

# **Division 3 Meeting of CIE, San Diego, USA**

## **Minutes 1<sup>st</sup> July 2003**

### **Held in the Sunrise Room of The Town and Country Hotel**

#### **1. OPENING OF THE MEETING**

The Division Director (DD) opened the meeting by welcoming the members and observers and issuing the quadrennial report of the Division.

The DD introduced the new President of CIE (PCIE) Wout Van Bommel who addressed the meeting. After summarising the work of CIE over the last 90 years, the PCIE described his vision for the future of CIE and called for members to make contact with other potential members in order to increase the influence and input of CIE. The volunteer aspect of CIE's work was acknowledged. In order to improve the work of CIE, several areas were cited. These included: good communication between all members, a restricted area on the CIE web site accessible by members through a password and the effective use of the staff at CIE HQ. A plea for active involvement on the part of DD's, TC Chairs and members was made as the marketing and sales of publications is helped by the active work of the members. In addition, the national committees have a role in encouraging sales of publications, which have now been halved in cost.

The PCIE is keen to implement all of the features in order to produce a lean, compact and focused CIE.

#### **2. APPROVAL OF AGENDA**

The DD presented the agenda for the meeting and this was approved.

#### **3. ATTENDANCE**

The following were in attendance

Marc Fontoynt	Division Director
Dominique Dumortier	Associate Director (Natural Lighting) (ADNL)
Geoffrey Cook	Division Secretary (DS)
Yoshiki Nakamura	Associate Director (Artificial Lighting) (ADAL)
Sueko Kanaya	Retiring Associate Director (Artificial Lighting)
Wout Van Bommel	President of CIE (PCIE)
Hans Allan Löfberg	Past-President of CIE (PPCIE)

J-B Aizenberg	Russia Division 3 Member, TC Member 3-38
Lou Bedocs	R310, Liaison ISO, member TC3-33
Grega Bizjak	Slovenia Representative – Division 3
David Carter	Chair TC3-31, Chair TC3-38
Christopher Cuttle	New Zealand Representative – Member TC3-22, TC3-34
Jonathan David	Society of Light & Lighting
Peter Dehoff	Austria Representative – Division 3
Arnoud Deneyer	Member of BNCV – CNBE
Jan Ejhed	National Committee of Sweden, TC3-34, TC3-38
Jean–Jacques Ezrati	France TC3-22
Liisa Halonen	Finland Representative – Division 3
Narya ara	Japan Representative
Robert Henderson	South Africa Representative – Division 3
Christine Hermann	CIE CB
Toshie Iwata	Dept. of Architecture, Tokai University, Japan. TC Member.
Hans Jacobsen	Denmark Representative – Division 3
Warren Julian	VPT
Henri Juslen	Finland Representative – Division 5
Tapio Kallasjoki	President of the National Committee of Finland
Sueko Kanaya	JCIE, TC3-21
Hyman Kaplan	USA Division 3, Alternate Representative
Mates Kobav	Slovene NC – Secretary
Yasuko Koga	Faculty of Human Environment Studies, Kyushu University,
Japan. Rep-TC3-25, TC3-36, Member-R3-20,	Japan representative – Division 3
Erlend Lillelien	Norway Deputy Member TC3-33
Fawaz Maamari	Chairman TC3-33
Don Macleod	TC1-36
Tomoko Matsuzawa	JCIE
Hajimu Nakamura	JCIE member
Mojtaba Navvab	TC Chair 3-11, TC3-19, TC3-32, TC Member TC3-25
Eliyahu Ne’eman	Israel Chariman TC3-22
Jonny Nersveen	Norwegian Building Research Institute
Naiyuki Oi	TC Member TC3-34
Allan Ottosson	Sweden Representative – Division 2
Etienne Pierson	Replacing Belgian Representative – Division 3
Piotr Pracki	Poland Representative – Division 3
Giuseppe Rossi	IEN Italy TC4-26
Axel Stockmar	TC3-31, TC3-33
Ragnar Suartor	National Committee of Norway
Rados Topalova	Ergolux, New York. TC3-34 Member, Reporter R17.
Guy Vandermeersch	CNBE
Jennifer Veitch	NRCC/IRC, Ottawa, Canada. Chair-TC3-34, Chair-TC6-11.
Istvan Vonnak	Hungary Representative – Division 3
Steven Weintraub	TC3-22

#### **4. APOLOGIES FOR ABSENCE**

Apologies for absence were received from:

Benedicte Collard (Belgium )  
 John T Grundy (South Africa)  
 Derrick Kendrick (Australia)  
 Ivan Pasini (Canada)  
 Yoshiaki Uetani (Chair TC3-37)  
 Laurens Zonnevelt (Netherlands)

## **5. APPROVAL OF OTTAWA MEETING MINUTES**

The minutes of the previous meeting of the Division in Ottawa in 2002 were approved, subject to the correction that reports had been received from the liaison officer for ISO/TC159/SC4 and ISO/TC159/SC5.

## **6. DIVISION MEMBERSHIP CHANGES - WELCOME NEW MEMBERS**

Marc Fontoynt was confirmed as the DD, Dominique Dumortier the ADNL, Yoshiki Nakamura the ADAL and Geoffrey Cook the Division Secretary (DS) for the next quadrennium at the CIE Board meeting on 24<sup>th</sup> June 2003. The DD thanked Sueko Kanaya for her contribution to the Division and presented her with a flower as a token of the Divisions thanks. Sueko addressed the meeting by thanking members for their support during her term of office. Sueko then introduced the new ADAL to members.

The DS had received details of the following new members:

Istvan Vonnack - Hungary

Jan Petter Skar - Norway Erlend Lillelien, representing the new members for Norway at the meeting, gave a message to the members from the retiring member Odd Arnesen.

Anil Valia – India

## **7. DIVISIONAL DIRECTOR & ASSOCIATE DIRECTOR'S REPORT**

### **7.1 The DD Report**

The DD presented a verbal report of the work of the division, which summarised the quadrennial report. A copy of the report was issued to the meeting.

### **7.2 The ADAL Report**

No report was presented by the incoming ADAL.

### **7.3 The ADNL Report**

The (ADNL) gave a verbal report emphasising the natural lighting aspects of the quadrennial report.

## **8. TC CHAIRMAN REPORTS**

### **8.1 TC3-11 Daylight calculation methods - Chairman M Navaab**

The Chairman reported that the work is finished. The TC met on 30<sup>th</sup> June to review the final report. Following TC and Division voting on the report the TC will close 1<sup>st</sup> July 2004.

### **8.2 TC3-15 Sky Luminance models - Chairman Y Uetani - finished**

Following final voting on the Standard this TC is closed

### **8.3 TC3-19 Scale Model Photometry for Interior Lighting – Chairman M. Navaab**

The Chairman reported that the work is finished. The TC met on 30<sup>th</sup> June to review the final report. Following TC and Division voting on the report the TC will close 1<sup>st</sup> July 2004.

### **8.4 TC3-20 Lighting and Architecture - Chairman H Kramer**

DD gave a verbal report of the progress to date. The coloured nature of the final report continues to set a challenge for CIE. The Chairman is concerned about CIE support although there is strong support within the Division. The chairman was to be contacted by the DD to assess the potential to scan the visual images and produce a descriptive text for general issue in CD format. Publish the final report in book form using an Architectural publisher, retaining a strong CIE presence as the source authority.

Jonathan David (UK) agreed to contact a range of architectural book publishers. It was appreciated that the copyright issues and the final quality aspects of the scanned images were issues of consideration. It was expected that the publication issues associated with this TC would be resolved by 1<sup>st</sup> July 2004.

### **8.5 TC3-22 Museum Lighting and Protection against Radiation Damage (Renamed Control of Damage to Museum Objects) - Chairman E Ne'eman.**

The TC met on 30<sup>th</sup> June. The final report of this TC has been out for divisional ballot from 20<sup>th</sup> June 2003 see:

<http://www.physics.kee.hu/cie/newcie/>

Using - user: cied3 password: d3zxcv

The International Council of museums (ICOM) to be contacted by the TC Chairman to be made aware of the report and encourage its wider adoption. Whilst the possibility of some of the content being produced as a Standard is to be encouraged, it was recognised that this may take place some time after the report has been published.

### **8.6 TC3-25 Co-ordination Development of the IDMP and its data Chairman D Dumortier.**

The TC met on 30<sup>th</sup> June. The Chairman gave a report describing the web-server, the final output of this TC. The web server is to be updated within the next year and the TC is due to close on 1<sup>st</sup> July 2004. This TC would then become a **study group** to maintain the web server.

### **8.7 TC3-30 Hollow Light Guides - Chairman L Whitehead**

The DD reviewed the problems concerned with the content of the final report of this TC. The PPCIE and the Secretary of CIE informed the meeting about the inclusion of minority reports within TC Final reports. TC Voting is complete and division voting is to be carried out in the near future.

### **8.8 TC3-31 Lighting for Real Spaces - Chairman D Carter**

The Chairman reported that the final report should be passed to CIE HQ for division voting with all speed.

### **8.9 TC3-32 Validation of Algorithms for Daylight Outdoors - Chairman N Navaab.**

The TC met on 30<sup>th</sup> June to review the final report. The Chairman reported that the relative accuracy of algorithms was the main object of the TC. It was agreed that the **TC would close** and the archive material and the active membership would move to TC 3-33.

### **8.10 TC3-33 Test Cases for the Assessment of Accuracy of Lighting Computer Programs - Chairman Fawaz Maamari**

The TC met on 30<sup>th</sup> June. The Chairman gave a report on progress of this Web based TC looking at 20 test cases. The potential funding of this TC was discussed as there is potential interest in the content of the report from software companies. At the end of July 2003 a draft report is to be issued to TC members in order for comments to be incorporated in a final draft report by the end of October 2003.

### **8.11 TC3-34 Protocols for describing lighting - Chairman Jennifer Veitch**

The TC met on 29<sup>th</sup> June. The Chairperson gave a report of the work. Whilst progress is being made it will not be until the summer of 2004 that a final report will be available for Division voting. A link to the 'lighting vocabulary' work of R3-13 has been established.

### **8.12 TC3-36 Use of satellite images to derive daylight data – Chairman Dominique Dumortier**

The TC met on 30<sup>th</sup> June. The Chairman gave a report of progress of the TC. An earlier TC meeting in March 2003 defined an IEA research task which has now been funded. The Chairman reminded the Division of the advantages of obtaining funding from other sources to forward CIE activity.

### **8.13 TC3-37 Guide for the application of the CIE General Sky - Chairman: Y. Uetani.**

The TC met on 30<sup>th</sup> June. The ADNL gave a report of the work of the TC. There are 15 to 36 sky types included in the standard. It is proposed to examine the relationship of actual types of sky with those in the standard in order to provide application examples that are based on real data. This can be done through the use of the IDMP data. This can also be done using the 5 years of daylight information found on the satel-light server (<http://www.satel-light.com>). At the TC meeting, the ADNL presented a method to produce the frequency of CIE Sky types without relying on the zenith luminance which is not available from the satel-light server.

The TC is considering approaching software companies to be corresponding members of this TC. It was appreciated that companies could join CIE as corporate members in order to become members of the TC. This route to potential funding was encouraged. A report is due to be produced in 2005.

#### **8.14 TC3-38 Tubular Daylight Guidance Systems - Chairman David Carter**

The TC met on 30<sup>th</sup> June 2003. The TC Chairman reported on the good progress of this work. The commercial aspects of the area are considerable and there is substantive representation on the TC of these interests. At final report stage the industry is to be approached to fund a high quality final report document.

#### **8.15 TC3-39 Discomfort glare from daylight in buildings - Chairman:Werner Osterhaus**

Yasuko Koga gave a verbal report of the work of the TC and the progress to date. The Division was made aware of an IESNA committee that is also working on glare and the TC is strongly recommended to establish a liaison with this committee.

### **9. DIVISION REPORTERS REPORTS**

#### **9.1 R3-02 Stage and studio lighting - K R Ackerman**

The DS gave a verbal report. The reporter wishes to retire and the DS is to investigate the potential for a liaison with a National or International body, i.e. Society of Television Lighting Directors, associated with 'Showlight' that has a keen interest in lighting for entertainment.

#### **9.2 R3-10 Maintenance of indoor lighting - L Bedocs**

The Reporter gave a verbal report. Some deficiencies have been identified with the published document and a revision is now required. This should include sustainability and other new issues.

#### **9.3 R3-13 Lighting vocabulary – Y Koga, J Veitch**

Yasuko Koga gave a report. A draft vocabulary containing approximately 130 definitions has been issued to the Division Directors. The date that the words have been changed is to be noted on the document so that changes can be tracked. CIE HQ is to send Yasuko Koga the emails and other documents produced by the previous Reporter. An English version of the vocabulary is to be agreed by 1 July 2004. Other additions are to be welcomed, including those being developed by the Sorbonne and those in the indoor standard for lighting. The Vice President Technical reminded the members that the source of the definition is to be given for all new words.

#### **9.4 R3-15 Lighting standards - S Simos**

A spreadsheet has been sent to all members. It was agreed that the title be changed to include 'standards and recommendations' The Reporter would like to email all CIE delegates this spreadsheet and also place it in the NEWS section of the MAIN CIE web site with a link to the Division 3 web site. All Division members are encouraged to contribute to this work. It is anticipated that this Reportership would remain active.

#### **9.5 R3-17 Calculation of utilisation factors - R Topalova**

A Report has been electronically sent to all division members. This was verbally presented by the Reporter. There are several methods for the

calculation of UF. A new method is being developed in Europe, and this is being paid for by the industry in order to simplify the various methods currently used. This is due for completion in late 2003. The UF in small rooms is variable and this European work is addressing that issue. When complete, the results will be made widely available. It is appreciated that other countries have different methods of determining UF. The Division agreed to continue this Reportership until the EU method is available. In addition the subject range of the Reportership is to be extended to examine the nature of the deficiencies in the CIE UF method. The Reporter is to draw up an action plan to produce outputs.

#### **9.6 Note R3-18 Thermal Environment, outdoor climate and visual references - C. Laurentin**

In order for the report to be included in the collection Divisional vote is required. DD to progress on this.

#### **9.7 Note R3-19 Glare from windows - M.Velds**

In order for the report to be included in the collection Divisional vote is required. DD to progress on this.

#### **9.8 Note R3 -20 The use of satellite images - Y.Koga**

In order for the report to be included in the collection Divisional vote is required. DD to progress on this.

### **10. LIAISON OFFICERS REPORTS**

#### **10.1 CEC JOULE Projects: Liaison Officer - Marc Fontoynt**

This is now Energie: Framework 6. The DD gave a verbal report that explained that lighting research no longer forms part of this research framework but improvement in lighting efficiency is seen as an attractive way to save energy, and demonstration projects will be stimulated.

#### **10.2 CEN/TC169 Lighting Applications**

Lou Bedocs reported on WG2.

- Outside Working Places. Work is progressing with photometric data to support the application standard being examined.
- Work on a lighting efficiency factor for luminaries is progressing.

WG9 Energy Requirements for Buildings. This is due to generate a standard to allow for the energy labeling of buildings. This is a mandated EU requirement and the work is due for completion in 2/3 years.

- DS to contact Anthony Slater regarding continuing the work of Reporter for CEN/TC169.

#### **10.3 International Association of Lighting Designers**

Liaison Officer – H. Kramer

No report was received. The DS to contact the liaison officer to request his agreement to become the liaison officer for the European Lighting Designers Association (ELDA). If so, then Mark Kaplan expressed a willingness to be the IALD liaison officer.

#### **10.4 International Energy Agency**

DD gave a verbal report of the work of this agency. Unfortunately funding is not currently growing. However the EU commission now recognises the IEA as a collaborating organisation.

#### **10.5 ISO/TC159/SC4/WG2 Ergonomics Physics Environment Lighting**

Liaison Officer - Lou Bedocs.

The Liaison Officer reported that the group was awaiting drafts from CIE/CEN on lighting of outdoor workplaces.

#### **10.6 ISO/TC159/SC4/WG3: Ergonomics/Signs and Controls, Workplace and Environment.**

Liaison Officer - Lou Bedocs

The Liaison Officer reported that work is concentrated on the completion of the multi-part document ISO 624.

#### **10.7 ISO/TC160/SC2/WG2 Glass in Buildings - Light and Energy Transmission - Hans Allan Löffberg**

There was nothing to report and this liaison is now **Closed**.

#### **10.8 ISO/TC205/WG7 Building environment design indoor visual environment:**

Toshie Iwata had been approached to be convenor. She gave a report of this monitoring role and called for a new convenor. Jonathan David agreed to establish the real nature of the activity of this ISO WG.

#### **10.9 World Meteorological Organisation (WMO)**

Liaison Officer Peter Valko

No report was received and a change of liaison was discussed. DS to investigate.

#### **10.10 IESNA**

Liaison Officer: Ivan Pasini

Jennifer Veitch reported that there had been little progress on the IESNA overhead glare work.

#### **10.11 SLL (Lighting for Age and Sensory Impairment)**

Liaison Officer: Geoffrey Cook

The Liaison Officer reported that a group had been convened and that the production of a guidance document was expected later this year.

### **11. REVIEW OF DIVISION 3 PUBLICATIONS**

The DS reminded the TC chairmen and members to review the CIE publications currently in the collection that go in line with their field of expertise. It was proposed to withdraw publication 55 and place this in the CIE archive.

## 12. FUTURE WORK

The DD led a wide ranging discussion concerning areas for future work. These cited the issues in the quadrennial report and also included:

**12.1 Lighting and health.** A priority area for CIE and a CIE Symposium on lighting and health is due to occur in Vienna in October 2003. The Division is encouraged to attend and contribute to this.

**12.2 Ground reflected sunlight.** To strengthen existing daylight prediction methods.

**12.3 Overhead glare.** Although TC3-39 is considering discomfort glare overhead glare is not part of the terms of reference. Recent published work in the IES Journal has addressed some of these issues.

**12.4 Design Guidance.** It was proposed that Publication 29.2 be revised to supplement the information contained within ISO/CIE Standard 008. It was agreed that any guidelines would need to be informative but not prescriptive. The descriptive parts of document 29.2 were seen to be a useful starting point for this work. It was agreed that a **new Reportership, R3-22**, be constituted.

**12.5 Contrast rendering factor (CRF).** Was discussed as a potential area for further work. This is a metric for on-site evaluation of contrast, which with recent developments in artificial lighting may assume new significance. Details of CRF are included in CIE Document 19.21. Volunteers are requested to carry forward this work.

**12.6 Energy efficiency.** The Division took the view that co-operation with leading groups for lamp development was to be encouraged. The energy labeling of buildings and luminaires in the EU is progressing. It was appreciated that energy efficiency topics can be very large and multi-faceted requiring a clear set of objectives for any useful results to be produced.

**12.7 Lighting Control.** Following discussions concerning lighting control and energy efficiency it was agreed that a **new Reportership R3-23** be established.

**12.8 Publications.** Following discussions it was agreed that at the next meeting of the Division a time will be made available for the Division to engage in a review of certain publications. Initially the ADNL and ADAL will select suitable publications for review and inform the members before the next meeting of the Division. This will allow members to prepare material to facilitate the review process.

**12.9 Glass in Buildings.** The extensive use of glass in buildings presents new challenges in lighting and a call for this to be examined was made. A society of façade engineering is being launched in the UK in the autumn and Jonathan David offered to act as a Liaison Officer to this group. This was agreed although a formal Liaison Officer role was not constituted.

### 13. EXISTING TC'S...CHANGES IN CHAIR, CLOSURE ETC.

TC3-32 is closed

### 14. PROPOSALS FOR NEW TCS

Document: 97 Maintenance, is now commercially sensitive and is now rather dated. A **New TC3-40 Maintenance of indoor electric lighting was proposed by Lou Bedocs (Chairman). This was agreed.**

#### **NEW TC3-40 – Maintenance of Indoor Lighting Systems.**

**Chair:** Lou Bedocs  
**Members:** P DeHoff (AT), H Juslen (NL), D Wisniewski (VL), W Julian (AU), H Kaplan (USA), A Blockmor (D), R Henderson (RSA).  
**Terms of Reference:** To update CIE 97 with new data  
**Duration:** 2 years  
**Operation:** Mainly correspondence e-mail

**A new TC3-41 The visual quality of display in museums. (Chair) E. Ne'eman was proposed and agreed.**

#### **NEW TC3-41 The Visual Quality of Display in Museums.**

**Chair:** Prof. E Ne'eman  
**Members:** J-J Ezrati & K Cuttle  
**Terms of Reference:** To propose guidelines for control of undesirable visual effects, principally:

- Reflected glare
- Direct glare
- Low luminance

**Duration:** 4 years completion 2007  
**Operation:** Mainly correspondence e-mail

The Chairman was reminded of the need to keep ICOM informed of the work of this new TC.

The DD called for new areas of work to be constituted, by the formation of new TCs, in accordance with the areas highlighted in the quadrennial report.

### 15. PROPOSALS FOR NEW REPORTERSHIPS

Since the Discomfort glare Publication 117 and the UGR have different approaches with regard to SHR, and other differences, it was proposed that a new Reportership be convened to address this. This was agreed and Lou Bedocs will be the **new Reportership 3-21** with duration from 2003 to 2005.

### **15.1 ISO/CIE Standard 008.**

It was agreed that any guidelines would need to be informative but not prescriptive. The descriptive parts of document 29.2 were seen to be a useful starting point for this work. It was agreed that a **new Reportership R3-22**, be constituted to examine this. Mark Kaplan agreed to be the Reporter and produce an interim report at the next meeting of the Division.

### **15.2 Lighting Control**

Following discussions concerning lighting control and energy efficiency it was agreed that a **new Reportership R3-23** be established. Peter DeHoff agreed to be the Reporter.

**15.3** Terry McGowan has agreed to act as Reporter on the work of the overhead glare committee of the IESNA. This is to be **Reportership R3-24**.

**15.4** The DD called for new areas of work to be constituted, by the formation of new Reporterships, in accordance with the areas highlighted in the quadrennium report.

### **15.5 The new Reporterships are:**

NEW Reportership R3-21 – To review the differences in the approach to the determination of discomfort glare as shown in CIE Publication 117 and that used by the UGR method. (Reporter: Lou Bedocs UK)

NEW Reportership R3-22 - To review CIE Publication 29.2 to provide supplementary information contained to that contained within ISO/CIE Standard 008. (Reporter: Hyman Kaplan US)

NEW Reportership R3-23 - Lighting control and energy efficiency (Reporter: Peter Dehoff AT)

NEW Reportership R3-24 - The assessment of overhead glare (Reporter: T. McGowan, US)

## **16. NEW LIAISONS**

Although Ivan Pasini is noted as Liaison Officer to IESNA, additional liaison was considered appropriate. It was agreed that the DD contact Rita Harrold at IESNA to move this forward.

## **17. OTHER BUSINESS**

The Division 3 web server is to be modified within the next year to allow members to place and access password safe documents. Whenever possible, email messages will be used to let members know of new Division documents and other events. All members are reminded that the contact information, as posted on the Division 3 web site, will be used for this purpose. The ADNL called for all members to keep their information up to date.

**18. DATE OF NEXT MEETING**

A choice to be confirmed is to meet in Dublin, just before the CIBSE Conference which will happen on the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> of April 2004.

TC meetings would happen on Tuesday March 30, 2004.

Division 3 meeting would happen on Wednesday March 31, 2004.

Review of division 3 publications would happen on Thursday morning April 1.