



STRATEGIC BUSINESS PLAN (SBP)

IEC/TC or SC 34	Secretariat United Kingdom	Date November 2011
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Please ensure this form is annexed to the Report to the Standardization Management Board if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

Title of TC
Lamps and related equipmentment

A Background

TC 34 prepares International Standards for lamps and other related equipment.

It was established in 1948.

Electric lamps, lamp caps and holders, lamp controlgear and luminaires are all components of lighting installations which can only fulfil their illuminating function when operated together. TC34 provides a co-ordinating function for these component sub-committees.

The aim of the standardisation work carried out by TC 34 and its sub-committees is to define the characteristics ensuring safety, functional reliability and interchangeability of those components mentioned above together with their performance.

There are 4 sub committees listed below which prepare international standards for the following:

SC 34A (Working Group PRESCO) - lamps including LED's and OLED's and glow starters,
SC 34B (Working Group EPC) - lamp caps and holders,
SC 34C (Working Group COMEX) - lamp controlgear,
SC 34D (Working Group LUMEX) – luminaires. This subcommittee makes use of Interpretation Sheets.

TC 34 also prepares international standards for miscellaneous related equipment not covered by a project of another technical committee. TC 34 also has a Chairman's/Secretary's Group.

B Business Environment

B.1 General

Rapid technological developments have to be incorporated into the standards/publications within TC 34 area of work. This is driven from the external environment. This includes the need of interoperability with others equipments or/and installation (ex: control devices).

Internal environment is to develop standards/publications which provide adequate information to application designers and engineers and ensure that there are no limitations on the supply and/or interchangeability of replacement components.

B.2 Market demand

Customers of the standards are manufacturers, certification and testing bodies, designers, end users, specifiers, retailers, consumers and government organisations. These are actively represented through either direct membership of Maintenance Teams, Project Teams, Working Groups or through the National Committee structure. The Committee's activities are well supported by the involvement of interested bodies.

TC 34 standards are widely adopted at both regional and national level. In Europe, CENELEC adopts the standards through the parallel procedures established with IEC, there are few modifications introduced. Harmonisation and adoption of the standards (with ANSI (also known as ANSI_ANSLG, American National Standard Lighting Group), JIS, etc.) has greatly advanced, resulting in less deviations worldwide.

Predominantly, this is an area of standards maintenance. Due to the rapid technological developments in the lighting field, the market is constantly demanding to keep existing standards up-to-date. There is also an area of completely new standards' development, particularly for LED products.

There is a market need to define requirements for new lamps (CFL and LED with integrated ballasts) so that they are compatible with the existing installations. Presco is already discussing these issues for the revision of IEC 60696.

In the field of energy efficiency a system approach is more and more needed. TC 34 should think how to cope with this, it goes beyond requirements for products, true saving will only be achieved if looked at the complete lighting systems, including controls.

B.3 Trends in technology

Energy saving, energy labelling, miniaturisation and co-ordination between lighting products require standards to be adapted. Rapid changes take place in the automotive industry. Improvements will need to be made to the standards to deal with implications of regional voltage changes and the environmental impact of products.

Use of alternative light sources Light Emitting Diodes (LED's and OLED's) and use of compact discharge lamps operating at high frequencies has required new standards to be developed. The rapid introduction of LED light sources to the market has changed the traditional approach to luminaire constructions and has quickly increased the diversity of light sources available for integration into luminaires. To manage the safety and quality aspects surrounding these developments the continued close and efficient working TC34 Maintenance Teams is critical. The increased burden that this work has placed on the Maintenance Team Experts of TC34 groups should also be appreciated. The greater use of PAS documents to support this work is expected in the future.

New government requirements regarding Electromagnetic Fields (EMF) have required development of a product related standard on this issue.

There is a need for solutions for the future, such as digital load line transmission lighting interface (DLT) which is being discussed by SC 34C for the moment. These new solutions should guarantee the interoperability between new lamps and the commands. The necessary requirements need to be fixed to guarantee safety and EMC. In order to achieve this, there is a need for a close cooperation with TC23 and especially with SC23B.

B.4 Market trends

There are various estimates of the use of more energy efficient products and for LEDs the prediction is that by 2020 these products will be in the majority. It is important that our standards keep abreast with, and can support , these developments.

B.5 Ecological environment

Industry today is very conscious of the need to develop their products to have less impact on the environment, using the guidance from IEC Guide 109 and taking environmental issues into account during standards' maintenance and development. Improvements are foreseen, (less toxic, recycling, lead-free etc.) reducing harmful effects on the natural environment

Energy use of lighting products account for around 90% of the environmental impact of the whole product life cycle. As such the use of more energy efficient products has a very positive influence on reducing the environmental impact.

C System approach aspects

System approach in IEC standardisation – IEC/TC 34

Component committees		
(IEC TC 34 – role of customer)	Zhaga	LED Module Interfaces
(IEC TC 34 – role of supplier)	IEC/TC97	Electrical installations for lighting and beaconing of aerodromes
	ISO/TC 20/SC 1	Aerospace electrical requirements
	ISO/TC22	Road vehicles
	ISO/TC22/SC8	Lighting and light-signalling
	ISO/TC23	Tractors and machinery for agriculture and forestry
Other committees	CIE	Committee International d’eclairage

System approach in IEC standardisation – IEC SC 34A

Component committees		
(IEC SC 34A – role of customer)	IEC TC3/SC3C	Use of symbols
	CIE	Committee International d’eclairage
(IEC SC 34A – role of supplier)	IEC/TC61	Household appliances
	IEC/TC97	Electrical installations for lighting and beaconing of aerodromes
	CENELEC	Reporting Sec on Lamps
Other committees	IEC/TC76	Photobiological
	IEC/TC 17B	Low-voltage switchgear and controlgear
	IEC/23B	Plugs, socket-outlets and switches
	IEC/SC23G	Appliance couplers
	GTB	Group Travail Brussels

System approach in IEC standardisation – IEC SC 34B

Component committees		
(IEC SC 34B – role of customer)	N/A	N/A
(IEC SC 34B – role of supplier)	N/A	N/A
Other committees	N/A	N/A

System approach in IEC standardisation – IEC SC 34C

Component committees		
(IEC 34C – role of customer)	CIE	Committee International d'éclairage
(IEC SC 34C – role of supplier)	N/A	N/A
Other committees	IEC/SC 77A	Low frequency phenomena
	IEC/SC23B	Plugs, socket-outlets and switches
	CISPR/F WG3	Interference household appliances... Method of measurement ...
	TC 96	Transformers, reactors, power supply units, and combinations thereof
	CENELEC TC 34Z	Luminaires and related components, excluding lamps

System approach in IEC standardisation – IEC SC 34D

Component committees		
(IEC 34D – role of customer)	CEN TC 169 WG 7.1	Lighting Applications
(IEC SC 34D – role of supplier)	N/A	N/A
Other committees	IEC/SC 23B	Plugs, socket-outlets and switches
	TC20	Electric cables
	TC 64	Electrical installations and protection against electric shock
	CENELEC TC 34Z	Luminaires and related components, excluding lamps

D Objectives and strategies (3 to 5 years)

Need to assess available standards for their applicability to new technological developments such as higher frequencies, alternative light sources Light Emitting Diodes (LEDs). Development of separate performance and safety standards for those areas where this has not already been undertaken.

New developments which have principle safety implications and require new requirements will be dealt with relative urgency. Maintenance Teams will continue to improve the technical contents of publications and the preparation of new technical requirements as required by the advancing technology of lighting equipment.

Time Line of Major Projects

Project	To be completed by
Higher Frequencies FDIS (Safety)	2013-12
LEDs FDIS (Performance)	2013-06
Efficiency (Project IEC 62442-1) (Performance)	2013-12
Preparation of IEC 62504 Ed.2 LED terms and definitions	2014

E Action plan

E.1 Current work

The current work programmes are listed on IEC websites of TC 34 and its subcommittees. During the Seattle series of meetings, the maintenance teams met in the afternoons of the same day as the sub-committees.

The maintenance teams met for one day each during the same week, in Tokyo in April 2011 and the same programme of meetings is also took place in the Switzerland in October 2011. Unless the needs of the maintenance teams change drastically, it is envisaged to hold two similar programmes of meetings during the Spring and Autumn of 2012.

In addition, project teams and ad-hoc groups when required meet during a series of TC 34 related meetings held in January and June/July each year. This enables a set timetable to be adhered to and enables work items to be progressed effectively. Co-ordination of meetings in this way reduces costs to those participating because of the overlap of membership between the work areas. It also provides a regular, structured interface between the related lighting products committees.

The project teams and ad-hoc groups meetings were held in January 2011 and June in Germany.

The main activities of SC34A and MT PRESCO are maintenance of existing standards to take account of new lamp developments. This includes provision of data for electronic control gear design covering fluorescent dimming, electronic operation of metal halide lamps. A new standard is being developed to cover LED lamps, building on the issued IEC PAS 62612.

Since 1998 SC 34A PRESCO together with SC 34C COMEX have held technical workshops which provide an open forum for industry worldwide to discuss and develop ways forward to deal with new initiatives on the market place and areas of concern needing future standardization. These have covered fluorescent dimming, electronic operation of MH lamps and LED product standardisation.

The main activities for SC 34B are as follows:

- IEC 60838-2-2: Edition 1, Amendment 1: Requirements for heat management – Expected publication date 2012
- Creepage distances and clearances including frequencies above 30 kHz
- Symmetrical ignition holders
- Listing worldwide situation regarding cap/holder fits for domestic lighting. Maintain watch.
- Fully safe cap and holder designs. Maintain watch.
- G5 fit – update
- G13 fit – update
- GX53 fit – update
- G10q fit – update
- GUZ10 fit – new
- WP3.3x16.5 fit – new
- PGJ21t fit – new
- PK32d-7 fit – new
- GX51 fit – new

- CH14.65d fit – new
- G8.5 fit – update
- G9 fit – update
- GX10 fit – update
- G8.5 fit – update
- PGZ/PGZX18 fit – new
- GU16d/GX16d fit – update
- G7.5 fit – new
- G22 fit – update
- K12s fit – new
- GU8.5 fit – new
- GZ5.3 fit – new
- PGJX28 fit – new

Withdrawal of fits with poor market relevance

The main activity of SC 34C, is the maintenance of the current 61347 series of standards parts 1 to Part 2-13. Technical changes are being incorporated as amendments to the relevant parts.

Also within SC 34C, the earlier new work started in the area of 'Digital addressable lighting interface' (IEC 62386-series) is being completed for the different products and further updated.

The main work items for SC 34D and its project teams at present are as follows:

Preparation of IEC 60570 Ed. 5.0: Electrical supply track systems for luminaires - Expected publication date 2015

Preparation of IEC 60598-1:Ed 8 : Luminaires- General requirements and tests – Expected publication date 2012

Preparation of IEC 60598-2-11:Ed 2: Luminaires - Part 2-11: Particular requirements - Aquarium luminaires – Expected publication date 2013

Preparation of IEC 60598-2-12 Ed 2: Luminaires - Part 2-12: Particular requirements - Mains socket-outlet mounted nightlights – Expected publication date 2012

Preparation of IEC 60598-2-18 am1 Ed. 2.0: Luminaires - Part 2: Particular requirements - Section 18: Luminaires for swimming pools and similar applications - Expected publication date 2012

Preparation of IEC 60598-2-22 Ed 4: Luminaires - Part 2-22: Particular requirements - Luminaires for emergency – Expected publication date 2014

Preparation of IEC 60598-2-24 Ed 2: Luminaires - Part 2-24: Particular requirements - Luminaires with limited surface temperatures – Expected publication date 2012.

Preparation of new IEC 62722 series Luminaire Performance Specifications, Part 1 General Requirements and Part 2 LED Luminaires for General Lighting - Expected publication date 2014

Preparation of IEC 62034 Ed. 2.0; Automatic Test Systems for Battery Powered Emergency Escape Lighting – Expected publication date 2012

TC 34 Ad Hoc Group on photobiological safety to prepare requirements for lamps and luminaires

The current membership of the maintenance teams, the close liaisons with other TC 34 committees and maintenance teams and liaisons with other committees provide the required expertise.

E.2 Resources/infrastructure needed

Increased use of electronic facilities has led to a decrease in the development time for standards within the TC 34 work area. IEC ftp server sites are used for each Maintenance Team in parallel with document distribution by Email attachments.

TC 34 has a Chairman's/Secretary's Group for their Sub-Committees which meets at the same time as the Maintenance Teams. It provides the TC 34 Chairman with advice and also provides a forum for cross-product subcommittee discussions and co-ordination of the activities of the subcommittees and maintenance teams. Matters affecting all groups are often put to the Chairman's/Secretary's Group for initial discussion and co-ordination.

Editing Committees consisting of Chairmen, French experts and Secretaries carry out a great deal of editing electronically and by correspondence. However, where new editions are being developed, or completely new standards produced, the editing committees meet as required

F Useful links to IEC web site

[IEC/TC 34 dashboard](#) giving access to Membership, TC/SC Officers, Scope, Liaisons, WG/MT/PT structure, Publications issued along with their Stability Dates, Work Programme and similar information for SCs, if any.

Name or signature of the secretary

Nick Bradfield