



IEC/TC or SC 23	Secretariat BE	Date 2007-03-21
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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

TC23: ELECTRICAL ACCESSORIES
SC 23A: CABLE MANAGEMENT SYSTEMS
SC 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES
SC 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS
SC 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE
SC 23F: CONNECTING DEVICES
SC 23G: APPLIANCE COUPLERS
SC 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS
SC 23J: SWITCHES FOR APPLIANCES

A. Background

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

Brief History of TC23

TC 23 was set up in 1933 in Paris. Close co-operation was established between IEC/TC23 and the International Commission of rules for the approval of the electrical equipment (CEE-EL). Many CEE-EL recommendations were adopted by IEC/TC23 before the setting-up of the Subcommittees. The subcommittee 23D was handling light holders. During the Brussels meeting held in 1974, the chairman retired. SC24B, already existing, had a meeting in Den Haag in 1975 where the merger of the two subcommittees was discussed and in the minutes it was noted that CA approved the merger. Thus, SC23D was disbanded.

Scope:

To prepare standards for electrical accessories for household and similar purposes, the word "similar" including locations such as offices, commercial and industrial premises, hospitals, public buildings, etc.

These accessories:

- are intended for fixed installations, or for use in or with appliances and other electrical or electronic equipment, and may include electronic components.
- are normally installed by instructed or skilled persons and are normally used by ordinary persons.

Include, in particular:

- conduit systems
- cable trunking systems
- cable ducting systems
- cable support systems
- switches
- HBES switches
- plugs and socket-outlets
- cable reels
- adaptors
- circuit breakers for overcurrent protection
- devices protecting against electric shock
- contactors
- connecting devices

- enclosures for accessories
- appliance couplers
- cord sets

Note 1 : For the terms "instructed persons", "skilled persons" and "ordinary persons", see Publication IEC 61140; 3.30, 3.31 and 3.32.

Co-ordinating Group of TC23 (CG23):

Terms of reference:

To help to co-ordinate the work of TC23 and its Subcommittees, with the following task:

- To advise TC23 and its Subcommittees on the organization and co-ordination of their work
- To review related work of other Committees of the IEC and of other bodies, and to make recommendations for further actions in cases where the work of TC23 or its Subcommittees is affected.

Membership:

The CG consists of the Chairmen, the Secretaries of TC23 and its Subcommittees and the convenors of the MT's, WG's and AGH's of TC23. The Chairman, the Secretary and the Assistant Secretary of TC23 have the same functions in the CG.

According to the subjects to be discussed, experts from National Committees or other Technical Committees may be invited.

Editing committee of TC23:

Terms of reference:

The editing committee is set up in order to improve the publications of TC23 only.

The publications of the subcommittees are being dealt with by the editing committees of the relevant subcommittees.

Membership:

The members of the editing committee of TC23 are the secretary of TC23, the convenor of the relevant WG, a UK member (Mr. Mullins), a FR member (Mr. Corneille) and a DE member (Mr. Hof).

Working Groups:

WG 6: Installation couplers intended for permanent connection IEC 61535.ed1

WG 7: Insulation co-ordination for electrical accessories in the scope of TC 23

WG AHG1: conditions for electrical accessories to be used at temperatures outside the range of the existing standards

Maintenance Teams:

MT 1: Bells, buzzers and chimes. Maintenance of IEC 62080.

MT61916: Maintenance team to maintain TR61916 Electrical accessories – Harmonization of general rules

MT 62139: Guidance for addition of environmental aspects in product standards

Number of participating countries: 24

Number of observing countries: 19

Number of publications: 5

Number of projects in development: 3

Liaison: ACOS,ACEC,ACEA,CTL,IEC/TC 64,IEC/TC 89,IEC/TC 109

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

Brief History of SC23A

SC23A was initiated in 1968, the first meeting was held in Tehran 1973. The Berlin meeting was the 24th meeting.

Terms of reference:

To prepare international standards for products and systems used for the management of all types of cables, information and communication lines, electrical power distribution conductors and associated accessories.

Management includes support and/or containment and/or retention and/or protection against external influences.

Working Groups, Project teams, maintenance teams :

WG05:	Cable trunking systems and cable ducting systems.
WG11:	Fire performances of cable management systems
WG12:	Cable tray systems and cable ladder systems
WG13:	Conduit systems
WG14:	Underground conduit systems for electrical cables and/or communication cables
WG15:	Powertrack systems
PT61914:	Cable cleats
PT62444:	Cable Glands
MT01:	Extra-heavy duty electrical rigid steel conduits, fittings and accessories
MT62275:	Cable ties and ancillaries

Number of participating countries: 21

Number of observing countries: 18

Number of publications (including amendments, new editions and language variants): 73

New Publications: issued since Seoul 2002: 1

Projects in development: 5

Liaison: CLC/TC 213

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES**Brief History of SC23B**

The Subcommittee 23B was established in 1970. First plenary meeting held in Athens in 1972.

Terms of reference:

- a) To prepare standards for general purpose switches including electronic switches, time-delay switches, remote control switches and isolating switches, for a.c. only, with rated voltage not exceeding 440 V, and with a maximum rated current not exceeding 125 A, intended for household and similar purposes, either indoors or outdoors.
- b) To prepare standards for switches and related accessories for use in Home and Building Electronic Systems (HBES), with a working voltage not exceeding 250 V a.c. and a rated current up to and including 16 A, intended for household and similar purposes, either indoors or outdoors and to associated electronic extension units.**
- c) To prepare standards for general purposes plugs and fixed and portable socket-outlets, fused plugs, socket-outlets for appliances, switched socket-outlets with and without interlock, plugs and socket-outlets for SELV, with a rated voltage not exceeding 440 V and a rated current not exceeding 32 A, intended for household and similar purposes, either indoors or outdoors.
- d) To prepare standards for general purpose boxes and enclosures for household devices, boxes and enclosures with provision for suspension means, connecting boxes and enclosures, floor boxes and enclosures, enclosures for housing protective devices and similar power consuming devices with a rated voltage not exceeding 440 V, intended for household and similar purposes, either indoors or outdoors. These standards are applicable to boxes, enclosures intended to house accessories which are in the field of other TC 23 Subcommittees and are produced in conjunction with other Sub-committees.
- e) To prepare standards for ancillary products which are related to/incorporate in products covered by a), b), c), d) e.g. luminaire couplers, adaptor, /cable reels, indicator light units, etc.

Maintenance teams:

- MT 4: Maintenance of IEC 60669-1, IEC 60669-2-4, IEC 60884-1, IEC 60884-2-1, IEC 60884-2-2, IEC 60884-2-3, IEC 60884-2-6,
- MT 5: Development and Maintenance of IEC 60670-1, IEC 60670-21, IEC 60670-22, IEC 60670-23, IEC 60670-24,
- MT 6: Maintenance of IEC 60669-2-1
- MT 8: Maintenance of IEC 60669-2-2, IEC 60669-2-3
- MT 9: Maintenance of IEC 60884-2-5
- MT 10: Maintenance of IEC 61242
- MT 12: Maintenance of IEC 60884-2-4 and IEC 60906-3.
- WG13: Luminaire couplers (standards under preparation IEC 61995-1 and IEC 61995-2)
- MT 14: Maintenance of IEC 62094

Number of participating countries: 33

Number of observing countries: 12

Number of publications: 45

Number of projects in development: 8

Liaison: CTL,IEC/SC17D,IEC/SC 23E, IEC/SC 34D,IEC/TC 61,IEC/TC 72

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS**Brief History of SC23C**

SC23C was set up in 1970 at TC23 Washington/USA meeting. First plenary meeting held in Athens in 1972.

Terms of reference:

To prepare dimensional standards for a worldwide unified system for plugs, socket-outlets and couplers for cord-extension sets for household and similar general purposes.

To elaborate the basic characteristics of a modular system, if possible suitable for all kinds of household installations and the definition of principles for its use.

To co-ordinate information for the introduction of the unified system and to make all efforts to ensure the harmonization of supplementary or transitional configurations necessary for certain countries, as stated by TC 64.

Working Groups:

- MT1: Maintenance of IEC 60906-1
- MT2: Maintenance of IEC 60906-2.
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Number of participating countries: 27

Number of observing countries: 14

Number of publications: 4

Number of projects in development: 1 item in maintenance

Liaison: EC-DG III / Unit D1

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE**Brief History of SC23E**

SC23E was set up in 1970 at TC23 Washington/USA meeting. First plenary meeting in Athens in 1972.

Terms of reference:

To prepare and to update standards for:

-circuit-breakers and residual current devices of rated currents not exceeding 125 A and rated voltages not exceeding 440 V for protection against overcurrent and/or against electric shock in domestic and similar installations,

-residual current devices for monitoring the conditions of insulation of domestic and similar installations,

- circuit-breakers of rated currents not exceeding 125 A and rated voltages not exceeding 440 V designed to protect equipment for use in domestic and similar installations,

-electromechanical contactors for household and similar purposes,

-protective devices for battery-powered vehicle supplies.

The standards concern devices intended to be used by unskilled and uninstructed persons in installations or equipment not subject to maintenance and contain all specifications necessary for certification purposes: sets of samples to be submitted, test sequences to be applied and conditions for approval.

They shall also include all specifications necessary for certification purposes concerning the groups of samples, the tests sequences each group shall be submitted and the number of failures admitted.

In working out such standards and according to the guidelines given by the SMB, close coordination is being kept continuously with SC 17B, dealing with the standards for low voltage switchgear and controlgear mainly intended to be used by instructed persons in installations subject to supervision and maintenance (In particular SC 17B is the leader for the preparation of standards for circuit-breaker, whilst SC23E is the leader for the preparation of standards for RCDs).

Coordination of parallel work of Technical Committee 23E of CENELEC is ensured by Chairman and Secretary being the same in both bodies, and by following the Dresden Agreement.

The work of the Subcommittees takes into account the specifications prepared by TC109 (former SC28A), SC77A and by TC64.

An official liaison with CTL has been established by nominating a liaison member who is also member of the parallel WG in the CTL organization.

Working Groups and Maintenance teams:

WG 1: Miniature circuit-breakers for domestic and similar purposes, Maintenance of IEC 60898 series and IEC 62019.

WG 2: Shock-hazard protective devices and residual current monitors, Maintenance of the IEC 61008 series, IEC 61009 series, IEC 60755, IEC 61540, IEC 61543 and IEC 62020.

WG 5: Circuit-breakers for equipment, Maintenance of IEC 60934.

WG7: Protective devices for battery powered vehicle supplies. (IEC 62335)

Number of participating countries: 30

Number of observing countries: 13

Number of publications: 42

Number of projects in development: 2 new project items and 6 maintenance items.

Liaison:

IEC/SC 17B, IEC/SC 17D, IEC/SC 23B, IEC/TC 32B, IEC/TC 64 (via TC23), IEC/TC 69

IEC/SC 77A, IEC/TC 109 (via TC23), CTL

SUBCOMMITTEE 23F: CONNECTING DEVICES**Brief History of SC23F**

The SC23F was set up during the TC23 meeting in Washington, on May 1970. (RM1293/23).

The first meeting took place in 1974 in Brussels.

Particularity: SC23F is assigned with a "Group Safety Function"

Terms of reference:

- a) To prepare standards for clamping units for connecting devices for the connection of electrical conductors having a cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50mm² aluminium conductors with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.
- b) To prepare standards for connecting devices as separate entities for the connection of two or more electrical conductors having a cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50mm² aluminium conductors with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.
- c) To prepare standards for male and mating female flat quick-connect terminations for use as either an incorporated or an integrated part of an equipment or of a component, or as a separate entity, for connecting electrical copper conductors up to and including 6 mm² with a rated voltage not exceeding 1000 V a.c. and 1500 V d.c. intended for household and similar purposes.

SC23F has a Safety Group Function for :

Connecting devices, either as separate entities or as integral parts of an end product, primarily for connecting external electrical supply conductors, for use with conductor cross-sectional area of 0,2 mm² up to and including 35 mm² copper conductors and up to and including 50mm² aluminium conductors, but excluding connecting devices intended for data and signal circuits.

Safety standard published: IEC 60998 Series and 60999 Series.

Maintenance team:

MT1 Maintenance of all Standards under the responsibility of SC23F.

Number of participating countries: 19

Number of observing countries: 17

Number of publications: 17

Number of projects in development: none.

Liaison: IEC/SC48B,ISO/TC22/SC3

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

Brief History of SC23G

SC 23G, Appliance couplers, was established at the TC 23 meeting in Athens on the 10th of November 1972. The first meeting of the Subcommittee took place in Milan on the 8th and 9th of March 1974.

Terms of reference:

To prepare standard sheets, tests and requirements for safety and interchangeability of the couplers, which allow for detachable connections between flexible cords and electrical appliances or equipment, and between parts of multi-part appliances. The appliances or equipment may have a detachable input connection and also detachable output connections to other appliances or equipment. The couplers are not intended for use in fixed installations.

SC 23G is responsible for the international standards:

IEC 60320 Series as well as for IEC 60799.

Working Groups and Maintenance teams:

WG5: Appliances couplers with a degree of protection higher than IP X0. Maintenance of IEC 60320-2-3.

MT 60320-1 : General requirements

MT 60320-2-1 : Sewing Machine couplers
MT 60320-2-2 : Interconnection couplers
MT 60320-2-3 : Appliance coupler with a degree of protection higher than IPX0
MT 60320-2-4 : Appliance couplers dependent on appliance weight for engagement
MT 60320-2-5 : Direct interconnection couplers
MT 60799 : Cord sets and interconnection cord sets

Number of participating countries: 21

Number of observing countries: 17

Number of publications: 15

Number of projects in development: 1 new proposal item and 1 maintenance item.

Liaison: IEC/TC23 and Scs, TC34,TC61,TC108 and CTL

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

Brief History of SC23H

Industrial Plugs and sockets used to be under the responsibility of SC23B but given the specific constraints of these products that are used in industry, whereas all other products covered by SC23B are for household applications, it was decided in Brussels in 1976 to create a specific subcommittee to cover them: SC23H. The secretariat of SC23H was given to France. The initial task given to SC23H was to produce two standards : one for the general requirements for all kind of industrial plugs and sockets and one for the rules for interchangeability of plugs and socket-outlets using cylindrical pin and sleeves with harmonised configurations. The First editions were published in 1979 (60309-1) and 1981 (60309-2).

Terms of reference:

To prepare standards for industrial plugs, socket-outlets and couplers suitable for use in industrial, commercial, private or public locations, either indoors or outdoors.

To prepare standards for other accessories, such as industrial cable reels among others, intended for use with industrial plugs, socket-outlets and couplers.

To prepare standards for connection products intended for the connection of electric vehicles to the supply network and/or to dedicated supply equipment.

The rated voltages of products covered by these standards lie within IEC 60038.

Working Group and Maintenance team:

- MT7: Maintenance of IEC 60309-1, 60309-2, 60309-4 and 61316
- AHG3: preparation of requirements for products with arcuate contacts proposed new IEC 62472 (Decision taken in Berlin)

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Number of participating countries: 24

Number of observing countries: 14

Number of publications: 5

Number of projects in development: 1

Liaison: IEC/TC 69,ISO (ISO/TC 131/SC5)

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

Brief History of SC23J:

SC 23J, Switches for appliances, was established at the TC 23 meeting in Oslo 1977. The first meeting of the Subcommittee took place in Stockholm 1980.

The work of the Subcommittee takes into account the specifications prepared by TC34, TC61, TC108. In 1994 the work of SC 48C was transferred to SC 23J in order to get a good harmonization of the requirements and tests for switches.

Close cooperation is kept with the other Subcommittees within TC 23 and with TC 72.

Terms of reference:

To prepare standards related to switches (mechanical, electromechanical or electronic) for appliances actuated by hand, by foot or by other human activity, to operate or control electrical appliances and other equipment for household or similar purposes with a rated voltage not exceeding 440 V and a rated current not exceeding 63 A.

It covers also switches intended to be incorporated in or with appliance equipment.

It covers also the general requirements and test methods for electromechanical switches with optional quality assurance procedures.

Working Groups and Maintenance teams:

Joint Working Groups:

JWG : JWG SC 23J/TC 61/TC 72: Insulation co-ordination

Maintenance teams:

MT1 Maintenance of the IEC 61058-series.

MT2 Maintenance of the IEC 61020-series.

Number of participating countries: 20

Number of observing countries: 21

Number of publications: 45

Number of projects in development: 3 maintenance item.

Liaison: CTL,IEC/TC 34,IEC/TC 61,IEC/TC 72,IEC/TC 108

B. Environment

B.1 Business environment

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

Accessories are used in installations and in appliances mainly in domestic field. For this reason the work is developed taking into consideration that accessories are used by uninstructed people but installed or mounted by skilled people.

The standards produced are in accordance with the principles of IEC guide 104 taking into account the safety pilot and safety group functions of other TCs/SCs. SC23F has a safety group function for connecting devices.

Wide range of materials and designs makes standardisation a challenge

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

Cable management systems and products should generally be considered as mature items but nevertheless they can be strongly influenced by external economic factors. The products generally fall into two broad categories i.e. those made from metals such as steel and aluminium and those made from plastics such as PVC. In both cases escalating and fluctuating raw material prices continue to have an effect.

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

The increase in the demand of safety, comfort and reliable performances in a country is closely linked with the relevant economical and technological development. As a consequence the need for standards ensuring safe and reliable performances of the devices is increasing in all countries. Moreover, for devices to be used by uninstructed persons, like those dealt with SC23B, the certification of compliance with the qualified Standards has become a must in developed countries and is increasingly required also in developing countries.

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

Accessories, under terms of reference of this subcommittee, plugs and socket-outlets, are used in installations and in appliances in domestic field.

In order to facilitate the commerce in a more large regional areas adequate provisions on interface dimensions should be defined especially those related to users' safety.

For this reason the work is developed taking into consideration that accessories are used by uninstructed people but installed or mounted by skilled people.

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

The increase in the demand of safety in a country is closely linked with the relevant economical and technological development. So the need for standards ensuring safe and reliable performances of the devices designed to provide protection for the users of the electrical installations and equipment is increasing in all countries.

Moreover, for devices to be used by uninstructed persons, like those dealt with SC23E, the certification of compliance with the qualified Standards has become a must in developed countries and is increasingly required also in developing countries.

The above trends, together with the ever growing world-wide trade have increased the demand in qualified standards of the largest possible acceptance so as to facilitate the circulation of products in the framework of the WTO guidelines.

The world-wide demand of protective devices dealt with by SC 23E can be evaluated up to:

- Some hundred millions of poles of circuits-breakers per year
- Several millions of residual current devices per year.

The total value of such market can be evaluated in some billions US\$.

SUBCOMMITTEE 23F: CONNECTING DEVICES

Connecting devices are essential parts of any electrical equipment since most of equipment are either powered or linked to other equipment through cables. The wide spread of Informative technology is an additional factor increasing the use of connecting devices and making them more and more popular.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

The widespread acceptance and use of appliance couplers means that appliance manufacturers can supply the same appliance to countries with different plug and socket-outlet configurations.

Only a separate cord set or an interconnection cord set must be packaged with the product so that it can connect to the local socket-outlets.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

Technical / external environment: With the recent development of IEC 60309 part 4, most of plugs and socket-outlets for industrial purposes currently available on the world market are properly covered.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

The switches dealt with by the Subcommittee are normally used by unskilled persons. The increased use of household and similar general purpose equipment has resulted in an increase in the demand of safety also for the switches.

For switches for electronic equipment it also provides guidelines for appropriate quality assurance procedures.

B.2 Market demand

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

The diversity of electricity supply systems has to be taken into consideration and, as far as possible accessories should be used without restriction whatever is the electricity supply system in use.

The large demand of safety, comfort and reliable performances, together with the ever-growing worldwide trade involve the need of qualified standards having the largest possible acceptance in order to ease the circulation of products.

The users of the issued standards are manufacturers, testing stations, original equipment manufacturers, electricity supplier, market surveillance authorities and installers.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

Product manufacturers, consultants, test laboratories and main contractors use the standards. The predominant representation on the WG's comes from the manufacturing side and the testing side of industry. Recent trends show manufacturers being either unwilling or unable to provide the same level of commitment to standardisation work when compared to the past; this is most likely due to financial pressures. Generally old experienced WG members are not appearing to be replaced by younger engineers and one can foresee a tendency whereby the large pool of knowledge will diminish to a critical state in the near future.

SC23A IEC standards are widely used at regional/national levels. Both maintenance of current standards and the development of new ones are part of our programme of activities.

The work is currently split between maintenance and development

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

The large demand of safety, comfort and reliable performances, together with the ever-growing worldwide trade involves the need of qualified standards having the largest possible acceptance in order to ease the circulation of products.

The customers of the issued standards are manufacturers, testing stations, electricity supplier and installers.

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

The large demand of safety, comfort and reliable performances, together with the ever-growing worldwide trade involve the need of qualified standards having the largest possible acceptance in order to ease the circulation of products.

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

The customers of the standards issued by SC23E are the manufacturers and the certification bodies.

Both are represented in the Subcommittee and also in the various WGs.

SUBCOMMITTEE 23F: CONNECTING DEVICES

SC23F provides two types of standards.

- General requirements and safety requirements are provided in series 60999 published in the frame of the safety group function. Other committees wishing to introduce prescription on connecting devices in product standards use these standards as horizontal standards. It has to be mentioned that manufacturers and laboratories may also use these standards which are recognised as essential standards from a safety point of view.
- Standards for connecting devices used as components. Connecting devices are commonly used as components used either in other electrical equipment or electrical installation. There is a strong demand from the whole industry, certification bodies, laboratories to refer to these standards.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

The accessories dealt with by SC 23G are normally used by unskilled persons. The increased use of IT equipment, household and similar general purposes equipment has resulted in an increase in the demand of safety also for the connection of the equipment to the electrical supply. The connection with appliance couplers, cord sets and interconnection cord sets has the advantage of easy and safe use.

A further benefit is the simple and low cost replacement of damaged cords, compared with cords terminated in the appliance.

The benefits of the standards include cost savings, interoperability, elimination of barriers to trade and opening of global markets.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

The customers of the issued standards are manufacturers and testing stations that participate

actively in SC23H works.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

There is a important demand for standards for switches for appliances and CENELEC has adopted IEC 61058-1 as a European Standard. The demand for particular standards for special switches, which will be published as part 2 in the 61058-series, is also important.

The demand for verification of the compliance with the safety requirements by independent certification bodies has also increased.

The IEC 61020 Generic Standard will be generalized for use with optional QA procedure during procurement and provides general requirements and test methods for electromechanical switches.

B.3 Trends in technology and trade

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

Home and building electronic systems which have influence on accessories related to control imply some extensions of existing standards. These accessories are to be installed in the fixed installation and incorporated in appliances.

In particular it is important that the standards take into account the presence of electronics in accessories and the subsequent electromagnetic compatibility.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

The digital evolution is increasing the demand for cable management products that enable easy reconfiguration of buildings.

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

Home and building electronic systems which have influence on accessories related to control imply some extensions of existing standards. In particular to take into account the presence of electronics in accessories and the subsequent electromagnetic compatibility.

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

No specific evolution

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

Home and building electronic systems which have influence on accessories related to control imply some extensions of existing standards. In particular to take into account the presence of electronics in accessories and the subsequent electromagnetic compatibility.

SUBCOMMITTEE 23F: CONNECTING DEVICES

Technology for connecting devices is mature; therefore standards for connecting devices are now stabilised. It has to be noted that there is a decreasing interest for aluminium connecting devices since aluminium conductors are only used in few countries.

The work on flat-quick conductors might get more interest in future.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

The technical development of electrical appliances and equipment also influences their electrical supply. This is true also for new kinds of equipment. Appliance couplers with characteristics other than those of the couplers used today are needed, i.e. the use of appliance couplers is more extended.

There is an increasing use of appliance outlets and interconnection cord sets for groups of related appliances and accordingly there is a new demand for multiple portable appliance outlet devices, adaptors and split cord sets.

These trends make it necessary to develop new specifications for the connections with appliance couplers.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

Future works may be targatted towards higher currents (up to 800 A) as well as an extension of the current voltage range up to 1 kV.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

The number of types of switches and the complexity of them has increased which has led to an enlargement of scope of the standards.

The above trend, together with the ever growing worldwide trade, makes it necessary to have qualified standards of the largest possible acceptance so as to facilitate the circulation of products.

B.4 Ecological environment

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

Work is concluded to provide guidance to the Subcommittees for the inclusion of environmental aspects in product standards (IEC/TR62139). The maintenance is done by TC23/MT62139. When TC111 has concluded, maintenance on the TR will start.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

PVC based products continue to be the focus of attention because of their perceived environmental impact concerning toxicity and acidity under conditions of fire as well as recycling and waste disposal management.

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

The impact on the environment during the life cycle of product dealt with by SC23B has not been studied. SC23B is waiting for the result of the work under consideration by TC23 on this matter;

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

Not in the Terms of reference

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

The Sub Committee has not studied the impact on the environment during the life cycle of products dealt with by SC23E. SC23E is waiting for the result of the work under consideration by TC23 on this matter.

SUBCOMMITTEE 23F: CONNECTING DEVICES

IEC Guide 109 is a reference to be used in the committee.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

Appliance couplers are designed to be as small as safety aspects allow. That implies that they have a minimum material content which makes an efficient use of resources.

Further impact on the environment during the life cycle of the appliance couplers has not been studied. It is proposed to review the standards with consideration based on Guide 109.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

Guide 109 – environmental aspects – will be considered in the development of new standards or amendments.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

SC 23J is following the guidelines from TC 23 in this issue and will implement the parts that are applicable to SC 23J.

C. Work programme

C.1 Current work

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

Each Subcommittee has its own work programme concerning the standards of its products, in which the current work is listed.

For TC23, the work is listed in the PW document.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

The detailed situation of the activity of SC23A is reported in the annexed PW.

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

The detailed situation of the activity of SC23B is reported in the annexed PW.

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

60906-1 is in complete revision in order to overcome the dangerous compatibility with the existing systems stated in IEC TR 60083. 60906-2 is in revision to enlarge its scope to 25A. Current activities are listed in the attached PW

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

Current activities are listed in the attached SC23E PW.

SUBCOMMITTEE 23F: CONNECTING DEVICES

The current work is mostly maintenance. Current activities are listed in the attached PW.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

The current work is mostly maintenance. Current activities are listed in the attached PW.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

Number of projects in development: 1 items

IEC 62472 (23H/190/CDV) Plugs, socket-outlets and couplers with arcuate contacts for industrial applications. 23H/190/CDV failed (23H/195/RVC) and an Ad Hoc Group 3 has been formed to continue the works.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

The current work is mostly maintenance. Current activities are listed in the PW.

C.2 Resources/infrastructure needed**TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES**

The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

The work is done by Maintenance Teams. The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23F: CONNECTING DEVICES

The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

The work is done by Maintenance Teams. The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

The current resources and infrastructure are deemed to be sufficient.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

The current resources and infrastructure are deemed to be sufficient.

C.3 Safety aspects (only for committees which do not have a reference to safety in their scope)

Not applicable

D. Future work

TECHNICAL COMMITTEE N° 23: ELECTRICAL ACCESSORIES

For TC23 the future work will comprise:

- Once TC111 will have finalised his work, TC23 MT62139 will review the TR in the light of the outcome of TC111.
- Once the 2° edition of TR61916 will be available, MT61916 will look into "preselection of material". The conclusion will be added to the TR.

Particular tasks for each Subcommittee:

The subcommittees are asked by TC23:

- To update existing standards for taking into account new technologies, improved test methods, need for a higher level of safety, higher continuity of service and improved comfort provided by devices.
- To issue new standards for products not (entirely) covered by the available publications and for which specific requirements have to be studied or are under consideration.
- To include in their Subcommittee new products, which are in their Terms of reference and to produce new standards for them.

Guiding programme valid for the majority of the Subcommittees:

The main task of TC23 (and SC's) is to prepare standards containing safety requirements and tests for the equipment used by persons defined as unskilled or uninstructed.

For these purposes to follow the recommendations contained in the Guide 104, and particularly to introduce requirements produced by the Committees having the role with "safety pilot functions" or "safety group functions".

Though the products of all TC23 Subcommittees are very various, many safety requirements and tests are similar. It is the task of the CG23 to co-ordinate their work, principally in those rules which are "general".

Horizontal Standards and Standards from TCs listed in the Guide 104, being of general interest, are intended to be followed by all TC's and SC's. Most of them will be introduced in TC23 (and SC's) standards and co-ordinated by CG23.

SUBCOMMITTEE 23A: CABLE MANAGEMENT SYSTEMS

The future work programme of SC23A over the next 5-10 years will comprise chiefly of the maintenance of existing standards plus possible new work items, no restructuring requirements are envisaged

SUBCOMMITTEE 23B: PLUGS, SOCKET-OUTLETS AND SWITCHES

SC23B is studying other important aspects, which will result in an improvement of the Standards under their responsibility.

Home and building electronic systems which have influence on accessories related to control imply some extensions of existing standards. In particular to take into account the presence of electronics in accessories and the subsequent electromagnetic compatibility.

SUBCOMMITTEE 23C: WORLD-WIDE PLUG AND SOCKET-OUTLET SYSTEMS

None.

SUBCOMMITTEE 23E: CIRCUIT-BREAKERS AND SIMILAR EQUIPMENT FOR HOUSEHOLD USE

SC23E is studying important aspects, which will result in an improvement of the RCDs.

Reliability of RCCBs and RCBOs : WG2 started preliminary work for new requirements likely to obtain consensus, before going to official program of work and CD stage. This work was put at priority level 1 of the Maintenance Team.

HF behaviour of RCDs : Blinding and unwanted tripping at HF supply currents superimposed to the

50/60 Hz supply current are being considered.

The behaviour of RCDs in the case of HF residual currents superimposed to 50/60 Hz residual currents shall also be considered by WG2.

SC23E has also started the revision of IEC Technical Report 60755 in order to update it with the inclusion of RCD's of type B.

SUBCOMMITTEE 23F: CONNECTING DEVICES

A new document merging IEC 61210 and IEC 60760 is under consideration.

SUBCOMMITTEE 23G: APPLIANCE COUPLERS

Maintenance work and possible new work for adaptors, multiple connectors, split cord sets.

SUBCOMMITTEE 23H: INDUSTRIAL PLUGS AND SOCKET-OUTLETS

The work to cover the US National Committee request regarding plugs and socket-outlets with arcuate contacts is in progress.

SUBCOMMITTEE 23J: SWITCHES FOR APPLIANCES

Since the publication of IEC 61058-1 the Subcommittee has found it necessary to work continuously on the revisions that have been brought about by the advancement of technology and the needs of the end user. This ever changing state makes it difficult to envisage the precise timing of the revisions that will be necessary long term but such current revisions will certainly continue to be necessary. Also the extension of the IEC 61058 series to cover more types of switches for appliances constitutes a great part of the work.

The integration of the work transferred from SC 48C will be a major part of the future work. That will include a broader view not limited to aspects of electrical safety of switches but also performance and capability.

E. Maintenance cycle				
Publication no.	Date of publication	Review date	Maintenance result date	Responsibility (Maintenance Team)
IEC 62139-TR	2004	2008	2009	TC23/MT62139
IEC 60614-1	1994-03	2002-11	2007*	SC23A/MT13
IEC 60614-2-1	1982-01	2002-11	2007*	SC23A/MT13
IEC 60614-2-2	1980-01	2002-11	2007*	SC23A/MT13
IEC 60614-2-3	1990-05	2002-11	2007*	SC23A/MT13
IEC 60614-2-4	1985-01	2002-11	2007*	SC23A/MT13
IEC 60614-2-5	1992-11	2002-11	2007*	SC23A/MT13
IEC 60614-2-6	1992-11	2002-11	2007*	SC23A/MT13
IEC 60614-2-7	1995-10	2002-11	2007*	SC23A/MT13
IEC 60981 Ed. 2	2004-07	2004-07	2007	SC23A/MT01
IEC 61035-1	1990-08	2002-11	2007*	SC23A/MT13
IEC 61035-2-1	1993-04	2002-11	2007*	SC23A/MT13
IEC 61035-2-2	1993-04	2002-11	2007*	SC23A/MT13
IEC 61035-2-3	1993-06	2002-11	2007*	SC23A/MT13
IEC 61035-2-4	1995-10	2002-11	2007*	SC23A/MT13
IEC 61084-1	1991-07	2002-08	2007	SC23A/MT05
IEC 61084-2-1	1996-01	2002-08	2007	SC23A/MT05
IEC 61084-2-2	2003-05	2004-05	2008	SC23A/MT05
IEC 61084-2-4	1996-04	2002-08	2007	SC23A/MT05
IEC 61386-1	1996-11	2004-05	2008	SC23A/MT13
IEC 61386-21	2002-02	2002-02	2009	SC23A/MT13

Publication no.	Date of publication	Review date	Maintenance result date	Responsibility (Maintenance Team)
IEC 61386-22	2002-02	2002-02	2009	SC23A/MT13
IEC 61386-23	2002-02	2002-02	2009	SC23A/MT13
IEC 61386-24	2004-07	2004-07	2009	SC23A/MT13
IEC 61534-1	2003-06	2003-06	2007	SC23A/MT15
IEC 61534-21	2006-06	2006-06	2008	SC23A/MT15
IEC 61537	2006-10	2008-06	2010	SC23A/MT12
IEC 61950	2007-01	2010-06	2012	SC23A/MT01
IEC 62275	2006-10	2010	2012	MT62275
IEC 60083 TR Ed.5	2006	2008	2008	SC23B Secretary
IEC 60669-1 Ed.3.2	2007	2008	2010	SC23B MT4
IEC 60669-2-2	1996	2008	2011	SC23B MT8
IEC 60669-2-3 Ed.2	2006-08	2008	2011	SC23B MT8
IEC 60669-2-4 Ed.1	2004	2005	2008	SC23B MT4
IEC 60670-1.Ed1	2002-12	2007	2008	SC23B MT5
IEC 60670-21.Ed1	2004-04	2007	2008	SC23B MT5
IEC 60670-22.Ed1	2003-05	2007	2008	SC23B MT5
IEC 60670-23.Ed1	2006-04	2007	2008	SC23B MT5
IEC 60670-24.Ed1	2005-02	2007	2008	SC23B MT5
IEC 60884-1 Ed.3.1	2006-07	2007	2012	SC23B MT4
IEC 60884-2-1 Ed.2	2006-10	2008	2011	
IEC 60884-2-2 Ed.2	2006-10	2008	2010	
IEC 60884-2-3 Ed.2	2006-10	2008	2010	
IEC 60884-2-5 Ed.1	1995	2009	2012	SC23B MT9
IEC 60884-2-6 Ed.1	1997	2009	2012	SC23B MT4
IEC 60906-3	1994-07	2007	2007	SC23B MT12
IEC 61995-1 Ed.1	2005-03	Ongoing	2007	SC 23B WG 13
IEC 62094-1 Ed.1	2002-10	2005	2007	SC 23B MT14
IEC 60755-TR	1983-01	2000	2008	SC23E WG/MT1
IEC 60898-1	2002-05	2007	2007	SC23E WG/MT1
IEC 60898-2	2000-06	2009	2009	SC23E WG/MT1
IEC 60934	2000-11	2008	2010	SC23E WG/MT5
IEC 61008-1	2006-06	2008	2009	SC23E WG/MT2
IEC 61008-2-1	1990-12	2008	2008	SC23E WG/MT2
IEC 61008-2-2	1990-12	2008	2008	SC23E WG/MT2
IEC 61009-1	2006-06	2008	2009	SC23E WG/MT2
IEC 61009-2-1	1991-09	2008	2008	SC23E WG/MT2
IEC 61009-2-2	1991-09	2008	2008	SC23E WG/MT2
IEC 61540	1999-03	2010	2010	SC23E WG/MT2
IEC 61543	1995-04	2007	2008	SC23E WG/MT2
IEC 62019	1999-02	2007	2007	SC23E WG/MT1

Publication no.	Date of publication	Review date	Maintenance result date	Responsibility (Maintenance Team)
IEC 62020	1998-08	2010	2010	SC23E WG/MT2
IEC 60998-1	2002-12	No revision scheduled	2010	SC23F/ Secretary
IEC 60998-2-1	2002-12	No revision scheduled	2010	SC23F/ Secretary
IEC 60998-2-2	2002-12	No revision scheduled	2010	SC23F/ Secretary
IEC 60998-2-3	2002-12	No revision scheduled	2010	SC23F/ Secretary
IEC 60998-2-4	2004-09	No revision scheduled	2012	SC23F/ Secretary
IEC 60999-1 ed.2	1999-11	No revision scheduled	2009	SC23F/ Secretary
IEC 61210	1993-05	Revision is decided in SC23F with a close contact with SC48B	2007 It is decided to enquire how to merge IEC61210 with IEC60760 from SC48B	SC23F / MT1 / Mr J. Killinger
IEC 61545	1996-01	No revision scheduled	2009	SC23F/Secretary
60320-2-1	2000-07	2008	2012	SC23G/MT 60320-2-1
60320-2-2	1998-08	2008	2012	SC23G/MT 60320-2-2
60320-2-3	2005-01	2006	2009	SC23G/MT 60320-2-3
60320-2-4	2005-10	2006	2008	SC23G/MT 60320-2-4
60799	1998-08	2012	2015	SC23G/MT 60799
IEC 60309-1Ed. 4.1	2005-12	2010	2011	SC23H/MT07
IEC 60309-2Ed. 4.1	2005-12	2010	2011	SC23H/MT07
IEC 60309-4 Ed. 1	2006-06	2010	2011	SC23H/MT07
IEC 62196-1	2003	2010	2011	SC23H SEC
IEC 61316	1999-09	2010	2011	SC23H/MT07
IEC 60388-1	1972-01	2008	2009	Not decided
IEC 60389-1	1972-01	2008	2009	Not decided
IEC 60390-1	1972-01	2008	2009	Not decided
IEC 60620	1984-01	2008	2009	Not decided
IEC 61020-1	1991-04	2006	2009	SC23J/MT 2
IEC 61020-2	1991-07	2008	2009	SC23J/MT 2
IEC 61020-2-1	1991-03	2008	2009	SC23J/MT 2
IEC 61020-2-2	1994-08	2008	2009	SC23J/MT 2
IEC 61020-3	1991-06	2008	2009	SC23J/MT 2
IEC 61020-3-1	1991-03	2008	2009	SC23J/MT 2
IEC 61020-3-2	1995-12	2008	2009	SC23J/MT 2
IEC 61020-4	1991-03	2008	2009	SC23J/MT 2
IEC 61020-4-1	1991-03	2008	2009	SC23J/MT 2
IEC 61020-4-2	1995-08	2008	2009	SC23J/MT 2
IEC 61020-5	1991-03	2008	2009	SC23J/MT 2

Publication no.	Date of publication	Review date	Maintenance result date	Responsibility (Maintenance Team)
IEC 61020-5-1	1991-03	2008	2009	SC23J/MT 2
IEC 61020-6	1991-03	2008	2009	SC23J/MT 2
Publication no.	Date of publication	Review date	Maintenance result date	Responsibility (Maintenance Team)
IEC 61020-6-1	1991-03	2008	2009	SC23J/MT 2
IEC 61020-6-2	1994-09	2008	2009	SC23J/MT 2
IEC 61058-2-4	1995-06	2007	2009	SC23J/MT 1
* These publications are scheduled to be withdrawn by this date as they are effectively replaced by IEC 61386 series.				

Name or signature of the secretary
Wim De Kesel