.</p>	<p>2005</p>	<p>DE: Keep as it is</p>	<p>DS pointed out that she had received information from Mr. Stockmar about an error. Mr. Zwick said that an erratum page can be produced, and Mr Bedocs (who chaired the TC that wrote the report agreed to this.</p> <p><i>Action: DS to talk to Peter Zwick about this.</i></p>	<p><i>Response:</i> Mr. Bedocs has agreed to produce an erratum page, but will not have time to do this work until the publication of the report from his TC 3-43 (in the next month or so).</p>
<p><b>108</b></p>	<p><b>Guide to recommended practice of daylight measurement</b>          This is a valuable document helping ensure consistency in daylight measurements. As the IDMP has been ongoing for ~15 years the document should be checked to ensure it still reflects current practice, perhaps via a reportership</p>	<p>1994</p>	<p>DE: Keep but check contents still correct</p>	<p>Dr. Darula commented that there are other ways people do daylight measurement. DE added that although one can buy the document, the diskette seems to have been withdrawn.</p> <p><i>Action: DD3 to ask Dumortier to look at this – maybe if he thinks it should be changed we will need to find someone to do it.</i></p>	<p><i>Response:</i> Dr. Dumortier reported: The CIE guide 108-1994 should indeed be updated. I would remove the parts regarding data formatting which have not been followed by many of us and are outdated. The quality control procedure is important, we should keep it and see if it can be improved in some ways based on our experience.</p> <p>Consider forming a new TC for this.</p> <p><i>Action: Dr. Darula will contact Prof. Igawa as a possible TCC for this new TC. If he agrees, they will develop a ToR for e-mail ballot.</i></p>

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117	<p><b>Discomfort glare in interior lighting</b> This document needs updating to harmonise with the output from TC 3-43. A way forward would be for CIE 117 to contain the theory and background to the UGR calculation and a second document contain the practical application of the UGR method for both 1:1 and 1:0.25 SHR. CIE 117 could perhaps take in useful content from CIE 55 and CIE 55 could then be deleted.</p>	1995	<p><b>DE: Update if possible but keep</b></p> <p>Mr. Bedocs says 117 could be split into two parts easily and integrated with the output of his TC 3-43. Could also depend on the results of TC 3-47. Who would do this? Mr. Bedocs could try it after finishing TC 3-43, with input from Kevin Poulton of AU who chaired the TC that produced 117. DE commented that ISO 9241-307 and S 008 link to this through UGR.</p> <p><i>Action: Discuss with DD3, DS, etc. and produce ToR for later e-mail ballot.</i></p>	<p><i>Response: Mr. Bedocs is considering this task, but real progress awaits the publication of his report from TC 3-43.</i></p> <p>A conflict will exist with 117 when the output of TC 3-43 will be published. Maybe this could be handled by an 'erratum' approach to modifying 117-1995.</p> <p>LB suggested a change to the ToR of TC 3-43 to add a task to review &amp; modify CIE 117-1995 to resolve any conflicts with its new publication.</p> <p><i>Moved [Bedocs/Knoop]: That we change the ToR for TC 3-43 to add a task: - "To revise CIE 117-1995 to harmonize with the new report."</i></p> <p>Unanimous.</p> <p><i>Action: DS contact CB to request BA approval.</i></p>
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### 13. Future work

#### **New TCs**

There was one proposal for a new TC, followed by discussion of other possibilities.

#### TC Proposal 1: TC 3-xx CIE Standard General Sky guide

##### Terms of reference

To finalise a guide for the application of the CIE General Sky standard for general users and designers. The guide will provide an explanation of the CIE General Sky standard concept and its simplified use by practitioners with available references and recommended prediction methods/tools/computer programs.

##### Members/Authors

S. Darula (Slovakia) -- TCC  
Aris Bartzokas (Greece)  
Harry Kambezidis (Greece)  
Derrick Kendrick (Australia)  
Richard Kittler (Slovakia)  
Matej Kobav (Slovenia)  
Marina Markou (Greece)  
Geoffrey Roy (Australia)  
Valerio R.M.Lo Verso (Italy)  
Stefen Wittkopf (Singapore)

##### Observers:

Ian Ashdown (Canada)  
Martin Butcher (Australia)  
Dominique Dumortier (France)  
Phillip Greenup (Australia)  
Yasuko Koga (Japan)  
John Mardaljevic (Great Britain)  
Edward Ng (Hong Kong, China)  
Markku Norvasuo (Finland)  
Richard Perez (USA)  
Peter Tregenza (Great Britain)  
Yoshiaki Uetani (Japan)

Target completion for July 2011 at CIE Session.

*Moved [Darula/Bedocs]: that we form this new TC to complete the work begun by TC 3-37. Unanimously approved.*

*Action: DS, inform CB and request BA approval of this new TC.*

#### To update CIE 49:1981 on emergency lighting

Mr. Bedocs suggested that we could add this topic to the interior lighting guide, the output of TC 3-42, rather than having a new TC. Mr. Thorns thinks this is more helpful as it gives people an integrated document that is easier for people to use. Prof. Ejhed likes this approach.

*Action: DS communicate this to TCC3-42.*

#### To update CIE 108:1994 – RP on daylight measurement

Prof. Darula will contact Prof. Igawa on the possibility of leading this activity as it is important to the operation of the IDMP stations.

*Action: Prof. Darula to contact Prof. Igawa. If yes, they will produce a ToR for a new TC, which the DS will circulate for Division ballot by e-mail.*

### An integrated approach to discomfort glare

There are many unresolved issues: overhead glare; transitions; daylight. Prof. Ejhed sees a problem because there's not enough new research. Dr. Knoop said there's not lots of money for glare research because LED and energy are dominating, but there is a risk that LED design solutions could bring back some old problems. Dr. Veitch asked if the existence of a comprehensive report on glare and an integrated conceptual model would be helpful to prompt funding bodies to give money. Prof. Osterhaus said it would help him as this he is trying to get a program of work funded. Dr. Raynham has some EPSRC money for an aspect of this. Mr. Bedocs says there's lots of work to be done and it's not clear on who would fund it. People nodded agreement.

As time was getting short, Dr. Veitch suggested that she would produce a short ToR for this, and we would discuss further by e-mail.

Mr. Bedocs asked that we prompt TC 3-42 to include material on overhead glare as an interim measure.

Prof. Ejhed comment that this issue will be more and more important as LEDs come along and daylight integration increases.

Prof. Nakamura thinks that luminance, size, and location are most important to discomfort. In TC 3-45 he is dealing with luminance distribution and thinks that the issues he is coming up with can be extended easily to smaller sources. It might be easy to come up with a model, by focusing on luminance distribution.

Mr. Bedocs thinks we need to know more about the mechanism by which discomfort occurs, in the brain, to come up with a complete model. He wants more neuroscience and physiology work.

Prof. Ejhed noted the widespread interest in the topic and expressed hope that it will be focused on more and more in the future.

Mr. Bedocs suggested we have a workshop in Sun City to discuss all these issues. There was consensus agreement on this idea.

### *Actions:*

- *Dr. Veitch to draft possible ToR for a new TC, and circulate for discussion. She is not proposing to chair it, so a TCC would be needed.*
- *DS to ask TCC 3-42 to address overhead glare in the report.*
- *DS/DD3 to add discomfort glare to the list of D3 workshops for Sun City, and explore how to do this with the organizers.*

### ***New Reporters***

#### Wikipedia Coordinator – Seeking volunteer

DS opened by explaining that the suggestion is that we have a reporter to develop a list of lighting terms or issues of particular important to CIE Division 3; to check on how Wikipedia covers them; to add links to relevant CIE material; to edit them to be consistent with CIE knowledge or positions.

Prof. Ejhed: This has been discussed at the DDs' meeting, that CIE needs to take charge of its public information as shown on Wikipedia. People don't always need full reports, and their first stop is often Wikipedia. Mr. Selander commented that IESNA is looking at this also.

Dr. Deneyer observed that Wikipedia is multilingual; no one person can cover all of them. The various versions are independent, not direct translations from one to the other.

Prof. Darula noted that there's misinformation on Wikipedia; linking to CIE can help to bring people to correct information. (At his university, they tell students not to use it.) CIE would also need correct information on its web site, some in a form useful to the public.

Prof. Schierz suggested maybe NCs could take this on rather than Divisions. Then there was some discussion of using an English official version and then translating.

Mr. Thorns asked about requesting Division members to identify the terms that D3 specifically is responsible for.

Prof. Ozturk asked whether this is CIE's job. She thought we should focus on making links to correct web sites, and generating the precise definitions and conclusions, rather than putting our information on Wikipedia.

Prof. Ejhed observed that we need to get the word out about us; there's some responsibility to ensure that information in public is correct, although we can't cover everything comprehensively.

Dr. Deneyer observed that the task is very big and we won't be able to do all of it perfectly to the satisfaction of everyone.

Prof. Darula suggested that maybe Wikipedia is a road map to more detailed information.

*Action: DS to initiate further discussion by e-mail. We will not vote on ToR until we have a volunteer to do it.*

#### Emerging Issues in Interior Lighting (Delphi poll)

Dr. Veitch explained the concept, which would be to have someone (ideally a student) conduct a Delphi poll, which is a structured qualitative research tool, to seek expert input concerning the most important issues for CIE Division 3. This would provide a systematic foundation for the Division to make decisions at its meetings, with input from people other than those who are able to come to any given meeting. Dr. Veitch made this suggestion merely for consideration.

Prof. Ejhed said this could be useful to us, as a way to focus our efforts for the future in a way that responds to the BA desire for rapid work by TCs on important topics.

*Action: DS to initiate further discussion by e-mail. We will not vote on ToR until we have a volunteer to do it*

#### **14. Any other business**

Prof. Ejhed started with an information item:

DD nominations. The BA wants proposals for new DDs, at least two nominations per division (there's really a desire for three per division), by June 15, 2010. This is for all divisions, as the terms of everyone come up in the session in 2011. A decision gets made in October 2010. People felt that the rules are not clear, so we invited Martina Paul to give clarification. As far as is known now:

- Send nominations by June 15 to DD & DS, copy to CB.
- Division ballot by October 1 (run by division, a poll of NC representatives).
- BA will make the final decision from the poll results, taking into account geographic and gender balance and the time commitment.
- Results have to be resolved by January 2011.

CB will issue a circular shortly to clarify the procedures.

Mr. Dehoff reminded us of the need to develop a task to address energy efficiency. He pointed out that if CIE does not address it then other organizations will take the stage, possibly in ways that are detrimental to interior lighting.

Mr. Bedocs commented that Division 4 has a TC on this for road lighting. Maybe D3 should do a complementary activity for interior lighting.

Prof. Ejhed asked if a standard is what we should aim for. Mr. Dehoff said no.

Mr. Bedocs says that we've had three TCs on this in the past but each "hit a brick wall" quickly. We need a positive output to aim for, to be useful. A bigger aim is to link to other agencies/groups that are already active in this area.

Prof. Ejhed says we need to articulate the importance of lighting quality that it should not be compromised for energy savings.

Mr. Dehoff said that it is difficult to think about what we should do; also the issue is political. ISO and CIE have an MoU, but if no one at CIE can answer energy-efficiency questions then we will lose our ground with ISO very quickly. We should be the ones producing these standards and then asking ISO to adopt them.

Prof. Öztürk says that an energy efficiency approach should include lighting quality, but we have no lighting quality measurement method. Others commented that we will have a step towards this when TC 3-34's report is complete, although the TCC 3-34 noted that it will not set criteria.

Dr. Veitch asked if Mr. Dehoff was willing to produce a short report. He said yes. Prof. Osterhaus asked whether we could link to the output of IEA Task 45. Mr. Dehoff said yes, he's a member of it. Prof. Ejhed said it's important to structure the topic.

*Action: Dr. Veitch and Mr. Dehoff to develop ToR for a reportership for e-mail ballot ASAP, and report to be done by Sun City. Likely a TC will follow.*

Flow Chart: Prof. Ejhed reported that Teresa Goodman (VP Publications) has made a flow chart to clarify TC procedures. It will be circulated as soon as it is done.

Mr. Bedocs asked for a secure area of the web site for private division/TC documents. DS reported that CB says the CollTool, which has this functionality, will be available end of 2010.

### **15. Next meeting**

2011, July: Sun City, South Africa (27<sup>th</sup> CIE Session)

We discussed a list of workshop proposals:

- (1) A joint D3-D6 workshop on output of TC 3-46;
- (2) Discomfort glare;
- (3) Energy matters inc. TC 3-49 on controls.

Prof. Ejhed pointed out that the structure will be different than previous years. The Session web site will be active next week; the call for papers will be there also, and the deadline is in August. Prof. Osterhaus asked if there would be more parallel sessions if there is less conference time. Prof. Ejhed said no, only 3 in parallel. Prof. Osterhaus expressed a desire for fewer, better keynotes.

We have no commitments for specific locations for meetings beyond 2011. One person who could not attend suggested that we consider only meeting at the Session and Mid-Session meetings, to lower the costs and environmental impacts of involvement in D3.

2012 ?

2013 CIE Mid-term meetings will be in Paris, France. (Does D3 want to meet then?)

### **16. Vote of thanks to hosts**

We invited CB staff to join us, then expressed our thanks to them in the customary way. Prof. Ejhed further congratulated them on a very successful conference earlier in the week.

### **17. Adjournment, 1:05**

J. A. Veitch  
Secretary Division 3

**CIE Division 3 2010 Meeting — Action Item List**

<b>Action</b>	<b>Actor</b>	<b>Deadline</b>
Letter of thanks to Dr. Dumortier for service as AD/Daylight	DS	2010-Apr-15
Provide TCC 3-49 (M. Knoop) with info about IEA and other related LED tasks	DS and others	ASAP
Remind CB to change ToR for 3-48 in TC database and web site	DS	ASAP
Contact Prof. Igawa re TCC 3-25	Dr. Koga	ASAP
E-mail ballot if Prof. Igawa agrees to chair TC 3-25.	DS	2010-Jun-01
Inform CB of decision to close TC 3-36	DS	ASAP
Inform CB of decision to close TC 3-37	DS	ASAP
Ask for BA approval of new ToR for TC 3-39	DS	ASAP
Inform CB and ask for BA approval of TCC change for TC 3-44; also inform Dr. Akashi and Dr. Cook.	DS	ASAP
Joint d3-d6 workshop on TC 3-46 report, Sun City	TCC3-46 & Ann Webb	2010-Jul-31
Remind TCC 3-49 that Dr. Koga wants to join	DS	ASAP
Inform CB of closure of R3-24	DS	ASAP
Send letter of thanks to Mr. McGowan for R3-24	DS	2010-Apr-15
Send R3-28 material to DS again, for circulation to the Division.	R3-28	2010-Apr-15
Circulate Liaison Officer guidelines	DD3 / DS	2010-Apr-15
Engage with VP-Standards to communicate that we need a better cooperation with the relevant ISO committees. This needs to be more structured. The current system is complex and is not working so well (esp. not for CIE).	DD3	2010-Sep-30
Send document for ISO TC205 to DS for circulation to D3 members, and then coordinate reactions.	Dr. Koga	2010-Apr-15
Get IESNA documents from Mr. Selander and circulate them.	DS	2010-Apr-15
Provide contact information for SLL and IEIJ to CB.	DS	
IEA – ECBCS -- follow up on MoU and put Dr. Atif in contact with Ms. Paul.	DS	2010-Apr-15
Inform CB of decision to withdraw CIE 49-1981	DS	ASAP
Ask TC 3-42 to incorporate emergency lighting in its guide as a section	DS	ASAP
Contact Prof. Igawa re: will he be chair of a new TC to update IDMP measurement protocol report	Prof. Darula	ASAP
If yes, formulate ToR for e-mail vote	DS, Prof. Darula, Prof. Igawa	2010-Jun-01
Request BA approval of change to ToR for TC 3-43	DS	ASAP
Request BA approval of new TC on CIE general sky	DS	ASAP
Draft initial ToR for a new TC on discomfort glare, and circulate for discussion.	Dr. Veitch	2010-May-01
Ask TCC 3-42 to address overhead glare in the report.	DS	ASAP
Add discomfort glare to the list of D3 workshops for Sun City, and explore how to do this with the organizers.	DS/DD3	2010-Jul-31
Develop ToR for a reportship on LQ and energy for e-mail ballot ASAP, and report to be done by Sun City.	Dr. Veitch, Mr. Dehoff	2010-Apr-15

March 10, 2010

CIE Division 3 meeting in Vienna on March 19, 2010  
Liaison Report from ISO/TC 163/SC 2 to CIE

I would like to apologize for my absence to the meeting.

(1) The NWIP ISO/WI 10916 "Calculation of the impact of daylight utilization on the energy demand for lighting" was approved by a simple majority of the voting P-members and 6 P-members voting approval have agreed to participate in the development of the project and have nominated an expert as follows:

Canada: Bob MARSHALL; marshallrbt@aol.com

Germany: Jan de BOER; jdb@ibp.fhg.de

Japan: Yoshiaki UETANI; yoshi.uetani@archi.kyoto-u.ac.jp

Norway: Barbara MATUSIAK; barbara.matusiak@ntnu.no

South Africa: Sanj LUTCHMAN; lutchmas@sabs.co.za

United Kingdom: Expert to be nominated

(2) Another ballot started on 2010-03-06 and is closed on 2010-05-03.

Title: ISO/TC 163/SC 2 decides to set up Working Group 14 "Daylight in buildings".

Question: ISO/TC 163/SC 2 decides to set up Working Group 14 "Daylight in buildings". Scope: To develop an international standard which covers a methodology to calculate the impact of daylight utilization on the energy need for lighting in buildings, coping with the influence of vertical facades and roof lights, shading systems, room geometry, climate and location of the building. Convenor: Mr Dipl.-Ing. Jan de BOER (DIN)  
The first task of WG 14 is to prepare a committee draft ISO/CD 10916 "Calculation of the impact of daylight utilization on the energy demand for lighting" by 2011-03. ISO Member Bodies are requested to nominate experts by registering experts in the ISO Global Directory no later than 2010-06-01.

Best regards,

Yoshiaki UETANI

Dr.Eng., Associate Professor

Department of Urban and Environmental Engineering

(Undergraduate - Department of Architecture)

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IES Vice President

Address to CIE Division 3 – Annual Conference CIE  
Vienna, Austria – March 19, 2010

It is a privilege to be with you for this great conference in beautiful Vienna. The theme of the conference, Lighting Quality & Energy Efficiency is one of the most interesting and important issues that the IES is also facing right now.

The current IES Board of Directors has been fairly busy of late. Our membership of about 9,000 has been asking the IES to become more active in the legislative arena; however our status as a US 501 (c) (3) organization limits the things we can do as a tax-exempt, nonprofit association. What we are doing is actively writing Position Statements and White Papers which can be used by anyone wishing to make an intelligent comment to influence North American policy as it relates to energy and lighting. The two most recent PS's address the topics of **Integrated Building Design** and the use of **Spectral Weighting** as a function to modify photopic luminous efficiency. You may read them yourself at [www.ies.org/pdf/positionstatements](http://www.ies.org/pdf/positionstatements). The Board has plans to increase our use of these new document types as one of several new methods for public outreach.

The IES Board will be voting on a new Strategic Plan which provides the strategic initiatives for the next four years beginning July 1, 2010. There are twelve initiatives in the new plan, down from 25 in the current plan, but there will be a strong emphasis on several key areas.

1. Strengthening relationships with key allied organizations. The IES has had a very strong, formal relationship with ASHRAE for over 35 years. I am a new, formal board-appointed liaison to the CIE, Division 3. We seek to have similar Board appointments to AIA, DOE, BOMA, USGBC, and ICC.
2. The Board has approved the hiring of a new IES staff member, the Director of Public Policy. This person will not be a lobbyist, but will represent the IES and promote quality lighting practices to both the public and more particularly, lawmakers, local and Federal.
3. The new Strategic plan will also include the creation of an Education task force, to help our committees create new educational materials for our Sections to offer as programs, (four new seminars on Lighting Codes and

Standards, Lighting Maintenance, Lighting Economics, and Controls), as well as full lighting courses.

4. A Lighting Information Center will be created to deliver accurate lighting information to new media and social networking sites as the public has interest in lighting and energy related topics. There is much misinformation and commercially biased, unvetted documents available, not coming from the IES.
5. The establishment of a new Board committee from individuals from within and from outside the lighting community to serve as a 'Think Tank' once a year to determine if we are getting our message across or if we need to consider new Board initiatives at any point in the four-year Strategic Plan cycle. The IES is a well-kept secret to many. As fast as the legislative environment and technology has been moving, the IES needs to have as much visibility as possible.

The IES has been the lead organization, along with co-signers, the International Association of Lighting Designers, (IALD), and the American Lighting Association, (ALA) to attempt to develop and publish a Lighting Quality Metric. As several of our allied associations have shared, "If you can't tell me what quality lighting looks like in a way that I can measure, it is of no use to us." The LEED rating system has awarded many buildings Gold and Platinum because of energy use and sustainable design, but these award-winning buildings often have poorly designed lighting systems. The IES wants to help!

You are all invited to attend the IES Annual Conference in Toronto, Ontario November 7-10, 2010. I'd personally love to see you there!

Respectfully yours,

John R. Selander, LC

**Report to CIE Division 3**  
**From**  
**The International Dark-Sky Association**  
<http://www.darksky.org>

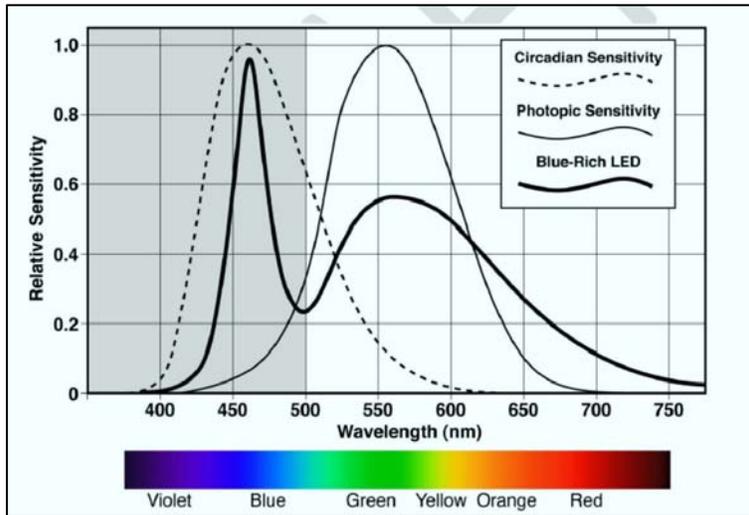
Terry McGowan\*, CIE Division 3 Liaison Member  
March 10, 2010

The purpose of this Division 3 liaison is to:

1. Exchange information about the subject of light and human health and especially those health effects involving light at night.
2. Work together to minimize the energy waste, light pollution and environmental problems that result from building interior lighting.

The International Dark-Sky Association (IDA) remains focused on efforts to reduce light pollution from indoor and outdoor lighting which results in sky glow, light trespass, glare and wasted light which, in turn, represents wasted energy.

Of growing interest is how this stray light affects the outdoor environment. A particular concern is blue-rich light (white light which contains substantial amounts of radiant power at 500 nm. or shorter). Such light has been shown to impact not only humans, but also plants and animals because the circadian sensitivity curve of living things peaks in the blue region of the spectrum (Fig. 1). All light sources that emit substantial



**Fig. 1. Circadian Sensitivity and Photopic Sensitivity Compared To Blue-Rich White Light LED Emission As A Function of Wavelength.**

approval of the CIE Board of Administration. To underscore the importance of the subject, the IDA notes that the recently-published report, "Artificial Light in the Environment" written by the U.K. Royal Commission on Environmental Pollution (11/09) also recognizes this issue (Page 15, Box 4A). The full report and a summary of the information may be downloaded from the Royal Commission web site at:

<http://www.rcep.org.uk/reports/sr-2009-light/sr-light.htm>

amounts of blue light are of concern including fluorescent, metal halide, mercury and induction lamps. Note, however, that the blue output of blue-rich white light LEDs peaks at the peak of the circadian sensitivity curve because white-light LEDs typically use a blue-emitting LED with a phosphor coating to produce the white light output. The IDA hopes that this concern will be on the agenda for discussion by the new Division 3 TC on LED Lighting Systems which is to be organized by Dr. Martine Knoop upon

The IDA remains interested in other work of Division 3 which deals with light and human health and, of course, that includes the work of TC3-46. (Research Roadmap for Healthful Interior Lighting Applications).

And, as always, the IDA appreciates this continuing liaison with CIE Division 3.

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