

THE ACTIVITIES AND WAY OF WORKING OF THE INTERNATIONAL LIGHTING COMMISSION, CIE

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INTRODUCTION

The CIE is a non-profit international organization that is active in all professional matters related to light, lighting and image technology. The abbreviation CIE comes from the French (Commission Internationale de l'Eclairage) because CIE was founded in 1913 in France. Today, some 40 countries are affiliated with CIE. These countries span all continents and range from developed to developing countries. CIE forms an independent forum of international cooperation by committed professional experts with backgrounds ranging from researchers, specifiers, designers, consultants and architects, manufacturers, governmental and municipal institutions, energy suppliers to end-user representatives.

OBJECTIVES

CIE provides an international forum for the discussion of all matters relating to the science, technology, practical application and art in the fields of light and lighting and image technology, and thus for the interchange of information between countries. CIE develops and publishes basic International Standards, Procedures and Application Guidelines.

As authority in its fields, CIE maintains liaison and technical interaction with other international and national organizations such as ISO and CEN and with other lighting societies.

So in short, CIE produces world Standards and practical Recommendations and Guidelines and is a forum for the exchange of knowledge and know-how.

PARTICIPATION AND PRODUCTS

CIE has some 40 National Committees ("country members"). Its technical work is organised in 7 technical Divisions, which together have 135 Technical Committees for the detailed technical expert work. The Technical Committees together join the knowledge and know-how of more than 700 expert volunteers from all over the world.

As a result today, CIE has more than 120 up to date Standards, Guides and Technical Reports available covering all fields of light, lighting and image technology.

Every four years, CIE holds a Session. This brings together all parties interested in CIE's technical activities in order to learn about the latest advances in science and industry. In addition, the CIE holds seminars, expertise workshops and symposia.

INTERRELATIONSHIPS

Figure 1 sketches the interrelations between, on the one hand the lighting bodies, and on the other hand the standardization bodies on respectively National, European and World level.

The National Committees in the countries, in many cases being part of the National Lighting Society, together constitute the CIE.

The National Standardization Institutes in the countries together constitute, in Europe, the European Standardization Institute, CEN (Comité Européen de Normalisation) and on world level the International Standardization Organization ISO¹.

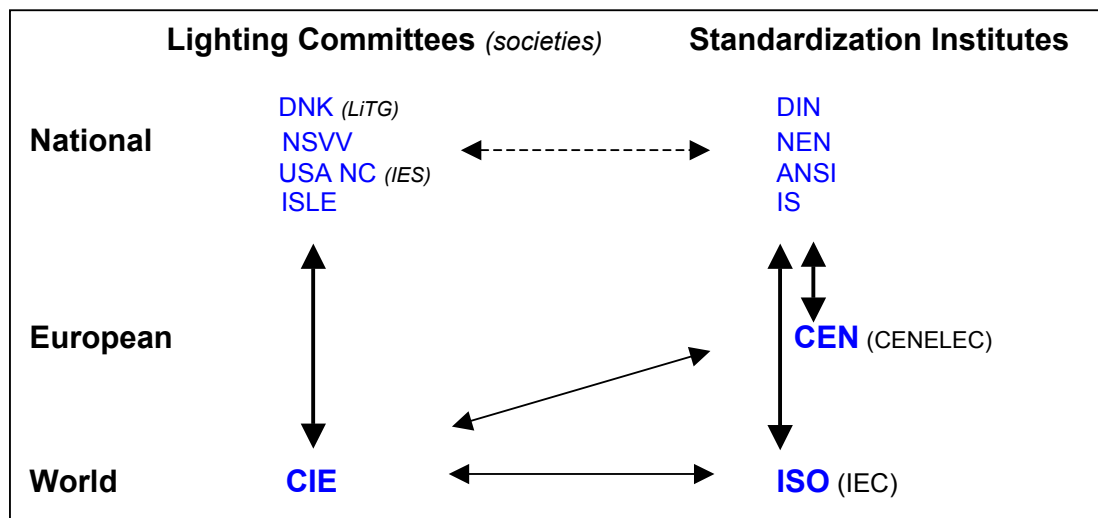


Fig. 1: Interrelations in the lighting and standardisation world.

Of course, the Standardization Institutes have detailed expertise on standardization matters but no detailed expertise on the many various professional fields they are active in. For the professional field of light and lighting they therefore usually get the detailed know-how from the experts active in the National Lighting Committees and/or National Lighting Societies. Often these are the same experts who are active in the Technical Committees of CIE. This helps harmonising international standardization and recommendation in the field of light and lighting. This harmonization is also strongly supported since CIE has signed agreements of technical cooperation with ISO (1989), IEC (1992) and CEN (1999). ISO and IEC herein recognise CIE as THE International standardisation body for light and lighting. CIE standards are offered to ISO or IEC for voting in ISO or IEC and are subsequently published under CIE-ISO or CIE-IEC logo. The agreement with CEN is aimed at avoiding duplication of work and especially also at avoiding conflicting standards and recommendations.

¹ For electro technical affairs we have on European level as standardization body CENELEC and on World level IEC (International Electrotechnical Commission).

ORGANISATION AND WAY OF WORKING

Figure 2 summarises the stakeholders groups in CIE. They can be divided in, on the one hand the “internal stakeholders”: National Committees, Board and Staff and the Division and Technical Committee (TC) expert volunteers, and on the other hand into: “external stakeholders” like the industry, universities and quality assessment institutes, governmental and international bodies, professional and technical societies and the media (press).

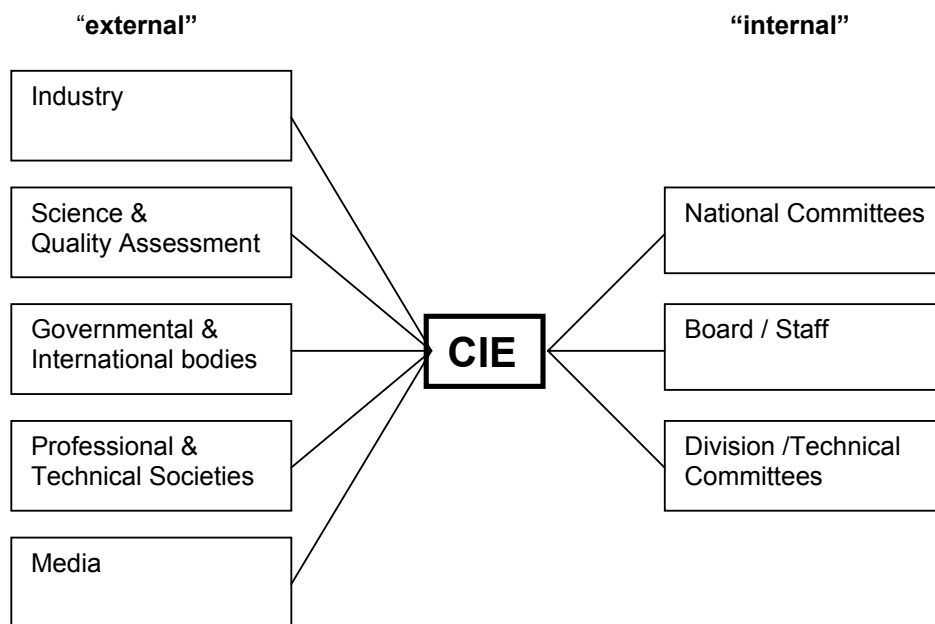


Fig. 2: Stakeholders in CIE

Internal stakeholders

1. National Committees and General Assembly

The affairs of the CIE are vested in National Committees which have the responsibility for decisions on all matters relating to the organization. The composition of the National Committees varies from country to country, but each is required to have in its country the cooperation of all organizations having an interest in light and lighting. So, each country can have only one National Committee. Once each two years representatives of the National Committees meet together with CIE’s governing Board in the so-called General Assembly meeting to overview and decide on non-technical content matters.

2. Board and Central Bureau staff

The General Assembly meeting elects, each time for 4 years (a quadrennium), the president and vice presidents who together with the division directors (see next section) form the governing body of CIE called “Board of Administration”.

Until 1987 CIE did not have a paid staff. Luckily since then a Central Bureau in Vienna has been put in place with a paid staff responsible for the many executive tasks.

3. Divisions and Technical Committees: the expert volunteers

The technical work is divided in 7 Divisions representing different working areas. Each National Committee (country) may appoint a representative for each Division. A Division Director heads the Division. The Division takes decisions about what work is going to be undertaken with what priority. Once the work results are available the division decides whether or not those results are accepted as for example a CIE standard, recommendation or technical report (the balloting procedure).

Volunteer experts carry out the detailed technical expert work, often in the form of drafting reports, recommendations or standards, but sometimes also by organising and participating in expert workshops. Exchanging arguments, building on recent new findings and solutions and finding compromises is an essential and often stimulating element of the work. The expert volunteers work together around one theme in Technical Committees created by the Division for this purpose. The Division appoints a chairman for each Technical Committee and the chairman then appoints a relatively small group of experts (often some 5 to 10 persons). The experts are not chosen to represent a country but to represent expertise knowledge. Technical committee membership should be so as to represent the different streams of “thinking” on a certain theme.

The 7 Divisions comprise the following working areas:

Division 1: Vision and colour

Division 2: Measurement of light and radiation

Division 3: Interior lighting and lighting design

Division 4: Lighting and signalling for transport (including road and automotive lighting)

Division 5: Exterior lighting and other applications (emphasise on sports and outdoor area lighting)

Division 6: Photobiology and photochemistry (including lighting and health)

Division 8: Image technology ²

External stakeholders

CIE exists 90 years and has evolved from a small group of experts sitting together and learning from each other to a worldwide organisation in which more than 700 (top) experts are active. These experts of course form an essential part of CIE but are not the only stakeholders. In fact the result of their work is beneficial and often essential for “external” groups as listed in Figure 2. It is important to give them opportunities to promote their ideas about priorities and urgencies in order to be able to steer the work of CIE in truly essential directions. They should be confronted with the results of the work of in an early phase. At the same moment some of these groups can support CIE in financial ways to further facilitate the professional way of working of CIE. To realise these goals, recently a new category of CIE membership has been introduced: supportive members. Three categories are available: Basic, Silver and Gold with increasing fees and increasing “rewards”. The “basic supportive CIE membership” is for example attractive for professional lighting consultancy bureaus to distinguish themselves as being fully up to date with the latest worldwide developments and achievements in light and lighting. For the large lighting companies especially the “reward” of having the internal (“silver”) or external (“gold”) exploitation rights for the use of all CIE publications can be important.

² Former Division 7 has been disbanded.

CIE IN A RAPID CHANGING WORLD

The world is changing quickly and that of course also has an influence on CIE. The fewer available volunteers have far less "employers" time to spend for CIE work. Everybody is more or less continuously confronted with cuts in traveling budgets. PCs allow for fast communication by Email. Documents principally can be made available on line via Internet. Telephone and video conferences are being used especially in the large international companies. CIE has to adapt itself to some of these changes.

While CIE in the meantime luckily developed a professional staff at its Central Bureau in Vienna, we have to safeguard this and to try to extend the support from the Central Bureau's professional staff to the expert volunteers: we should try to limit the work of the expert volunteers as much as possible to making their expertise available. It may be effective to introduce new ways of working using modern electronic means like a shared internet workspace per TC or per Division where all latest versions of the working documents are on line available for the active participants in CIE.

Since expert volunteers become more rare and have less time to spend CIE should learn to focus more and be more sure about the importance and urgency of new planned work. CIE should be more realistic with time frames set for the work. On the other hand once a working program with deadlines has been accepted a stringent control is what one should expect. This is also important because the "outside" world may expect announced publications to indeed be available at the time announced. This would in continuity further improve the image of CIE as the world recognized authority in the field of light, lighting and image technology.

The best reward for the active volunteers and for their employers is that the Standards, Publications and Guides they have been prepared are being read, studied, referred to or in other words: are used by many readers and users all over the world. An important step in this respect has been the reduction of the publication prices in 2002 to 50 % ! Another step could be making CIE publications easier available by having the publications downloadable on the Internet, ideally eventually even free of charge.

To be able to really pick up some if not all of these changes CIE will have to obtain financial funding from new sources. This was one of the goals of the supportive membership system introduced in 1999 that has made it possible for companies and international institutions to join the CIE organization.

CONCLUSION

Efficient and effective international cooperation and standardisation in the field of light, lighting and image technology is especially today with the disappearance of so many borders essential. CIE has a long history in this field and has kept itself "young" by continuous adapting itself to changing circumstances. A real challenge for CIE is not only to keep the organisation young but also to attract in continuity young and new people to actively participate in its work. For this, but also for the other stakeholders in CIE it is required to show that CIE works actively and efficiently on items with great importance in a stimulating environment.

In the past, expert volunteers could spend considerable “employer’s time” for CIE. This is far less the case today. Financial means to move non-expert tasks from volunteers to paid professional staff is therefore indispensable.

Widely spreading the results of the work of the CIE volunteers is the most important “reward” for them. This means that we must try to keep the CIE publications as cheap as possible, which is also important for the external stakeholders.

CIE's Board together with the able support of the Central Bureau staff will try to guide CIE through the coming challenging period. But that alone will not be enough: CIE needs the support of all the active volunteers that form the basis of CIE, and CIE in continuity needs new, enthusiastic, young expert volunteers.