



COMMISSION INTERNATIONALE DE L'ECLAIRAGE
INTERNATIONAL COMMISSION ON ILLUMINATION
INTERNATIONALE BELEUCHTUNGSKOMMISSION

**CIE CODE OF PROCEDURE
FOR
DIVISIONS
AND
TECHNICAL COMMITTEES**

1999, with supplement 2001

CENTRAL BUREAU OF THE CIE

A-1030 VIENNA, Kegelgasse 27 – AUSTRIA

1. FUNCTION, STRUCTURE AND OPERATION

1.1 Preamble

This document gives the procedures to be used in the conduct of the affairs of the Divisions of the Commission Internationale de l'Eclairage (CIE). It is one of a number of documents (see 4.3), the purpose of which is to provide a legal, administrative or working framework for the activities of the CIE.

Chapter 1 of this document is composed of a number of sections which contain procedures that are obligatory for members of Divisions to follow, since they are part of Statutes and By-Laws. Such procedures are marked either "S" for Statutes or "B" for By-Laws and are printed in italics.

There are additional procedures in both Chapters 1 and 2 which have been drawn up to ensure the efficient operation of the Divisions. These procedures are not meant to cover every contingency nor are they meant to inhibit development of supplementary procedures by individual Divisions in order to assist their efficient functioning.

This Code of Procedure (CP) is issued on the authority of the Board of Administration (BA) of the CIE (B1.2.4).

1.1.1 Abbreviations

Throughout this document the following abbreviations are used:

Activity Report	-	AR
Associate Director	-	AD
Board of Administration	-	BA
Central Bureau	-	CB
Code of Procedure	-	CP
Division Director	-	DD
Division Editor	-	DE
Division Officer	-	DO
Division Reporter	-	DR
Division Secretary	-	DS
Individual Member	-	IM
Liaison Officer	-	LO
National Committee	-	NC
Research Note	-	RN
Technical Committee	-	TC
TC Chairman	-	TCC
Technical Report	-	TR
Vice-President	-	VP
Vice-President Publications	-	VPP
Vice-President Technical	-	VPT

1.2 Objectives of the CIE

The CIE is a scientific, technical and cultural, non profit organization whose objectives are:

- a) *To provide an international forum for the discussion of all matters relating to the science, technology and art of light and lighting and for the interchange of information in these fields between countries. To achieve these goals the CIE organizes scientific educational events and holds CIE Sessions, normally every four years.*

- b) *To develop basic standards and procedures of metrology in the fields of light and lighting.*
- c) *To provide guidance in the application of principles and procedures in the development of international standards in the fields of light and lighting.*
- d) *To prepare and publish proceedings, standards, technical reports and other publications concerned with all matters related to the science, technology and art of light and lighting.*
- e) *To maintain liaison and technical interaction with other international organizations concerned with matters related to the science, technology, standardization and art in the fields of light and lighting.*

"Light and lighting" in these objectives is to be understood in the broad sense of embracing such fundamental subjects as vision, photometry and colorimetry, involving natural and man-made radiation over the UV, the visible and the IR-regions of the spectrum, and application subjects covering all usages of light, indoors and out, including environmental and aesthetic effects, as well as means for production and control of light and radiation.

1.3 The Functions of Divisions

The technical activities of the CIE shall be carried out by the Divisions each covering one sector of light and lighting and chaired by a Division Director (S 6.5.1).

The BA proposes the number of Divisions and their field of activity for approval by the National Committees (S 6.4.7) (see 4.4).

Each Division shall make proposals for a working programme including proposals for technical publications, to be submitted to the BA for approval and to be carried out by Technical Committees (S 6.5.3, B 2.3).

After approval of its working programme a Division is responsible for the conduct of the working programme, within the procedures given in this document (S 6.5.3, B 2.3).

Each Division should also further the objectives of the CIE as set out in 1.2, where possible and relevant, by

- a) conducting or participating in discussion i.e. seminars, symposia or conferences,
- b) providing liaison and technical interaction with other international organizations,
- c) promoting the publication of material on CIE activity outside the CIE.

Each Division should advise the BA, through its Director on policy and on the operational aspects of the technical activity of the CIE as well as on the scope of technical activities as stated in its working programme. This information shall be forwarded as Activity Reports (see 1.8.3 and 4.7).

1.4 Division Structure and Operation

1.4.1 Division Members

Each National Committee shall be entitled to appoint one voting Division Member, to each Division. Each Associate National Committee may appoint one Observer Division Member without voting rights. Supportive Members may appoint a representative to attend Divisional meetings without voting rights (S 6.5.1). Associate members may join the Division without voting rights (S 5.2.2).

All members shall:

- a) participate in the work of the Division,

- b) represent the interests of their NC in the technical field of the Division,
- c) advise their NC on Division activity,
- d) recommend items for the working programme of the Division,
- e) recommend TC chairmen,
- f) monitor technical activity within the Division,
- g) approve and recommend the status of documents from the Division to the BA.

1.4.2 Division Officers

The Division Director, Associate Director(s), Division Secretary, Division Editor form a managerial team which is usually referred to as the Division Officers. Their function is to support the DD in the "day to day" running of the Division.

1.4.3 Division Director

As required, each Division shall recommend to the BA a short list of persons to be considered as DD (B 2.1). Based on these recommendations the Officers shall appoint the DDs, balancing the appointments among NCs. Each DD shall be a member of the BA (S 6.4.1). DDs shall not normally serve longer than two terms. The activities of the CIE shall be organized in terms, these being the periods between Sessions. The normal length of a term is four years (S 6.1, B 2.1).

The functions of a DD include:

- a) promoting the objectives of the CIE within the Division,
- b) coordinating the working programme of the Division, especially between Division meetings,
- c) calling and chairing meetings of the Division,
- d) representing the Division on the BA,
- e) implementing policies and directives of the BA,
- f) keeping the VP Technical and the Central Bureau informed on major developments of work and of changes in the organization of the Division.

1.4.4 Associate Directors

The DD, in association with the members, may nominate a number of ADs. These nominations must be approved by the BA. A AD shall assist the DD in the technical functioning of the Division. The duties and authority of the AD should be drawn up by the DD together with the AD, to suit the requirements of the Division. If not already a member, the AD shall be a member of the Division, without voting rights (B 2.8).

1.4.5 Division Secretary

A DD shall with the approval of the Division appoint a DS to help with the administration of the Division. The duties and authority of the DS should be drawn up by the Director together with the DS, to suit the requirements of the Division. In 4.6 possible duties of the DS are listed. If not already a member, the DS shall be a member of the Division, without voting rights (B 2.9).

1.4.6 Division Editor

A DD shall with the approval of the Division appoint a DE whose function is to ensure that the publications of the Division are technically consistent and prepared in accordance with instructions of the VP Publications and the guidance given in Chapters 2 and 3 of this CP. The DE, if not already a member, shall become a member of the Division without voting rights (B 2.9).

1.4.7 Technical Committee and Chairman

Each Division shall propose terms of reference including type of publication, and a working programme including timetable, and shall nominate a TCC for each TC it wishes to establish. The nomination, terms of reference and working programme shall be submitted to the BA for approval. The nominee does not need to be Division member but on appointment, shall become a member of the Division without voting rights (B 2.3, 2.4). Form C (4.12) shall be used for requesting the establishment of a new TC.

Sometimes the primary decision of the Division only covers the TC name, terms of reference and TCC, because it has not been possible, beforehand, to find expert members and to elaborate the working programme. In such cases the new TC will be set up for a period of up to six months, during which time the proposed TCC studies the feasibility of the proposed work. Only after a positive report from the TCC to the DD on the working programme, including time schedule, and on TC members willing to actively participate in the work, will the TC be established.

The functions of a TCC include:

- a) nominating members of the TC (see 1.5.1),
- b) coordinating the work of the TC, specifically ensuring that all knowledge and viewpoints are considered, that the TC keeps to its terms of reference and to its time schedule,
- c) conducting TC meetings and keeping of records and minutes,
- d) responsibility for preparing drafts of publications,
- e) reporting to the Division,
- f) TC Chairman should, from time to time, examine personal and/or working commitments to see whether these still permit effective leadership of the TC. If in doubt, this should be discussed with the DD. Possible solutions include the change of TCC.

1.4.8 Reporters

Each DD shall with the approval of the Division appoint Reporters whose function is to inform the Division on relevant technical subjects which are not dealt with by TCs. A DR, if not already a member, shall become a member of the Division, without voting rights (B 2.9).

1.4.9 Liaison Officers

Each DD shall with the approval of the Division appoint Liaison Officers whose function is to provide liaison and maintain technical interaction with other CIE Divisions and other international organizations (see 4.8).

Whilst they act as an official representative of the CIE they may not enter into any engagement on behalf of the CIE which requires prior approval of the BA. A LO, if not already a member, shall become a member of the Division without voting rights (B 2.9).

1.4.10 Inactivity

Should a Division member, or TCC, be inactive, the DD shall write first informally pointing out the relevant requirements of 1.4.1 to 1.4.7, with a copy to the VPT. If necessary, the VPT will then write formally to the NC. The DD should consider disbanding TCs which remain inactive for a long time if it is felt that it will not benefit from a change of chairmanship.

1.5 Technical Committees

Each Division shall establish, subject to the approval of the BA, a number of TCs to carry out the technical programme (S 6.5.3).

Each TC shall be responsible for one item of the working programme of the Division, restricting their scope of activity to the terms of reference adopted by the Division and approved by the BA (B 2.3).

The TC shall be dissolved when the specific task is completed, usually signalled by the publication of its work. At that stage the TCC shall send all relevant background material to the CB for archiving (B 2.6).

1.5.1 TC Members

The TCC shall, with the approval of the Division, appoint members of the TC from among experts of the member countries and Individual Members, paying attention to the international nature of the CIE activity (B 2.5).

- a) The members must be experts within the item referred to in the working programme of the particular TC. They need not be members of the Division.
- b) The membership of a TC must represent the range of knowledge and viewpoints which exist. It is not necessary to have a member from each NC. Normally the size of the committee will be determined by the range of experts available and by considerations of efficient functioning.
- c) The TCC shall submit the list of TC members to the Division for formal approval. This approval should not be allowed to delay the work of the TC.
- d) *A NC may appoint a member to a TC. Such members have the same status as those appointed by the TCC (B 2.5).*
- e) The members of TCs are not members of Divisions, unless already so by virtue of another position.
- f) Should a TC member be inactive, the TCC shall write to the person (with a copy to the DD and the Division member and NC of the country from which the TC member comes). If necessary a TCC, on the authority of the DD, may revoke the appointment of an inactive member. If the member was appointed by the NC, the NC must be informed.

1.5.2 Advisors

At the discretion of TCC, persons (including experts from non-member countries who, however, should be urged to become IMs) may join a TC to give specific advice; they have no status within the CIE structure but may be acknowledged in CIE reports at the discretion of the TC.

1.6 Meetings of Divisions

1.6.1 Scheduling of Meetings

Meetings of Divisions shall be held at least twice each term (B 2.2). One of these meetings will normally be part of the CIE Session.

As general policy Division meetings should be held in conjunction with relevant seminars, symposia or conferences.

It is recommended that each Division draw up a programme of meetings for at least two years ahead. In doing so, account should be taken of the international nature of the CIE activity. The CB shall be consulted and informed of this programme.

1.6.2 Notice of the Meeting

Formal notice of meetings should be sent out at least six months prior to a meeting. Such a notice should include a call for agenda items. A copy of such a notice should be sent to VPT and the CB (B 3.2.1).

1.6.3 Constituents of the Meeting

The constituents of a meeting are the DD, AD(s), DS, DE, Division members, TC Chairmen, DRs, LOs. The Division members and TC Chairmen may be accompanied by advisors without voting right. If any Division members are unable to attend a meeting of the Division, they may delegate their votes to alternative representatives from their country or to another member. In either case the DD must be informed in writing.

There is no limiting quorum for a divisional meeting that has been correctly announced.

1.6.4 Chairman of the Meeting

The chairman of a Division meeting shall be the DD, if unable to attend, the DD may appoint one of the DOs to chair the meeting.

1.6.5 Meeting Procedure

The business shall be conducted according to an agenda, circulated to reach the constituents at least six weeks before the meeting. A model agenda is given in 4.2; it contains items that a Division must consider. However, it is not exhaustive and each Division may have additional items that are necessary for its individual functioning. It is recommended that reports, drafts, information and discussion papers be circulated beforehand so that constituents can come to meetings fully briefed and so that meeting time is used efficiently.

The business should be conducted according to normally accepted procedures, i.e., formal items should be dealt with by motion, with each speaker limited to one contribution. Written contributions should also be considered within any debate. Minority viewpoints should not be inhibited (see 4.1) and time should be given, if required, for general debate on policy.

Division members are obliged to convey the viewpoint of their NC at the meeting or in writing.

1.6.6 Minutes of Division Meetings

The DD shall be responsible for keeping a record of the meeting and for preparing minutes.

The minutes shall record the essentials of the meeting, including decisions, minority viewpoints, actions required and persons responsible to carry out these actions.

The minutes of each Division meeting shall be sent to the constituents, VPT and to the CB (B 2.7).

1.7 Meetings of TCs

1.7.1 Scheduling of Meetings

Meetings of the TCs should be held as often as necessary and practicable, in order to complete the task within the allocated time.

It is advisable to also hold TC meetings, whenever possible, in connection with Division meetings. The TC meetings should preferably be planned two years ahead and the final call for a meeting should be given not less than six months ahead. Details of the meeting calendar should be sent to the DD.

1.7.2 Attendance

It may not be possible for all members to attend meetings. In order to take account of the international nature of the CIE activity, it is important to give attention to written contributions.

To limit costs a TC should try to do at least a part of its work by correspondence or possibly arrange telephone conferences.

1.7.3 Task

Since the end product of TC activity is normally a technical publication, meetings should be structured around the consideration of a draft. This should be done, if possible, from the first meeting, extending and refining successive drafts until a complete draft is achieved (see 2.3).

1.7.4 Responsibility of TCC

The TCC is responsible for calling meetings, preparing the agenda and circulating the draft publication. The TCC is responsible for keeping a record of the meetings and preparing the minutes. This documentation shall be circulated within the Division as agreed with the DD and copies of minutes sent to the CB.

1.7.5 Reporting

The TC, through its TCC, reports at each Division meeting and whenever the DD needs information for the Activity Report. If the TC has difficulties in agreement (see 4.1) or the task is likely to exceed the allotted time, the DD should be informed.

1.8 Publications

Publications of the CIE shall include Standards, TRs, CIE Technical Collection, Proceedings of Sessions, CIE News, Roster and other administrative publications (S. 9, B 4).

1.8.1 Technical Publications

1.8.1.1 Standards

CIE standards will usually be concise documentation of data and procedures defining aspects of light and lighting for which international harmony requires such unique definition. On the basis of agreements between CIE, ISO and IEC it is to be expected that CIE standards will be taken, essentially unaltered, into universal standard systems.

Standards shall reflect majority opinion, however all efforts should be taken to reach consensus.

The Standard shall refer to TRs as "Normative References". These may include minority opinions.

1.8.1.2 Technical Reports

These will normally be two kinds, a "survey" or a "guide". They will contain documentation of knowledge and experience within specific fields of light and lighting with recommendations as to how this documentation should be used by the CIE membership and other interested parties at large. A TR would usually be a necessary preliminary to a CIE or joint ISO/IEC standard.

Since a TR of the survey type will often represent the state of the art, it is to be expected that it will contain a range of knowledge and viewpoints. Some TRs may use the word 'Guide' in the title to reflect documentation of desirable practice within specific fields of light and lighting. CIE Guides may be used as a basis for international or national standards.

If a formal minority opinion is to be included in the TR on the insistence of members of the TC and/or members of the Division, the procedure given in 4.1 must be followed.

1.8.1.3 CIE Technical Collection

These carry documentation of knowledge and experience arising out of CIE technical activities which merit publication but which may not be sufficiently comprehensive or immediately applicable to appear as a standard or as an individual TR. The CIE Technical Collection can contain TRs or RNs (see 2.2.2).

Material from a TC or a DR for publication as a TR must go through the approval procedure described in 2.4 before being accepted.

Material for publication as a RN must be submitted by the DD, with a note supporting publication and indicating that the material has been refereed by two experts in the field supporting publication (with any necessary revisions). The DD will also provide for publication, a statement on the relevance of the material to the work of the CIE.

1.8.2 Session Proceedings

A report of the activity of each Division shall be included in the Proceedings of Sessions. These reports are the responsibility of the DD and DE.

1.8.3 Activity Reports

Divisions should inform NCs via their members within the Division by summarizing and publishing the progress achieved in the TCs in a Division AR. These six-monthly reports should also contain information on liaison matters, material submitted by DRs, and news items related to the life of the Division. Division members should be encouraged to distribute

information gained via the AR. Information copies should reach the President, VPT and (if possible also on disk) the CB to be used in CIE News.

The AR should have a uniform format, so it can easily be recognized as an important document of information. The head of the front page should be as shown in 4.7, which also shows examples of a contents list and a "TC Status" report.

1.8.4 CIE News

The Divisions should make sure that their programme of activity, including TC meetings, are published in the *CIE News*. It is the responsibility of the DD to inform the CB of scheduled meetings.

1.8.5 Roster

The *CIE Roster* lists the working programmes of the Divisions, addresses of the officers, members of NCs and Divisions and of TC Chairmen. It is the responsibility of the DD to notify the VPT and the CB of changes to the Roster.

1.8.6 Other Publications

The CIE may from time to time become involved formally in other publications. These include proceedings of CIE sponsored seminars, symposia and conferences and joint reports with other international organizations. Prior approval for such involvement is required from the BA. The DD is responsible for obtaining such approval, giving information on the amount of active CIE involvement, financial, publishing and marketing arrangements and the approval of the associated organizations.

2. FORMAT, STYLE AND APPROVAL OF PUBLICATIONS

2.1 Introduction

When a Division proposes the formation of a new TC for approval by the BofA, the terms of reference should include details of the form in which the TC is expected to present the results of their deliberations. This may be a RN, TR or a standard as defined in 1.8.1. However, on occasions as the work progresses it may be necessary to change the method of publication.

This chapter is intended to assist members of Divisions and TCs in drafting documents so that when drafts are in the final approved form, they can be issued as CIE publications as quickly as possible.

2.2 CIE Standards and Research Notes

Before dealing with TRs in some detail, just a few comments on the two other forms in which the work of a TC might be published.

2.2.1 CIE Standards

CIE standards will, unlike other CIE documents, require approval by a majority of the NCs in a postal ballot and are published in the three official CIE languages (English, French and German). A TC preparing a standard on behalf of the Division should provide a draft in one of the three languages (preferably English) and the CB will arrange for translation and printing. The guidance given in 2.5 also applies to standards. See also "ISO Directives Part 3: Drafting and presentation of International Standards" (1989). Where a standard includes figures, diagrams and complex reference tables, the final camera-ready versions of these should be prepared by the TC, working with the DE. These should reach the CB together with a disk-copy of the manuscript, including the tables. In this way, unnecessary delay in technical proof reading by the TCC or DE is avoided.

When the draft has been approved by the Division and BA, it shall be

- filed by the CB as a Draft Standard (DS) and
- given a DS number assigned by the CB;
- translated into the other two official CIE languages and printed by the CB, showing the date of issue and the last date for comments (six months after issue) on the front cover;
- sent free of charge to every NC for comment (one copy);
- included in the List of Publications and made available for sale for public comment.

NCs will publicise the DS, make it available in their country for sale, collate opinions and forward the national comment to the CB before the date for final comments.

Note: To help the NCs in publicising the DS, the CB will

- provide Press Release information;
 - sell the DS through NCs (as all other publications);
- or
- offer the option for each NC to print the DS; in this case the CB provides a "master copy" to the NC, and the NC pays a royalty of 30% of the CB NC price.

The CB shall collect and order the comments and forward these within 60 days to VPT, VPP, DD and TCC of origin. The VPT shall prepare a marked up copy of the DS within 60 days and send it to the CB with a list of those comments that were not accepted together with the reasoning why they were not accepted.

The CB shall produce the 2nd draft of the DS and within 60 days sends it to NCs for vote, together with a statement on the non-accepted comments. NCs shall cast their yes/no vote within three months. A DS shall fail if it does not get the majority of the returned votes.

The CB shall inform the BA and TCC on the outcome of the vote and, in the positive case, negotiate with ISO/IEC on joint publication.

2.2.1.1 ISO/IEC Joint Standards

Joint standards of CIE/ISO or IEC are published by ISO or IEC, usually in English and French. The CIE approval procedure is the same as for CIE standards.

2.2.2 CIE-Research Notes

A TC may wish to propose, for example, new calculation or experimental procedures which require validation by other interested workers in the field. Other examples would be working papers, related research or review papers. Such work can be published in the CIE Technical Collection as a RN. It is also possible that such material could be placed with other journals if this would give wider coverage to CIE activities.

When a DR finishes the work without a new TC being established, the Division can consider the final report as a possible RN.

2.3 CIE Technical Reports

The first task is to agree on a title and draw up a contents list indicating the way in which the report will be sub-divided into chapters and subheadings to satisfy the terms of reference. Copies of this should be sent to the DOs for comments.

The TC members should ensure that they are familiar with all current CIE publications that are related to their subject and that references to these are included in the text.

2.3.1 Part Drafts

The work of drafting chapters may be divided among members of the TC. This can be an effective way of getting the work of the TC moving quickly on several fronts. However, to avoid potential confusion, each draft should be issued with a "PART DRAFT" front page giving the following information:

- TC number and name
- Title of full report
- Chapter number(s) and title(s) covered by the "Part draft"
- Draft number,
- Date
- Name(s) of author(s)

Circulation of part drafts outside the TC should be limited.

2.3.2 Complete Drafts

As the part drafts are developed and linked together, the information on the front page should be combined so that the progress of the report and the status of various drafts can be assessed.

Once the first 'complete' draft including all the main chapters with a contents list is produced, a new "COMPLETE DRAFT" front sheet should be used giving the following information:

- TC number and name
- Title of report
- Draft number
- Date
- Name of the TC member who is providing the word processing service
- Word processor file reference (word processor format, version, document, if relevant).

The draft number now returns to (1) and subsequent re-drafts should be numbered sequentially and added to the previous information.

A draft should never be called a "Final Draft". In the past, confusion has arisen from several "Final Drafts", from different authors, all being circulated at one time!

No matter how minor the change, a new draft number and date must be added to the front page. It is also useful to indicate where changes have been introduced since the previous draft. Particularly for large complex documents the only certain way to achieve this is either to have every page dated or adopt a different type face for the amended text.

2.3.3 CIE Publication Numbers

The issuing of publication numbers is the sole responsibility of the CB. This will be done only when the document has completed the full approval procedure. If a TC wishes to refer to a yet unpublished report, the CB should be informed and the matter would be resolved in the final proofing stages.

2.4 Drafting and Approval Procedure for Technical Reports

The drafting and approval procedure is summarized in the flow diagram, Fig. 2.1. This diagram and the following text is for guidance only, it is not a mandatory procedure to be followed in cases where it is agreed that changes will ensure that the work is carried out more efficiently and effectively. What is essential is that all relevant CIE officers and staff are kept fully informed of the procedure being followed at all stages of the drafting and approval of a TR.

The TCC should consult the DE and the DD at early stages of the drafting and should follow the advice given in this CP. During the procedure the DD cooperates with the DE, DA(s) and DS and may, at any time, consult the VPT and VPP when it is beneficial for the progress of the TC work.

Normally it is necessary to write several drafts, which will be circulated to TC members and it is advisable to mark clearly those parts which have been amended in the new draft compared with the proceeding draft.

When the TC has voted, using Form D (4.12) to accept a complete draft, the draft should be submitted, with Form A, to the DD, and to the DE for the final editing.

The DE sends the edited draft back to the TCC, usually within four weeks (if he/she needs more time for editing, this means probably that major re-writing is needed; in this case TCC and DD should be informed and - as far as possible - a member of the TC with English as his mother tongue be involved). DD and CB should be informed on the progress of finalising the draft.

The edited, complete draft, hard copy plus disk, and the original artwork of figures, diagrams and tables, are sent by the TCC to the DD together with a report using a new Form A (see 4.12).

DD checks on the completeness of the draft and sends it for further processing to the CB. CB puts the draft and Form B on its divisional and BA FTP site and informs Division and BA members on the availability for downloading and assigned password by e-mail. A Division or BA member can request a hard copy by return of mail. The deadline for the Division and BA ballot is 14 weeks after posting the material on the FTP site.

When the divisional ballot is completed, whether for or against publication, a summary of the voting with any comments received should be compiled by the CB. The CB will then send this and a statement of the BA ballot with any comments received, to the VPT, VPP and DD.

As shown on the flow diagram, in the event of an unfavourable ballot, the VPT will return the draft to the DD with recommendations for future action, with copies to the VPP, TCC and CB.

Normally, however, the VPT, indicating the comments which need to be taken into account in the publication, will confirm his approval to the VPP and inform the DD and CB.

The VPP will then prepare a draft marked-up to take account of valid comments and send it to the CB, requesting the preparation of the final camera-ready copy using the original artwork of figures and diagrams which will already be at the CB (see above). Before printing, the CB will send a copy of the camera-ready document to the TCC for final proof-reading, with copies to the VPP, DD and VPT. When the TCC indicates approval, the CB will arrange for printing, binding and distribution of the document and prepare a press release which is sent to the NCs, the BA and suitable journals. An announcement of publication will be included in CIE News.

Finally, the DD will write to the TCC formally winding up the TC and acknowledging the work of the TC. The TCC will also be required to send all relevant background material to the CB for archiving (B 2.6).

2.5 Layout

2.5.1 Pagination

Cover - designed and supplied by CB.

Page I - duplicate of cover by CB.

Page II - standard preface and disclaimer in three languages by CB.

The text to be delivered by the Division starts here:

Page III - list of TC members below the statement:

"The following members of TC x-yy (Name of TC) took part in the preparation of this (TR/Standard). The TC comes under CIE Division x (Name of Division)".

Advisors should be listed separately below the TC members.

Division members not serving on the TC should not be included. Any other acknowledgements of contributions made in drafting the report should be placed at the end of the "Conclusions".

Page IV - contents of reports with page numbers (see 2.5.2.4).

Page V - title and summary of report in the three CIE languages.

Note: The text in this summary is often used to publicise the publication and should be written with this in mind.

Page VI et.al - only necessary if 'Contents' and 'Summary' each take more than one page.

Page 1 - Introduction

.....

.....

..... - to end of report, including appendices, references, bibliography, etc. as defined on the

contents page.

Pages should be numbered at the top of each sheet.

2.5.2 Style and Format

2.5.2.1 English Language

All reports will be in English. The aim should be to use a style of writing which is simple and concise. For all technical terms refer to the International Lighting Vocabulary [current version: IEC 50(845)/CIE 17.4 1987]. For all other words use the Shorter Oxford English Dictionary or the Concise Oxford Dictionary, see 3.4.3 and "ISO Directives Part 3 (1989): Drafting and presentation of International Standards". Both give useful guidance for those preparing all CIE publications. American spelling is accepted as long as it is used consistently throughout a document.

2.5.2.2 Paper Size

Camera-ready copy must be on A4 paper (210mm x 297mm). The area covered by figures, tables and text should not exceed 150 mm x 250 mm. Camera-ready text is not required when the report is supplied on disc, although a hard copy should be provided for reference.

Note: If artwork and tables originating in North America can only be supplied on quarto paper, the 150 mm x 250 mm area should still be used so that the final A4 page does not look under-filled.

2.5.2.3 Units and Numbers

SI units should be used throughout. (Refer to ISO 1000 or ISO 2955 if using a limited character set). For representation of numerical values see 4.11.1.

2.5.2.4 Contents. Example of Contents Page

The report should be divided into chapters, these in turn being divided into sections using decimal numbering for all chapter headings, section headings and sub-headings. The following example shows how a contents page might appear using the numbering system with the various headings differentiated by type form.

Example:

	Page
1. INTRODUCTION	1
1.1 Scope	1
1.2 Background	
2. OBJECTIVES	2
2.1 Long term	2
2.2 Medium term	3
2.3 Short term	3
3. METHOD	4
3.1 Instrumentation	4
3.1.1 Receptors	5
3.1.2 Meters	6
3.2 Data Recording	7
3.3 Data Analysis	8
.	
.	
.	
.	
.	

9.	CONCLUSIONS	16
9.1	Recommendations	27
	9.1.1 Short term	27
	9.1.2 Medium term	28
	9.1.3 Long term	28
9.2	Acknowledgments	28
10.	APPENDICES	
10.1	Questionnaires	29
10.2	Meter Calibration Curves	31
11.	REFERENCES	40
12 .	BIBLIOGRAPHY	44

2.5.2.5 Illustrations and Tables

These should be inserted at appropriate positions throughout the text, i.e. not grouped at the end of the document.

Photographs do not reproduce well with the technique used in CIE publications. A TC which considers photographs essential should inform the VPP and CB as early as possible in the drafting stages to see if the additional cost can be accepted. The TC should bear in mind that this cost will be reflected in the selling price of their report. Good quality can only be achieved on art paper. This dictates that the illustrations will have to be grouped which may mean that pictures cannot be placed adjacent to the appropriate text.

Diagrams and figures should be drawn to a consistent style. When the original artwork is intended to be reduced in size to produce the A4 camera ready copy, the size of type and line thickness used must ensure legibility in the final version. Graphs must not be drawn on fine graph paper. All axis must be scaled and units clearly marked. Symbols or broken lines to indicate different series of points, or shading indicating different areas under curves, must be clearly distinguishable. More than three functions on one graph are potentially confusing. Figure 2.2 shows an example of a poorly designed diagram and Figure 2.3 shows an improved version.

2.5.2.6 Numbering of Figures and Tables etc.

In the next four sub-sections, the numbering system linked to the chapters is intended for use in large reports where part drafts are divided among members of the TC. The advantage of this is that when the part drafts are combined the numbering need not be revised. However, for small reports sequential numbering of figures and tables, equations and references is acceptable. In the section dealing with references an alternative method of alphabetical listing is included.

2.5.2.7 Figures

"Figures" include all forms of illustrations; graphs, line diagrams, photographs, etc., and should be numbered consecutively throughout each chapter preceded by the chapter number, e.g. Fig. 2.7, i.e., the 7th figure in chapter 2. Each figure should be captioned, usually below the illustration in the same type face as the main text.

2.5.2.8 Tables

Tables use a similar but separate numbering sequence in each chapter, e.g.: Table 2.7, i.e., the 7th table in chapter 2. Each table should be titled, usually above the table.

Note: Current data on lamp type, wattage ratings, lumen output, efficacy, colour temperature, colour rendering and life were issued by Division 7. This data is to be used in all reports at the time of publication to achieve consistency in numerical values. The TC is required to select the lamp types which are relevant to the subject of their report and add any additional columns of comments and application information (see 4.10).

2.5.2.9 Equations (see also 4.11.2)

All equations should be numbered consecutively in brackets, at the right-hand side of the page, throughout each chapter, e.g.:

$$E = Mc^2 \quad \text{..... (2.7)}$$

i.e., the 7th equation in chapter 2.

2.5.2.10 References

Two methods of indicating references are acceptable:

- a) Preferred method: References grouped together at the end of the document in alphabetic order. The reference within the text should state the first author or organization and the year of publication in brackets, e.g.: (Jerome, 1974) or (CIE, 1974). If more papers from the same source and year occur in the publication, some further identification should be used, e.g. name of further authors (Jerome - King - Pond, 1974) or (CIE 52, 1982).
- b) References should be grouped together at the end of the document under the chapter heading "REFERENCES" and numbered sequentially in each chapter. These numbers, in square brackets, to appear at appropriate positions within the text, e.g.: [2.7] i.e., 7th reference in chapter 2. Alternatively reference numbers can appear in the text in small type and superscript. Where the same reference is repeated in a later chapter it should retain the original chapter reference number.

Within "REFERENCES", the information should be presented in the following way:

Surname and initials of the author(s), year of publication in brackets, full title of paper, official abbreviation of journal, volume, (in bold type), series (if applicable), first - last page of contribution, e.g.:

Jerome, CW - King, S - Pond, J (1974). Absolute Colour Rendering, *J Illum Eng Soc*, **4**, 25-28.

For books or monographs, write after the name(s) of author(s) the year of publication in brackets, the title of the book (monograph), the name of the editor (if appropriate), the publisher and the place of publication e.g.:

Brown, JG (1991). Modern Lighting (Chapter 4) in *Building Services* (ed. Smith, PR), McGraw-Hill, New York.

Where the work referred to is an official publication, the organization responsible for the publication should be quoted, e.g.:

CIE Publication No. 23 (1973). International Recommendations for Motorway Lighting. Commission Internationale de l'Eclairage.

2.5.2.11 Bibliography

In this chapter a list of additional sources of information, not directly referred to in the text, can be given. The details of these publications should be shown in the same form as for "References". The ordering of the items is left to the discretion of the TC and DE.

2.5.2.12 Definitions

Definitions of terms which appear in the current issue of the International Lighting Vocabulary should not be repeated in the report. A reference to ILV will suffice. This may be supplemented by simple explanations of terms in publications intended for non-specialist readers.

2.5.2.13 Use of Abbreviations

Abbreviations should not be used alone in a report until the term has been introduced in full, e.g.: World Health Organisation (WHO). Alternatively, as in this CP, a list of abbreviations to be used can be given in the introduction to the report.

2.5.2.14 Use of Notes

Notes, if they must be used, should be inserted at appropriate points in the text and not as footnotes. This is again to avoid complications when inserts and deletions are made to a draft.

2.5.2.15 Trade and Proprietary Names

In spite of the inclusion of the disclaimer statements on the preface page of all publications, trade or proprietary names should be avoided; they should be used only where no other means can identify a material or product.

2.5.3 Consistency of Style

CIE is dependent on the secretarial services provided by the members of the Division. For this reason, the aim is to achieve consistency of presentation within one report and not to attempt to achieve a rigid "house style" for all CIE publications. For this reason, 2.5.2 does not comment on type face, use of underlining, indenting etc. Nevertheless wherever practical, the aim should be to conform with international standards, and 4.11 gives extracts from IEC/ISO Drafting and Presentation, 1989, which should be taken as a guide for the representation of numerical values and formulae. When a TC can provide the text on disc the CB is, of course, able to make changes to format and typeface. In this case, the captions for the figures and tables should also be included on the disc.

2.5.4 Use of Recent Publications for Guidance

None of the current publications follow these notes in every detail. Nevertheless publications 86 (1990), 89 (1990), 90 (1991) and 92 (1992) can be taken as a base level of quality and consistency that the CIE wishes to maintain. As the guidelines in this CP are applied, a higher level of consistency of layout between publications will be achieved.

Reference should always be made to the latest publications for guidance on style and format.

3. FIVE STEPS IN WRITING A GOOD TECHNICAL REPORT IN ENGLISH

This is an edited version of a report prepared by G. Hietbrink and presented at the Division 5 meeting at Houston in February 1986.

3.1 Foreword

If you want sound advice, it is always a good idea to go to the professional specialist. So I did, and I discovered a small book* which I read with much pleasure and where I recognized information, that could have prevented many of my own mistakes, had I read it before. I immediately phoned the publisher, but he told me that the book is out of print.

*) Note: "Writing Scientific Papers in English"

by M. O'Connor , F. P. Woodford

Pitman Medical Publishing Co Ltd.

P O Box, 7 Tunbridge Wells Kent TN1 1XH England.

From that book I have selected the most important recommendations; some 110 pages have been reduced to 9. If you like what you read, credit is due to the experts who put their knowledge on paper in an almost perfect way. If you don't like it, you may of course put the blame on me for not making the right selection. I do hope however, that you will read it and use it!

I will not go into details now about the contents of my selection, but a few remarks are useful. Let us start at the end.

In 3.7 you will find a very instructive list of "expressions to avoid". The list is not a dictionary, for it comprises only three pages, but every expression in it is a beautiful example of how things should not be done. It teaches you how to be critical and use your dictionary. What are the leading thoughts of the book?

The most troublesome blocks to writing a good report are conceptual and not procedural.

When underlying failures in logic have been dealt with, many language problems disappear or can easily be solved by someone else with a better command of language.

In this way the Committee prevents the Editor being tempted to re-write a report. He must only be allowed to finish it and no more.

So, if we compare the report to a building, the committee has to do more than deliver the building materials to the site in an orderly way. It has to provide a logical basic design and to complete that until it only needs to be finished.

I can't say it better than the authors of my book "The search for the simplest, most direct way to express your thoughts is - in the end - a matter of efficiency for both author and reader".

G Hietbrink

Eindhoven February 1986

3.2 Preparing

3.2.1 Draft a working title and summary

Compose a working title and a draft summary (that is, a short version of what you intend to say) for the report you have not yet written. This suggestion is not as paradoxical as it may seem. You have already worked out what your conclusions are and how they relate to other work on the same subject.

Drafting the title and summary should therefore present no difficulties, if you know exactly what the report is to convey. If you are not yet sure of the scope, composing a working title and summary will help you to define it. Later, the working title and summary will guide you in deciding what to include and what to leave out. Refer back to them often while you are drafting the text.

3.2.2 Decide on the basic form

Now decide the basic structure of the report. Examples are:

Conventional

Introduction
Materials and Methods
Results/Recommendations
Discussion

Theoretical

Introduction
Theoretical Analysis
Applications
Conclusions
Descriptive

Introduction

Materials and Methods
Analysis of Data
Results/Recommendations
Discussion
Conclusions

New Method

Introduction
Description of Procedure
Tests of New Method
Discussion

3.2.3 Collect the material

When you have selected the main headings as just discussed, write each of them at the top of the sheet of paper. On each sheet put down in random order, just as they occur to you, all the thoughts that seem to belong under that heading.

As you go along, add any relevant tables, graphs or other illustrations that you have already made in rough form. Collect also all the reprints or cards giving bibliographical details of references that you are likely to need.

3.2.4 Design tables and illustrations

Tables and illustrations usually contain all the evidence on which a report is based, and readers often examine them before deciding whether the text is worth studying. Choosing and designing them carefully now, before you write the text, will show up any gaps. It will also ensure that the reader will be able to grasp the significance of tables and illustrations without referring to the text.

Finally, it may save you writing many extra words, because information presented in tables or illustrations need not and should not be repeated in detail in the text.

Every illustration and table must have a purpose and form an essential part of your argument. Aim to make each of them convey a clear message. Try to provide maximum information in minimum space, while keeping the whole as simple and clear as possible.

The titles, column headings, entries in the first column and explanatory notes form the framework of the tables. Together they must make the tables comprehensible and independent of the text. Make sure that the proposed tables are all worth setting as tables: very small tables can often be converted into one or two lines of text. Number the proposed tables in the order in which you expect them to appear. Then write a list of tentative titles, stating in each title what the table will show. Listing the titles together will help you to decide which tables are essential and whether their purpose will be clear to the reader. Compare the titles with one another and remove redundant words and inconsistent statements.

3.2.5 Write a topic outline

Before you begin to write the text, make an outline. Two kinds of outline are commonly used: a topic outline and a sentence outline. A topic outline defines what subject will be discussed in each section or paragraph. A sentence outline expands the topic outline and puts into sentences the main point you want to make about each subject in the topic outline. Thus, the topic outline is a series of nouns or phrases arranged in a hierarchy, whereas the sentence outline is a series of sentences. Only the latter would make sense to another person. Ideally, every sentence in the sentence outline will form the basis of a paragraph in the final text.

3.3 Writing the first draft

Writing the text should present few difficulties if your preparations have been thorough. Settle down at a time and place which will allow you to remain undisturbed for several hours. Collect all the material you have prepared and begin to write or type the first draft. Follow the outlines closely at this stage. Make the introduction brief, be concise but clear: aim to awaken interest rather than stifle it with fussy detail, and try to gain and keep the attention of readers.

People who find writing difficult - that is, most of us - sometimes fill introductions with platitudinous general statements. There is nothing wrong with doing this if it clears your mind and helps you start writing. But there is no good reason for publishing these generalities and you should remove them ruthlessly before you reach the final draft. A drastic piece of advice worth considering is: tear up the first two pages. When you have written the first complete draft, put it away for a day or two. Then re-read it quickly and not too critically, correcting only

the obvious mistakes as you go through it. Before you embark on the next stage - revising the draft - put the manuscript away and forget about it for a week or two.

3.4 Revising

3.4.1 Re-examine the structure

A good way to revise the first draft is in two stages: structural and stylistic. It is a waste of time trying to improve stylistic details before you are sure that the sections, paragraphs and sentences are in the right order, that all the essential points have been included and any superfluous ones removed. Start with the structure, therefore, and examine everything you have so far prepared for logical order, accuracy, consistency and truth.

3.4.2 Check the illustrations and tables and make the final versions

Re-examine the illustrations and tables in the light of the structure of paper as it is now. Are any of them redundant or less relevant than you thought at first? If so, remove them. Can any remaining illustrations or tables be combined for greater effect? Can any be simplified? Make any necessary changes - and appropriate alterations to titles, legends and footnotes - before you prepare the final versions. This reconsideration will help to give you a new view of the text. Prepare the illustrations, or have them professionally drawn or finished.

3.4.3 Check for consistency

Now check whether you have been accurate in other matters. Have you spelt the same word in the same (correct) way throughout? Have you written numbers, symbols and abbreviations in the approved form. Many English words have British and American spellings. Neither is 'more correct' than the other, but you should be consistent. A good dictionary will show both forms of spelling and tell you which is which.

3.4.4 Type the first draft

Have the manuscript typed on good paper with wide margins and wide spacing, so that you have a clean copy to work on in revising the style.

3.4.5 Revise the style

Editors do not/should not expect people brought up speaking other languages to write perfect English - but they do expect all authors to express themselves as clearly as possible, avoiding clumsy phrases and major grammatical errors. Where, for example, an original French or German text is translated into English the sentence construction also has to change. Thus, "It is recommended to draw the diagrams at such a scale that ..." should read "It is recommended that the diagrams are drawn to a scale so that ..."

3.4.5.1 Problems with verbs

- Non-agreement of subject with verb. Example:

"The luminous intensity of lamps from office installations were higher than expected". Should read 'was higher'. The subject is intensity, not lamps or installations.

- Incorrect omission of 'was' and 'were' in a series of passive verbs. Example:

"The installation was measured and several values noted for examination" is wrong because 'values' as the subject of the second verb needs the plural auxiliary verb 'were', not the implied singular verb 'was'.

- Be careful about sentences like:

"The lamps were broken and their filaments stretched" - because the reader may wonder whether the filaments stretched of their own accord or were stretched.

3.4.5.2 Dangling or hanging participles. Example:

"Examining the results, the conclusions are obvious" means, if taken at its grammatical face value, that the conclusions are examining the results.

Correct this fault by substituting an active verb for the participle and naming the subject: "When we examined the results, the conclusions were obvious".

3.4.5.3 Excessive use of passive voice

It is absurd, and mentally lazy, to use the passive voice in every sentence. Write 'Fig. 1 shows', not 'As is shown in Fig. 1'. In the Introduction or Discussion sections of papers write 'we believe' rather than 'it is thought' if you are referring to your own thoughts. (This type of circumlocution has been called 'passive modesty'). If you think you must use 'it is generally thought', try to identify by whom it is generally thought: you will probably decide to abandon the phrase. The right place for a verb in the passive is in a sentence like 'The meters were re-calibrated twice a year' when there is no need to identify the laboratory technician, or in a sentence like 'The meters should be re-calibrated twice a year' when there is no need to direct any particular person to do that job.

3.4.5.4 Problems with pronouns

The words 'it', 'this', 'that' and 'which' can give trouble if they do not refer unambiguously to a preceding noun. Find every such pronoun in your text and ensure that the reader will immediately understand what it refers to.* It is far better to repeat a noun than to risk being misunderstood.

* Nowadays ending the occasional sentence with a preposition is acceptable. To insist on using "to what it refers" is considered over-pedantic.

3.4.5.5 Problems with nouns

Some scientists have a mania for using abstract nouns. This leads to a heavy and colourless style which is often mistakenly regarded as a model of objectivity and detachment. Good English stylists detest this habit. If the only English you read is that in the scientific journals, be especially careful: Your style is undoubtedly so contaminated that you are probably writing sentences like this: 'The addition of x and y to the medium permitted shaking of the solution without the formation of ice crystals and the precipitation of z'. The words in this sentence ending in '-tion' - addition, formation and precipitation - are abstract nouns derived from the verbs, 'form' and 'precipitate'. Note that abstract nouns are almost always longer than their corresponding verbs; both their length and their abstract quality contribute to the ponderous effect for which you are probably striving in imitation of your British and American models. Stop striving and write 'After adding x and y to the medium, we were able to shake the solution without causing ice crystals to form and without precipitating z'. Learn to suspect that inside every abstract noun there is an active verb struggling to be let out. The distress signals in your text will include weak and colourless past participles such as occurred, effected, brought about, achieved and produced. Having detected the fault, you can improve sentences like 'Separation of A from B was effected (brought about, achieved, performed, obtained, carried out etc)' by writing 'A was separated from B' or 'we separated A from B' instead.

3.4.5.6 Problems of verbosity and pomposity

The most effective writing, in a scientific journal or anywhere else, is simple clear, precise and vigorous. If you want to write effective prose, search for the simplest, most direct way to express your thoughts. Beware of hedging over uncertainties or suppositions: 'It may seem reasonable to suggest that this effect may possibly be due to involvement of some toxin-like substances' contains eight degrees of uncertainty and only means 'This effect may be due to toxins'. And do not suddenly hesitate after a positive phrase : what does 'This strongly suggests that chromatic aberration probably plays no part in...' mean? English favours shorter sentences than many other languages. Shorten or simplify each sentence, provided that this can be done without sacrificing subtlety and exactness of meaning. Try to keep sentences to less than 40 words, but vary their length. It is more important to have a single idea in a sentence than to strive for constant length: besides, a series of 20-word sentences is almost as tedious and distracting as a succession of 80-word ones. Always place different ideas in separate, clearly constructed sentences.

Choose common, short words in preference to long or archaic ones ('end', not 'terminate'; 'on', not 'pertaining to'; 'before', not 'prior to'). Cut out all long-winded introductory phrases like 'it is of interest to note that' and 'it will be seen upon examination of Table 2 that'. Remove any unnecessary adjectives and adverbs, giving special attention to vague qualifiers such as 'very', 'quite', 'rather', 'fairly', 'relatively' 'comparatively', 'several' and 'much'. 'Relatively' is particularly objectionable unless you really are relating one number or quantity to another.

3.4.5.7 Problems of imprecision

If you always choose elaborate words instead of simple ones you will soon be trapped into using words wrongly. English is so rich and complex that vigilance and self-discipline are needed for success in writing it correctly. The utmost accuracy in writing, as well as in experimenting or observing, should be every scientist's aim. Make sure, therefore, that you know the exact meaning of every word in your text. Since this is hard, time-consuming work, the fewer words there are the better for you. You need good dictionaries, of course, including both a dictionary from your own language into English and a large English language dictionary. Even quite simple words may be used wrongly by people who do not bother to discover their exact meaning. If you want to point out that one value is lower than another, do not say it is 'decreased relative' to the second number: this is both cumbersome and wrong. 'Decrease' implies a change with time or after some event or manipulation, whereas the two values may have been constant for centuries. Mistakes like this are dangerous; in no time you will find yourself wondering whether the first number has in fact decreased. And your reader may be quite sure that it has. Again, when you write that the investigation followed 'alternate' pathways, that literally means that it proceeded first by one pathway, then by another, then by the first and so on: the word you probably want is 'alternative'. Only a careful study of the dictionary will enable you to distinguish 'affect' and 'effect' or 'proceed' and 'precede' reliably.

Because certain words and phrases are constantly misused even in reputable international journals, you may be unaware that you have acquired incorrect usages. Read through section 3.7 now, and use your dictionary to establish the correct meaning of words you are surprised to find in the left-hand column.

3.4.6 Get advice from colleagues

After you have revised the paper structurally and stylistically to the best of your ability, have the revised version (the second draft) typed again and send it to your colleagues on the Technical Committee. Ask them to give you their comments in writing if possible; this usually saves everybody's time in the end, and keep tempers cool. While the copies of the manuscript are being critically considered, relax and think about (or do) something else.

3.5 Refining

3.5.1 Make changes

When your colleagues have read the second draft, think about their suggestions carefully and objectively. Read the draft critically yourself, and make any changes that you decide are needed. Polish it into its near-final state. You will have to check every part of the report to ensure that it complies with the relevant instructions to TC's and construct the reference list in the correct form.

3.5.2 Rewrite the title and summary

You wrote the working title and summary for yourself. Now write a title and summary for publication, bearing in mind that the purpose of the published title is to bring the report to the attention of the people who ought to see it, and that the purpose of the published summary is to tell them briefly what it is about and why it will interest them. Make the title concise, accurate and informative. The object is to give the reader as much specific and intelligible information as you can in as few words as possible. If a title can be kept below 12 words and 100 characters (including spaces), so much the better. Readers find titles longer than this difficult to grasp when they are scanning a large number of them.

In constructing your title, try to choose the words you would think of if you were looking for the paper in a subject index. In your efforts to be informative, do not inflate the title into a short summary - if you keep it to less than 100 characters you will avoid that danger. Keep the summary down to 250 words for a report with 30 or more pages and to 100 words for a short communication. Be brief; state the purpose and the conclusions so that non-specialist readers can grasp the significance of the work.

3.6 Make the final check

Make sure that you have:

- Numbered the text pages consecutively.
- Numbered your figures, tables, equations and references.
- Read the caption and headings of each figure and table objectively to determine that they can be understood without reference to the text.
- Searched the text for references to figures and tables to make certain that each table is referred to and that each of the references is to the appropriate figure or table.
- Checked that each figure and table is placed appropriately in the text.
- Examined your text to make certain that each reference cited is accurately represented in the reference list.
- Examined your reference list to make certain that each listed there is accurately referred to in the text.
- Examined each item in the Bibliography for accuracy of dates, wording, spelling and other details.
- Reconsidered the appropriateness of your title, summary and your content list.
- Reviewed 2.5 of this CoP and made certain that your report follows the suggested format and
- Carefully read your final typescript at least twice, once checking against the pages from which it was typed and the second time - preferably on a different day - just reading it straight through.
- Attached to the front of the typescript a completed copy of Form A (see 4.12) giving a report of the TC voting, the degree of agreement, any major dissenting or minority opinions and any omissions or inclusions of material which require comment.

- Prepared as many copies of your text, tables and illustrations as are required.
- Kept for your files the complete original of your manuscript and accompanying material.

3.7 Expressions to avoid

Readers are advised to work through the whole list to get the flavour of the suggestions rather than use it as a reference tool, since alphabetical listing is so arbitrary. Do not regard the list as a dictionary: the word or phrase in the second column is not by any means always an exact equivalent of that in the first.

Avoid	Usually prefer
alternate (adjective)	you probably need "alternative"
anticipate	expect
approximately	about
are of the same opinion	agree
as already stated	see "woolly words" below
as can be seen from Fig.1, growth is more rapid	growth is more rapid (Fig.1), or Fig.1 shows that growth is more rapid
as far as our own observations are concerned, they show	our/my observations show
as far as this factor is concerned, as follows:-	this factor is (omit "as follows" and the dash; the colon is sufficient)
as for these experiments, they are	these experiments are
as of now	now, from now on
as shown in Fig.11	Fig.11 shows that
as regards this factor, it	this factor is
assist(-ance)	help, aid
at some future time	later
at the present moment, at the present moment in time, at this time	now
author(s), the	I, we
bright red in colour	bright red
colourless past participles: accomplished, achieved, attained, carried out, conducted, done, effected, experienced, facilitated, given, implemented, indicated, involved, made, obtained, occurred, performed, proceeded, produced, required)	avoid: use a meaningful verb instead
commence	begin, start
comparatively	avoid, unless you are making a real comparison of one item with another (omit)
concerning this effect, it may be borne in mind that	
conducted irradiation experiments on	irradiated
considerable amount of	much
considerable number/proportion of	many, most
contemporaneous in age	contemporaneous; the same age
created the possibility	made possible; enabled (a person); allowed (an action)
data	facts, results, observations, information

decreased number of decreased relative to due to the fact that during the time that	fewer, less less than, lower than because while
elevated employ encountered encountered frequently	raised, higher, more use met this effect was common e.g.: "this effect was"
equally as well exhibit; X exhibits a good linear response	equally well show; X has a linear response
fairly fewer in number following (the test) for the reason that from the standpoint of	(omit) fewer after (the test) because, since according to
goes under the name of greater/higher number of	is called more
if and when if conditions are such that in a considerable number of cases in all cases in connection with increased relative to in few cases in excess of in order to	(use one of these prepositions alone) if often always about, for more than sometimes, rarely more than, above to
in regard to in relation to in respect of in terms of in the case of in the context of))) (use the appropriate preposition,) e.g. in, for, about, with))
in the event that in the present communication in this connection the statement may be made that in view of the fact that it has long been known that it is apparent, therefore, that it is of interest to note that it is often the case that it is possible (probable) that it is this that it may, however, be noted that it may be said that it seems to the Committee it will be seen upon examination of table 5 that it would thus appear that	if here; in this report (omit) since, because (omit) hence, therefore (omit) often possibly (probably) this nevertheless, but possibly we think, it seems Table 5 shows that apparently
large number(s) of large proportion of	many much, most

light in character	light
lesser extent, degree	less
level	concentration, content, value
literature, e.g. It is reported in the literature that	others have reported that
made a count	counted
majority of	most
moment in time	time
much	(omit)
multiple	several, different
number of	several, some
of large size	large
of such strength that	so strong that
on the basis of	from, by, because
owing to the fact that	because
parameter	index, criterion, factor, characteristic, measure, value, variable
pertaining to	on, about
prior to; prior to that time	before; before that
proportion of	some
quite	(omit)
rather	(omit)
regime	regimen
relatively	(avoid, unless you are calculating a real quotient)
relative to (This letter is relative to)	about
respectively	(avoid, unless you are sure you are using the word correctly, as in "Measurements at 200, 250 and 300 nm give spectral energy values of 60, 70, and 80 mW respectively")
reveal	show
serves the function of being	is
significantly	much, appreciably, definitely (but correct if statistical tests of significance have been made)
similar in every detail	the same
small numbers of	few
sophisticated	advanced, new, expensive
square in shape, square-shaped	square
sufficient number of	enough
subsequent to	after
terminate	end
the test in question	this test
the tests have not as yet	the tests have not
the measurement having been performed	after measurement
there can be little doubt that this is probably here	this is probably (often unnecessary: e.g change, "There is much work being done on .." to "Much work is being done on...")
is, there are	they are alike (similar)
they are both alike (similar)	they are alike (similar)
throughout the entire area	throughout the area

throughout the whole of the experiment
two equal halves

upon
utilize, utilization
very

while
with reference to
with regards to
woolly words:
area, character, conditions, field, level, nature,
problem, process, situation, structure, system

throughout the experiment
halves

on
use
(omit)

although
about
in, to

avoid:
change to more precise words

4. APPENDICES

4.1 Minority Opinions

4.1.1 Criteria for Preparing Minority Opinions

The minority opinion: During the approval procedure of a TR, a dissenting minority opinion may develop. In order to be considered for printing as a formal minority opinion with the TR the minority opinion must apply to parts or the total of the draft and the following criteria must be met.

- Rejection of the draft: If the total draft is rejected by the minority the reasons for this opinion must be clearly stated and a new approach to drafting such a document must be proposed.
- Rejection of parts of the draft: The parts for which the dissenting minority opinion exists must be clearly identified. The reasons for dissenting on those parts must be stated and revised text for those parts must be proposed.

4.1.2 Procedures for Processing Minority Opinions Arising from Division and BA Ballots

Minority opinions must be submitted by the member of a NC when, or before, the draft is distributed to the Division members for a vote of approval.

If such a minority opinion is submitted, the DD and the TCC concerned should make efforts to ascertain that the dissent is not due to misunderstandings and can be resolved by editorial modifications. CB should immediately be informed of any dissent so that the BA ballot can be suspended.

If the dissent persists the DD shall circulate the minority opinion to all members of the Division and the CB with a request for comment. If most of the comments are in favor of the minority opinion, the DD may circulate an amended draft for another vote of the Division and BA. If the comments are not in favour of the minority opinion then the original ballot and draft is reinstated.

4.1.3 Dissenting Minority Opinions Arising during the Drafting Stages of a Report

Most areas of disagreement will be resolved by debate within the TC led in the first place by the TCC and in particularly difficult cases involving the DD.

Where a minority opinion remains unresolved the criteria in 4.1.1 should be applied and the Division members should be asked to vote on the inclusion of a minority report in the draft, prior to submitting the complete document to the full approval procedure. Information on the minority opinion would be included on Form A (see 4.12) with additional documents if necessary.

4.2 Model Agenda for Division Meetings

- 1 Opening.
- 2 Apologies for absence.
- 3 Approval of minutes of previous meeting.
- 4 DD's report.
- 5 DE's report.
- 6 TCCs' reports.
Discussion on status, terms of reference, working programme, TC membership.
Discussion on changes.

7. Progress reports from DRs.
Discussion and decision on changes.
8. LOs' reports.
Discussion and decision on changes.
9. New TCs.
Suggestion, discussion and decisions, also including TCC, terms of reference and, if possible, working programme and TC membership.
10. Suggestions for new DRs.
Discussion and decision.
11. CIE-ISO/IEC Standards.
12. Draft CIE publications. Discussion and approval.
13. Existing CIE publications. Review and discussion of the status.
14. Nomination for DD.
15. Other DOs for next quadrennium.
16. Division and BA policies.
17. Calender for future Division meetings and TC meetings.
Planning for next Division meeting.
18. Any other business.
19. Closing.

Note: The order of the items on the agenda can, of course, be changed at the discretion of the DD.

4.3 List of CIE Administrative Publications

Statutes and By-Laws.

Code of Procedure for Divisions and TCs.

Code of Procedure for Drafting and Presentation of CIE Standards

Code of Procedure for Sessions.

Roster.

4.4 List of CIE Divisions

Div.1 Vision and Colour.

Div.2 Physical Measurements of Light and Radiation.

Div.3 Interior Environment and Lighting Design.

Div.4 Lighting and Signalling for Transport.

Div.5 Exterior and other Lighting Applications.

Div.6 Photobiology and Photochemistry.

Div.8 Imaging Technology.

4.5 CIE Public Statements and CIE Stationery

This section outlines the procedure to be used for issuing public statements on behalf of the CIE, and the use of CIE stationery.

- a) The authority to speak for the CIE and issuing opinions or interpretations on all matters related to its technical, financial and administrative activities rests with the President.
- b) Other members of the BA, such as VPs, Secretary and Treasurer have the authority to speak for the CIE and issue opinions or interpretations only in matters related to their job description or if authorized by the BA or the President.
- c) DDs have the authority to correspond on technical opinions or interpretations within the terms of reference of their Divisions, provided these opinions or interpretations are not binding on the CIE in a policy sense. Policy statements by DDs require prior authorization by the BA or President.
- d) The ED has the authority to correspond on all matters related to the job description.
- e) Technical opinions or interpretations on behalf of the CIE may not be issued by TCs.
- f) Comparisons or endorsements of specific products, companies or persons may not be issued at any level.
- g) CIE stationery is the only stationery to be used for official actions and communications of the CIE.
- h) Stationery which is to be considered as CIE stationery bears all of the following distinguishing marks:
 - the CIE emblem consisting of blue characters C, I and E,
 - the full name of the CIE in French, English and German,
 - the official address: Kegelgasse 27, A-1030 Wien, Austria,
 - the name of the issuing office (CB, etc.) or authorized officer with the address for further correspondence. Company or brand names should not be emphasized in the address.
- i) For internal use within the CIE, stationery with the name of a Division and address for correspondence may be used by DDs, ADs, DSs, DEs and TCCs.
- j) Stationery of a CIE NC with the CIE emblem and indication of the membership of the CIE is not considered CIE stationery.

4.6 Duties of Division Secretary

In 1.4.5 is stated that the duties and authority of the DS should be drawn up by the DD, to suit the requirements of the Division. As a help in this process the following proposals have been listed.

- a) To maintain an up-to-date list of Division members and their addresses, telephone, fax and E-mail numbers.
- b) To maintain an up-to-date list of TC members and their addresses, telephone, fax and E-mail numbers.
- c) To maintain an up-to-date list of DRs and LOs and their addresses, telephone, fax and E-mail numbers.
- d) To circulate material to Division members, President, VPT and ED.
- e) To prepare a calling notice for Division meetings at least six months prior to the date of the meeting. This notice should include a call for agenda items.
- f) To circulate an agenda at least eight weeks prior to the meeting (see 4.2). This allows two weeks for the mail delivery.
- g) To circulate a call for nominations for DD six months prior to the quadrennial

Session.

- h) To prepare and distribute minutes of Division meetings (see 1.6.6) to which is attached the current list of Division members, TC members, DRs and LOs.
- i) To organize postal ballots on Division documents and to send the results together with any comments to the CB and DD, TCC and DE. Form E is a checklist Division Secretaries may find to be convenient to use in keeping track of the approval procedure of a CIE Publication.
- j) To conduct ballots at Division meetings, the results to be included in the minutes.
- k) To liaise with the DE regarding the preparation of the six-month AR.
- l) To maintain the Division archives.

4.7 Activity Report

Example of the front page of an Activity Report: see fig. 4.7

4.8 Duties of Liaison Officer

The LO shall provide liaison and maintain technical interaction with other CIE Divisions and international organizations, Sister Organization (SO), and be a CIE Ambassador for the SO.

- a) Information to give
The LO should be seeking all possible opportunities to inform the SO about relevant CIE activity and work in progress and about new CIE publications, to both advertise the achievements of the CIE and to avoid duplication of work.
- b) Receipt of information
The LO shall receive all relevant information directly from the SO. It is the responsibility of the LO to screen the material upon receipt and decide if it is relevant to the CIE. If so, copies should be sent to the DD, CB and, if necessary, any other DD involved.
- c) Preparation of reply
The LO should prepare an answer, if necessary, with the help of a small 'Task Group'. The task group should be no more than 6 people who should usually be members of the Division or a TC.
The LO should make every attempt to meet the deadline set by the SO. If this proves impossible, the SO should be informed and a time extension requested.
- d) Approval of replies
The LO should clear 'non-controversial' replies with the DD by telephone or fax.
If the reply is 'possibly controversial within the Division' the DD should take further advice. This procedure should not be allowed to extend beyond 2-3 weeks.
If the reply is 'definitely 'controversial' the DD shall consult all Division members before a reply is sent. The LO should advise the SO of the delay and the reason.
The LO should then formulate the CIE 'Reply' according to the above procedure and send it to the SO with copies to the DD and CB. It should be noted that if the reply is to be a CIE public statement then the procedure given in 4.5 must be adopted.

- e) Reporting to the Division

The LO should send a report to the DS for inclusion in the AR.

The LO should report at the Division meetings and bring forward any items of long-term work which may require a DR or TC.

4.9 Order of Magnitude of Main Lamp Parameters

see figure 4.9

4.10 Overview of Light Sources and Applications

see figure 4.10

4.11 Extract from IEC/ISO Directives Part 3: Drafting and Presentation of International Standards (1989)

4.11.1 Representation of Numerical Values

The decimal sign shall be a comma on the line in all language version of international standards. If a value less than 1 is written in decimal form, the decimal sign shall be preceded by a zero.

EXAMPLE - 0,001

Each group of three digits reading to the left or to the right of a decimal sign shall be separated by a space from preceding digits or following digits respectively, except for four digit numbers designating years.

EXAMPLES - 23 456 2 345 2,345 2,345 67 but the year 1989

A multiplication sign (x), rather than a point, shall be used to indicate multiplication of numerical values.

EXAMPLES - Write $1,8 \times 10^{-3}$ (not $1,8 \cdot 10^{-3}$ or $1,8 10^{-3}$)

To express numbers of items (as opposed to numerical values of physical quantities), the numerals one to nine shall be spelt out in full.

EXAMPLES

1 "Carry out the test on five tubes, each 5 m long"

2 "Select a further 15 tubes for the pressure test"

To express numerical values of physical quantities, arabic numerals accompanied by the international symbol for the unit (see ISO 31 or CIE International Lighting Vocabulary) shall be used.

4.11.2 Equations

Equations shall be expressed in mathematically correct form, the various quantities being represented by letter symbols the meanings of which are explained below the equation.

The following style shall be used:

$$\frac{\rho_1}{\rho_2} = 1 + \eta \left(\frac{T_2 - T_1}{T_1} \right)^{\gamma(\gamma-1)}$$

where

- p_1 is the intake of pressure, in pascals;
- p_2 is the delivery pressure, in pascals;
- η is the isentropic efficiency;
- T_1 is the inlet temperature, in kelvins;
- T_2 is the outlet temperature, in kelvins;
- γ is the ratio of specific heat capacities.

Note that names of units (pascal and kelvin in the above example) are spelt out in full when they are not preceded by a numerical value.

As far as possible, symbols having subscripts which themselves bear subscripts shall be avoided, as shall any symbols and equations which would involve printing an extra line of type.

EXAMPLES

- 1 $D_{1,\max}$ is preferable to $D_{1_{\max}}$
- 2 In the text, a/b is preferable to $\frac{a}{b}$
- 3 In a displayed formula, it would be better to use

$$\frac{\sin[0,5(N+1)\theta] \times \sin(0,5N\theta)}{\sin(0,5\theta)}$$

than

$$\frac{\sin \frac{(N+1)}{2} \theta \sin \frac{N}{2} \theta}{\sin \frac{\theta}{2}}$$

4.12 Copyright

CIE holds copyright on all its technical publications. Technical publications, or parts of such publications may not be translated, or reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the CIE Central Bureau.

4.13 Forms to be Used by TCs and Divisions

On the following un-numbered pages are examples of four standard forms to cover administrative procedures mentioned in this CP.

These are:

Form A - Submission of Draft Standards and Reports

Form B - Ballot on Reports

Form C - Approval of New TC

Form D - Ballot of TC members.

These are printed on one side of the paper so that photocopies can be taken.

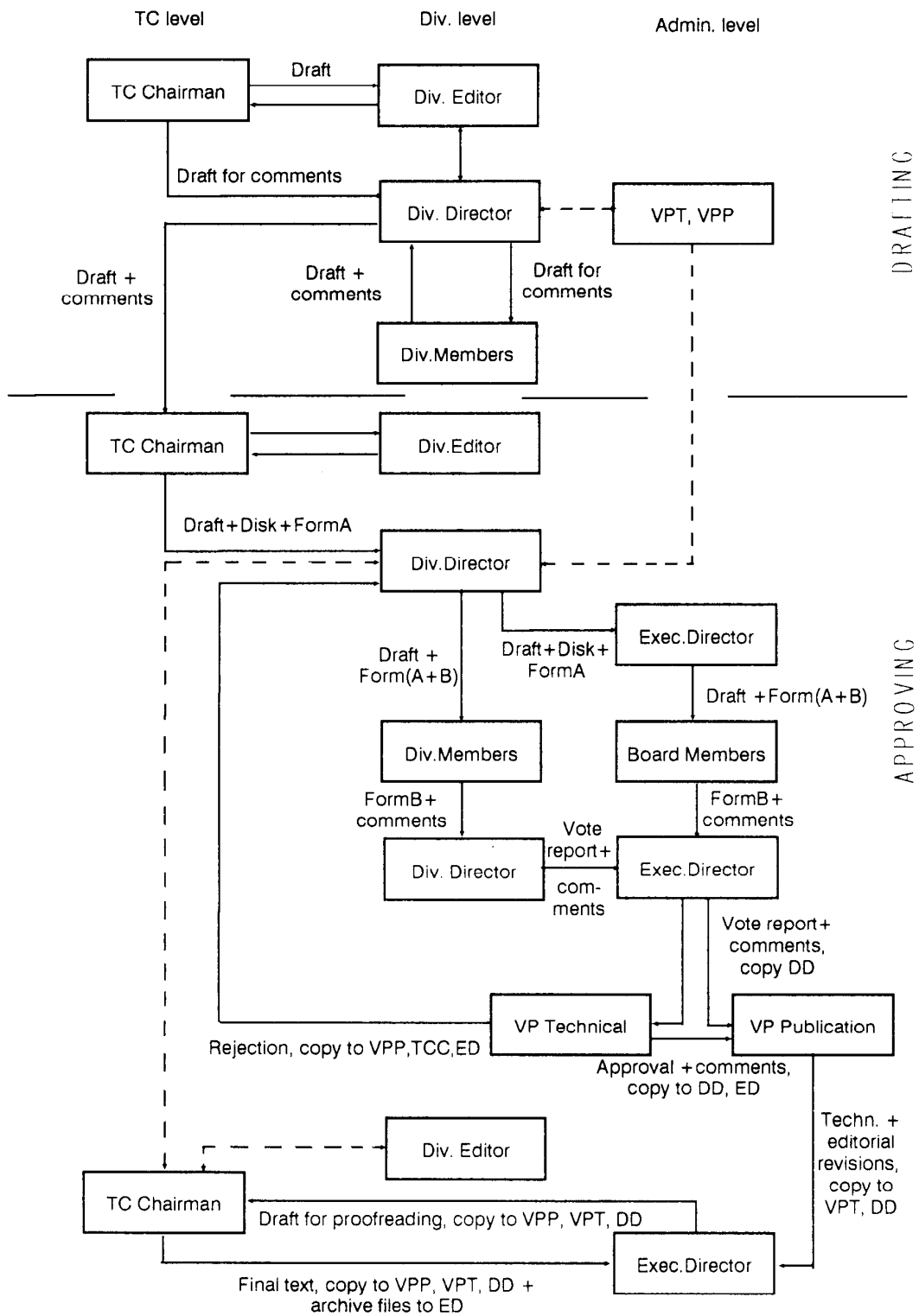


Fig. 2.1 Flow diagram indicating drafting and approval procedure for CIE publications.
Broken lines mean consultations and advise.

Note: This diagram is for guidance only. It is, however, essential that all relevant CIE officers and staff are informed of, and agree to, any changes.

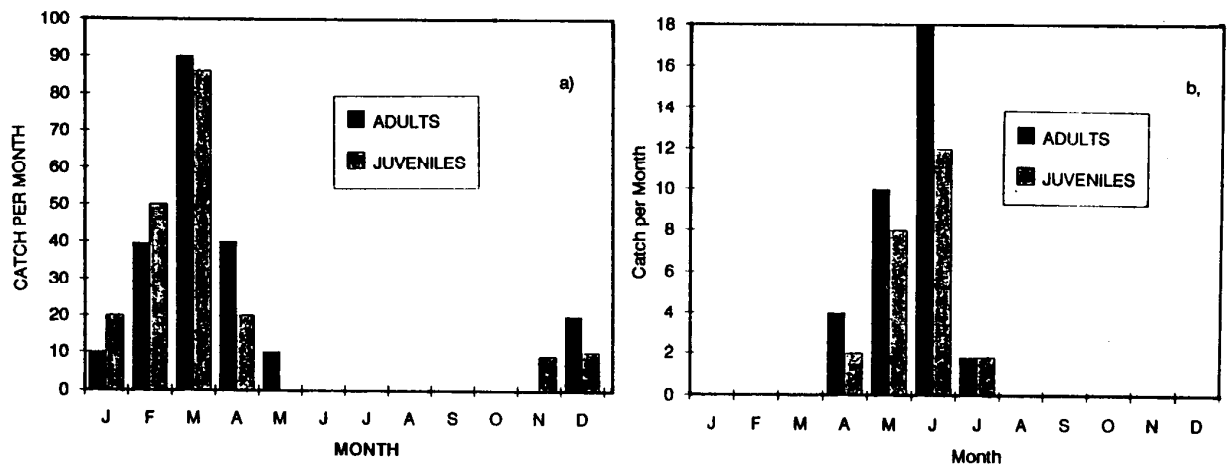


Fig. 2.2 Common faults of draftsmanship

- 1 scales different in a and b
- 2 insufficient contrast between columns for adults and juveniles
- 3 inconsistencies in type size and use of upper and lower case
- 4 symbols a and b far too small
- 5 excessive numbering on y axis
- 6 heavy black frame

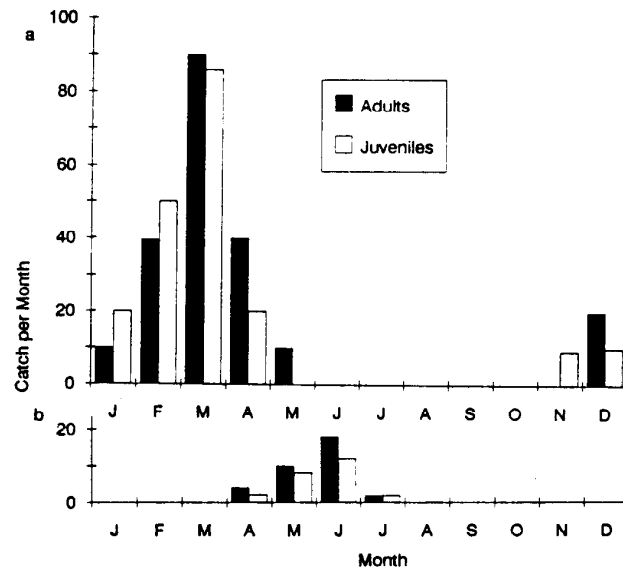


Fig. 2.3 Clear presentation of data in Fig. 1

- 1 histograms on the same scale
- 2 economy of line and lettering
- 3 contrasting columns for adults and juveniles
- 4 correct use of type size to highlight the important features

4.7 Activity Report

Example of the front page of an Activity Report



Division 4: Lighting and signalling for transport

Director: RW Holmes Department of Transport Room 4/28 St. Christopher House Southwark Str. London SE1 0TE ENGLAND	Editor: RS Yates 63 Riverside Park Gd Rd Bordeaux Randburg 2194 SOUTH AFRICA	Secretary: EC de Vries de Mol Inst. for Perception TNO Kampweg 5 POBox 23 3769 ZG Soesterberg The NETHERLANDS
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CONTENTS

1.	CIE general matters	6.	Division roster
2.	New publications from the Division	7.	Next meeting
3.	TC status	8.	Other meetings of interest
4.	DRs status
5.	Relevant country reports

.....
.....
.....

3. TC status

In this section the following abbreviations may be used; see also Section 1.1.1 Abbreviations and sample TC Status report:

TCC:	TC Chairman	AD:	Associate Director	TRef:	Terms of Reference
ST:	Status	ML:	Membership list.		

Example:

TC 4-07: Design method for road lighting

TCC: J Vermeulen AD: None

ML: Burghout, Hautala, Keschull, Simons,

TRef: To review existing design methods and to investigate their validity for bends of large radius. To review

ST: 1992.01.12: Originally the report had been written Expected date of draft No. 3 for circulation to TC: 1992.06.15.

4.9 Order of Magnitude of Main Lamp Parameters

	Power (W)	Luminous flux (lm)	Luminous efficacy (lm/W)	Colour temp. (K)	Colour rendering (Ra)	Lamp life (hours)
General Incandescent	10 - 1 500	50 - 35 000	5 - 25	2 500 - 3 000	100	100 - 2 000
Tungsten Halogen	10 - 2 000	150 - 60 000	15 - 30	2 800 - 3 300	100	50 - 2 000
Standard Fluorescent	4 - 200	150 - 15 000	40 - 100	2 500 - 6 500	60 - 95	10 000 - 20 000
Compact Fluorescent	5 - 25	250 - 1 500	50 - 80	2 500 - 6 500	80 - 90	5 000 - 10 000
High Pressure Mercury ¹	50 - 1 000	1 500 - 60 000	30 - 60	3 000 - 6 000	25 - 60	10 000 - 20 000
Blended HP Mercury	100 - 1 250	1 000 - 40 000	10 - 30	3 000 - 6 000	40 - 50	5 000 - 10 000
Metal Halide ¹	30 - 2 000	1 500 - 250 000	50 - 125	3 500 - 6 500	50 - 85	2 000 - 10 000
High Pressure Sodium ¹	30 - 1 000	1 500 - 150 000	50 - 150	2 000 - 2 500	20 - 80	10 000 - 25 000
Low Pressure Sodium	15 - 200	1 500 - 35 000	100 - 200	1700	---	10 000 - 15 000
1) Clear bulb and coated bulb versions					TC 7-02	March 1987



New Publication, Form A

No. of Ballot:

Date of issue:

- SUBMISSION OF DRAFT** **Standard**
 Technical Report
 Research Note

FOR APPROVAL BY DIVISION AND BOARD OF ADMINISTRATION

From:

TC Chairman of TC -

Title of Document:

UDC:

Descriptors:

Report of Technical Committee Voting

Name	Country	Vote	Comments Attach details on any minority opinions
(See Code of Procedure 2.2 & 4.1.3)			

Draft prepared by
 Is English the first language of the authors?
 Draft seen by DE:
 Which current CIE Publication(s) does this draft replace?
 With which, and how, does this draft interact with
 existing or planned publications?

Give details of omissions or inclusions of material or
 material or deviations from or contradictions of
 current CIE or other publications.
 (Use reverse side of form if necessary to give
 additional information)
 Division Ballot deadline: - -



New Publication, Form B

No. of Ballot:

Date of issue:

LETTER BALLOT to DIVISION
 BOARD OF ADMINISTRATION
 NATIONAL COMMITTEE

voting on the publication of the Document:

by CIE TC - as a CIE

- Standard
 Technical Report
 Research Note

- 1 I approve publication of the above document: []
2 I approve publication of the above document with suggested editorial modifications as per enclosure: []
3 I do not approve publication of the above document for the technical reasons given on the reverse of this ballot: []
4 I abstain from voting for reasons given on the reverse side of this ballot: []

Date: - -
(year) (month) (day)

Name:
(please print)

Signature:

Please return this ballot not later than to:
(You can fold this form to show address in window)



New TC , FORM C

No. of Ballot:

Date of issue:

LETTER BALLOT to Board of Administration

Establishment of new Technical Committee

This ballot form should be returned only in case of objections. If this ballot form is not received within four weeks of issue at the Central Bureau, it will be regarded as approval.

DIV. requested the establishment of a new TC entitled:

Terms of Reference and further information are given on the reverse side of this ballot form.

Proposed TC Chairman:

1. I object against the establishment of the above TC:
2. I object against the proposed TC Chairman:
(Give reasons on the reverse side of this ballot form)

Date: - -
(year) (month) (day)

Name:
(please print)

Signature:

Please return this ballot only in case of objections to:
(You can fold this form to show address in window)

C. Hermann
General Secretary
CIE Central Bureau
Kegelgasse 27
A-1030 Wien / AUSTRIA



New Publication, Form D

No. of Ballot:

Date of issue:

LETTER BALLOT to Members of CIE TC -

voting on the publication of the Document:

- | | | |
|----------|--|--------------------------|
| as a CIE | Standard | <input type="checkbox"/> |
| | Technical Report | <input type="checkbox"/> |
| | Technical Report in Technical Collection | <input type="checkbox"/> |
| | Research Note | <input type="checkbox"/> |

Draft number:

- | | | |
|---|---|--------------------------|
| 1 | I approve publication of the above document: | <input type="checkbox"/> |
| 2 | I approve publication of the above document with
<i>suggested editorial modifications as per enclosure:</i> | <input type="checkbox"/> |
| 3 | I do not approve publication of the above document for the
<i>technical reasons given on the reverse of this ballot.</i> | <input type="checkbox"/> |

Date: - -
(year) (month) (day)

Name and Country :
(please print)

Signature:

Please return this ballot not later than to:
(You can fold this form to show address in window)

FORM E.1 - Use of copyrighted material in CIE publications

USE OF COPYRIGHTED MATERIAL, TO BE SIGNALLED TO THE TC

I, member of CIE TC

would like to recommend that the following part/figure of publication

.....
(title, year, name and address of publisher)

be used for the CIE report:

..... (title)

- I will request permission, copy to be sent to CIE Central Bureau
- I am asking the CIE Central Bureau to request permission from
(contact address of publisher)

FORM F.1 - ASSIGNMENT OF EXPLOITATION RIGHTS FOR CIE TC WORK

CIE-TC

Title

1. In the framework of the Berne Convention for the protection of literary and artistic works:

a) .By signing this statement I assign solely, exclusively and irrevocably to CIE (International Commission on Illumination) for the benefit of its members the exploitation rights in such of my intellectual contributions as are reproduced in the publications resulting from the technical work of CIE TC

This assignment is granted free of charge, and covers the following forms of exploitation specified below, throughout the world, for the total duration provided for by law.

Forms of Exploitation:

The assigned exploitation rights cover the right to reproduce, to adapt, distribute, subdistribute, adjust, translate, rent, lend, derive revenue from duplication and loan, communicate to the public in total or in part, in summary or with comments, transfer all exploitation licences and authorize all sub-distribution. The exploitation rights cover all languages and cover all forms of exploitation, in particular and non-restrictively: publication by all means and all graphical support systems, by print, press, photocopy, microfilm, and via all magnetic, computerised and numerical support systems, memory cards, CD-Roms, films, photographs, slides, teledistribution, cable, satellite, diskettes and on-line document servers and networks.

b) My name will be mentioned in the list of contributors in the foreword of the Technical Report/Research Note/Standard.

c) I accept that this assignment does not preclude me from continuing to exploit my own copyrightable contribution for my own purposes provided that such exploitation does not adversely affect the exploitation of the publications specified above.

2. Should I offer intellectual contributions for which I do not personally hold the copyright, I undertake to declare this to the CIE TC Chairman and to name the holder of the copyright if known to me.

Name:

Signature:

Date: