



**The minutes of the Division 4 meeting in Bern, Switzerland, on the 8<sup>th</sup> in September 2004, 10.00 - 11.30, and on the 10<sup>th</sup> in September 2004, 13.00 - 17.15**

**Wednesday 8.9.2004**

**1. Opening of the meeting**

Division director, Pentti Hautala, opened the Division meeting at 10.00 and welcomed everyone present.

Pentti Hautala told that since our last meeting two of our division's honoured members has passed away: Werner Riemenschneider and Jan de Vlieger, After DD's suggestion the meeting honoured their memory for some minutes silence.

Peter Blasern also welcomed everyone present and made a short presentation about some housekeeping items.

**2. Approval of Draft agenda**

Draft agenda, which had been published in our web-pages and sent to some members earlier, was accepted as the agenda of the meeting. Some minor changes were made: Item 8 (Editors report) was divided in two parts: 8.1., Editors report and 8.2., TC4-10 progress report.

**3. Apologies for the absence**

Division secretary had received ten messages of the absence: Pieter Walraven, Jose Luiz Pimenta, Kohei Narisada, Alain Floris, Wout.Van.Bommel, Giuseppe Rossi, Tore Gabriellsson, Vladimir Pchelin, Dave Coatham and Pierantonio Cinzano.

**4. Approval of the executive summary of the minutes of the last division meeting in San Diego**

The last meeting was held on the 30<sup>th</sup> in June and 2<sup>nd</sup> in July 2002 in San Diego, USA. The summary has been published last summer in the division's webpages.

DD mentioned that this summary has been written during the flight to Finland (by DS).

The summary was approved.

**5. Announcements**

DD announced that Giuseppe Rossi has sent email two days ago that he can not travel to Bern.

DS suggested he will try to contact Mr. Rossi and get new Draft by email before TC4-26 meeting, so that members of that TC can have some discussions in Bern.

Peter Blasern told that in Friday when DIV4 meeting is in "Metas", we can have a quided tour to the laboratories.

## 6. Report by the Division director

The huge research and development period which started in 70's and lasted until 90's produced several technical reports and standards, has now reached some kind of saturation or fulfillment.

DD said we have published the basic road lighting reports, many of them are also revised. They may now affect as practical operations and applications.

The latest good example is the work in TC 4-35: "Tunnel lighting". Technical report is widely approved in divisional and Board voting. We can't reach unanimity but however majority. We could have continued for ever, but the work must be stopped and the report published. Experiences will be collected. Time of the next revision is after several years, perhaps 10.

DD also mentioned that there is going on some kind of "change of generation" in DIV 4.

## 7. Secretary's announcements

The division secretary had some announcements:

-He said he hopes all TC-chairs give the report of their TC meeting before leaving Bern. He also mentioned he wants only a short report of the real situation of TC:s, not the complete minutes.

### 8.1. Editors report

Patric Paldrey gave his report:

There have been one new report after our last meeting in San Diego: "Tunnel Lighting"

### 8.1. TC 4-10 report

In last meeting Ad de Visser said Dr. Karl Manz is reviewing two documents from this TC and he is needing one year to complete the work.

Now Dr Manz is in Bern, and he gave a short presentation about the situation of these documents.

First document:

#### **"Definition of the cut-off vehicle headlights"**

Aiming of low-beam headlamps is currently performed visually in Europe and USA (since 1997), using the cut-off line in the beam pattern.

A good definition of a visual cut-off would allow uniformity in interpretations. This report is a survey of studies on that question in Europe and North America and the basis of a proposition for such a definition by CIE.

A precise objective definition of what a low-beam visual cut-off is, seems all the more necessary since the requirement of correct aiming of these beams is specified within all the existing regulations.

Comparing the research work in different countries a recommendation about how to define the cut-off line of a low-beam headlamp by photometric means is derived.

Second document:

### **“Requirements for light beam pattern of front fog lamps”**

The UN Economic Commission for Europe (ECE)-regulation 19 with respect to front fog lamps was first issued in 1970 and has not been revised since that date as far as the photometrics are concerned.

Most of the front fog lamps of today improve vision during foggy weather because of their wide beam pattern and the reduced amount of scattered luminance. In the meantime technologies in headlamp manufacturing improved so much that new photometric requirements could be developed.

For these reasons it seemed to be necessary to improve the relevant ECE-regulations which was done in two steps of development:

- a. simplified photometric requirements
- b. improved photometric requirements

These are new documents = New ballot.

This part of meeting ended 11.30.

### **Friday 10.9.2004**

DD Pentti Hautala reopened the meeting Friday 10.9.2004 at 13.00.

In the beginning of this part of meeting Peter Blattner made a short presentation about METAS.

### **9. Progress Reports by TC-chairmen**

The next TC:s had a meeting in Bern, and the progress reports were presented:  
TC 4-10, TC 4-15, TC 4-24, TC 4-36, TC 4-37, TC 4-38 TC and 4-40

The rest of TC:s did not have meeting in Bern but there was a discussion about the situation of these TC:s.:

**TC 4-19:** No information about this TC, Ad de Visser suggested that the draft should be ready latest 1.3.2005 or the TC should abolish.

**TC 4-26:** No meeting; nothing to report.

**TC 4-27:** No meeting; nothing to report. DS read email he has got from Pieter Walraven. After discussion the meeting decided that the draft should be ready latest 1.3.2005 or the TC should abolish.

**TC 4-32:** No meeting; nothing to report. DS read email he has got from Pieter Walraven. After discussion the meeting decided that the draft should be ready latest 1.3.2005 or the TC should abolish.

**TC 4-33:** Prof. Schmidt-Clausen has send email telling that he will step down from CIE work. Carl K. Andersen told he can try to find new volunteer (Dr. Ron Givens?) to chair this TC.

**TC 4-41:** No meeting; nothing to report. After discussion the meeting decided that the draft should be ready latest 1.3.2005 or the TC should abolish and change it to reportership. Axel Stockmar was against this.

**TC 4-42:** Prof. Schmidt-Clausen has send email telling that he will step down from

CIE work. After discussion the meeting decided that the TC should be abolished and add some items to the TC4-38.

## 10. Progress Reports by Reporters

### R 4-14 Road Lighting and Accidents (Carl K. Andersen)

Carl have a presentation and he told that he will send it written later to add to division webpages.

### R 4-21 300 mm Traffic Lights (Carl K. Andersen)

Carl gave a presentation and he told that he will send it written later to add to division webpages.

### R 4-22 Use of LEDs in Visual Signalling (Steve Jenkins)

Steve had made a detailed report. As his recommendation he said he is feeling that a TC should be established.

The meeting decided to keep the reportership one more year; in the next years meeting Division should discuss this item again.

### R 4-23 Management and Maintenance of Road Lighting Eirik Bjelland gave detailed presentation. The meeting decided that in Léon there should be a Workshop.

### R 4-24 Definition of an Eye Sensitivity Function in the Mesopic Region to be Used for the Calculation of Road Lighting Levels

Stefan Voelker gave a PP-presentation and he told that he will send it later by email to add to the division webpages.

### R 4-25 Automotive lighting (Ad de Visser)

Associate Director gave his yearly report: "Automotive and Standards":

#### Automotive

- Reports to GTB

Regular reports to GTB regarding CIE activities were given.

- TC4-10 There are still two documents "nearly ready for publication" since many years within TC 4-10 "Automobile lighting systems". Dr. Karl Manz is reviewing these documents. Suggestion is to cancel this activity after 2005.

- GTB / CIE Agreement / CIE TC's on particular automotive lighting issues. GTB is now an independent and international committee for the preparation of regulations for automotive lighting, in liaison with CIE, IEC and ISO. Basically, there seems not to be a change in the type of work being done. No need to review the agreement between CIE and GTB.

- PAL symposium

Next PAL symposium (Progress in Automobile Lighting) will be September 2005

- New developments (update with reference to the 2003 report, only):

- Mandatory use of Daytime Running Lights (DRL) is under discussion of the EU. Because governments have deviating opinions, the EU Commission has given an assignment to a research consortium (project leader TNO) to advise on how to proceed. The report was finalised but execution is awaiting the installation of a new commission. Outcome is in short: mandatory dedicated DRL for new vehicles incl. sensor for activation, mandatory use of lighting during daytime for existing vehicles on the road.

- Automatic “ON” on motorcycles was agreed.
- Car industry is introducing more and more electronics, which has an impact on traditional light sources.
- “Phantom light and colour wash out tests” are under study. Reasons are the recent introduction of red coloured filament lamps and the increasing use of reflective materials (chrome rear lamps, for instance).
- LED headlamps are being developed and are being introduced into the regulations. Signalling lamps with LED’s are already on the market.
- Proposals for signalling lamps with variable luminous intensity are being developed. Output to be controlled by sensors for detecting rain, snow, fog, day/night and dirt.
- Another development is the intended introduction of an emergency break light display and automatic activation of hazard warning lamps.
- A worldwide harmonised low and high beam pattern is under consideration.
- Improved methods for aiming are under being introduced.
- Additional light sources in the low beam headlamp for bend lighting and active night vision systems agreed.
- Websites
  - ECE Regulations: <http://www.unece.org/trans/main/wp29/wp29regs.html>
  - GTB working documents (password via head of national delegate)  
: <http://www.ass-cuna.org/>
  - US FMVSS: <http://www.access.gpo.gov/>
  - SAE standards (costs charged): <http://www.sae.org/servlets/index>

### Standards

- No items to report.

## 11. New R&D reports

DD circulated two reports: “Finnra Engineering news No 15” and “Wind Road Light”.

## 12. Discussion of the new items

a.) Reportership R4-21 to TC, Carl K: Andersen to make the terms of reference.

## 13. Liaison matters

The next liaison matters were discussed:

**CEN/TC 226: Road Equipment** Pentti Hautala

Pentti told that there has been one meeting, but no items related to roadlighting.

**GTB** Ad de Visser gave his report earlier.

## 14. Planning the future meetings

### 2005 meeting:

Next meeting is in conjunction with the CIE Midterm meeting in Leon, Spain May 2005.

### 2006 meeting:

DIV 4 have got invitation to Geece; The Greek Associate NC of CIE will organ-

ize the conference "Urban Nightscape 2006" in September 2006 in Delphi/Greece, and asked for co-operation of CIE Divisions 4 and 5. Also Hungary volunteered to host our meeting either 2006 or 2008.

#### **15. Other business**

DD told about the Vocabulary project.

#### **18. Closure**

DD closed the meeting (17.15 ), thanking our hosts about the conference, meeting facilities and pleasant atmosphere of our meeting.

Tapani Nurmi  
Secretary, CIE DIV 4



A handwritten signature or set of initials in black ink, located at the bottom center of the page. The characters are stylized and cursive, appearing to be 'O.L.' followed by a horizontal line.