



IEC PERFORMANCE 2007

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION



ABOUT THE IEC

The International Electrotechnical Commission (IEC) is the world's leading organization that prepares and publishes International Standards for all electrical, electronic and related technologies, collectively known as "electrotechnology". IEC's coverage is vast – from standards for power stations to standards for electrical safety in the home or workplace, to industrial automation standards and standards for multimedia, just to mention a few.

The IEC activities embrace all electrotechnology on land, at sea and in the air, as well as associated disciplines such as terminology, electromagnetic compatibility, performance, safety and the environment, including work on increasing electrical energy efficiency and the development of standards for renewable energies.

The IEC also manages conformity assessment schemes that certify whether equipment, systems or components conform to its International Standards.

As well as providing an excellent framework for improving safety and optimizing energy use, IEC's International Standards support fair trade among countries, providing a reference for the functioning of the World Trade Organization's Agreement on Technical Barriers to Trade.

At the end of 2007, the IEC counts 145 countries in its membership and developing nations programme.

IEC OFFICERS (2007)

President	RENZO TANI
President-Elect	JACQUES RÉGIS
Treasurer	OLIVIER GOURLAY
Vice-President	DONALD GRAY
Vice-President	FRANK KITZANTIDES
Vice-President	ENNO LIESS
General Secretary & CEO	AHARON AMIT

MESSAGE FROM THE IEC PRESIDENT



Renzo Tani stepped down as IEC President at the end of 2007.

“ The IEC achieved very robust results in 2007. In operational terms, we became more efficient, obtaining further improvements in the time to market of IEC Standards. In financial terms, the Commission controlled expenditures tightly and was able to achieve solid results in all areas of standards development and conformity assessment, noting exceptional sales of its International Standards. The IEC Family saw membership increase and participation in the Affiliate Country Programme – for developing countries – improve. We also saw the launch of the Market Strategy Board, which will bring the market even closer to the decision- and priority-setting process for the IEC.

I am happy to hand over the reins of the Presidency to my successor, Jacques Régis, safe in the knowledge that the Commission is sound, strong and ready to continue serving the needs of the market effectively and efficiently.

RENZO TANI
IEC PRESIDENT

CONTENTS



Message from the IEC President	3
Executive Summary	5
Global Reach	7
International Standards for the Market	17
Standards Production	21
World Class Certification	25
Financial Performance	27
Annexes	29
A/ The IEC in Figures	29
B/ List of Member countries	30
C/ List of Affiliate countries	30



EXECUTIVE SUMMARY

Two thousand seven saw the IEC build on the momentum generated by the Centenary celebrations of 2006. The Commission strengthened its operations on all fronts, including the following:

- The IEC maintained leadership in standardization by continuing to respond to users' needs in all areas, from new online collaboration tools to standards development and conformity assessment in database format.
- Five hundred twenty-one publications were produced. The average production time was reduced by two months to 36 months with 63 % of all publications produced in less than three years.
- A new technical committee on marine energy (Technical Committee 114: Marine energy – Wave and tidal energy converters) was launched.
- IEC Family continued to grow rapidly to 145. Cuba, previously an IEC Affiliate, became the 68th member, while the IEC Affiliate Country Programme for developing countries expanded to 77.
- The IEC increased cooperation with the World Trade Organization, participating in its workshops in the Persian Gulf and Africa.
- Membership fees were reduced to encourage developing countries to join.
- Sales of IEC publications increased 6.6 % to CHF 4,9 million (from CHF 4,6 million in 2006). Royalties increased 7 % to CHF 6 million (from CHF 5,6 million in 2006).
- Following on the successful models in the Asia-Pacific and North America, a new Regional Centre for Latin America was opened in São Paulo, Brazil, to raise awareness and increase participation from all countries in the region.
- The IEC signed a cooperation agreement with the Pacific Area Standards Congress (PASC), and continued to support and coordinate with other regional standards-setting bodies.



-
- The IEC redoubled its efforts in the field of electrical energy efficiency and renewable energies, briefing delegates at the World Energy Congress and starting a new global community website called **wattwatt**. In cooperation with the International Energy Agency (IEA), the IEC launched a competition for school children aimed at increasing awareness of the importance of electricity and energy efficiency.
 - More countries started to make use of IEC conformity assessment systems. Belarus, Bulgaria, Saudi Arabia and the United Arab Emirates joined the IECEE Scheme on electrical equipment safety. Australia and Singapore joined the IECQ. The new IECEx Services Scheme catered to more end users, driven by increasing demand by the major petrochemical companies.
 - The IEC Council approved the creation of the Market Strategy Board – a new management body comprising industry representatives – to help set priorities for standardization development and conformity assessment and to carry out technology road mapping. ■



GLOBAL REACH

IEC Family grows

The IEC Family grew to 145 countries – 68 Full and Associate Members and 77 Affiliates. Cuba rose to Associate Member from Affiliate.

Support for experts and users

The IEC Central Office held more than 20 individual training sessions, covering both initiation and refresher sessions, for National Committee officers and industry experts. In addition, the National Committees held workshops that helped them to recruit new stakeholders to their memberships.

Africa

Working with all the relevant regional bodies in Africa, the IEC reached out to the widest possible audiences. In April, the IEC spoke at the 10th meeting of SADCSTAN, the Southern African Development Community Cooperation in Standardization. And in May, the IEC shared its experiences at the UPDEA electrotechnical standardization colloquium in Cape Town, South Africa. UPDEA (the Union of Producers, Transporters and Distributors of Electric Power in Africa) supports the establishment of AFSEC (the African Electrotechnical Standardization Commission).

In addition, the IEC organized awareness seminars in Botswana, Madagascar and Zimbabwe.

At a two-day meeting in Tunisia of the United Nations Industrial Development Organization and the African Union, the IEC explained how

its International Standards and conformity assessment systems can play a leading role in building "quality infrastructure" in Africa. The IEC emphasized the importance of involving stakeholders, explaining how national committees, as defined by the IEC, were good vehicles for gathering stakeholder information.

Americas

The IEC opened its Latin America Regional Centre (IEC-LARC) in São Paulo, Brazil. The new office gives Latin American countries more direct contact with the IEC, making the logistics of IEC work more efficient in terms of language and time zones and helping the IEC to develop closer relationships with electrotechnical experts in the region.

A highlight of the opening was a seminar that gave participants a close look at the breadth of technologies handled by the IEC and at its conformity assessment work. The technologies included informatics and communications, multimedia, ultra-high voltage, electrical energy efficiency and renewable energies.

The IEC organized country dialogues in Argentina, Brazil, Colombia and Uruguay to encourage greater participation from these countries. President-elect Jacques Régis and IEC Regional Manager Amaury Santos visited Chile, not currently a member, reaching out to industrial and governmental representatives to help them understand the potential benefits of IEC membership.



Amaury Santos - Regional Manager of the IEC Latin America Regional Centre (IEC-LARC).

-
- ▶ A special joint session of two key regional bodies – the Pan American Standards Commission (COPANT) and the Pacific Area Standards Congress (PASC) – in Cartagena, Colombia, provided a unique opportunity for IEC President Renzo Tani to update their memberships on IEC activities. At the COPANT Annual Assembly, he emphasized the importance of the cooperation agreement



IEC General Secretary & CEO Aharon Amit (left) with Fabio Tobón, Chair of PASC XXX.

between COPANT and the IEC. At the PASC meeting, a new IEC-PASC cooperation agreement was discussed. That IEC-PASC agreement was later signed by both organizations in Geneva.

The IEC Regional Centre for North America (IEC-ReCNA) had another solid year. Opened in 2000, IEC-ReCNA provides additional support for technical committees, particularly those with strong participation from North America. Located in Worcester, Massachusetts, IEC-ReCNA supports 22 IEC technical committees as a natural extension of the IEC Central Office.

Asia-Pacific

The IEC Asia-Pacific Regional Centre in Singapore (IEC-APRC) consolidated its support to a number of technical committees with the recruitment of a new technical officer, Suzanne Yap. The TCs previously supported by IEC-APRC Officer in Charge Dennis Chew were transferred to Ms. Yap's responsibility.

Freed of the technical duties, Chew was able to renew his promotional role for the centre. He provided informational and training sessions and facilitated regional conferences in Brunei Darussalam, Cambodia, Indonesia (with the International Organization for Standardization), Lao PDR and the Philippines. In addition, he was able to maintain the IEC's profile among the key regional groupings – Asia Pacific Economic Cooperation (APEC) and the Association of Southeast Asian Nations (ASEAN).

IEC conformity assessment participated in the joint meeting of the APEC Chemical Dialogue on Restrictions of Hazardous Substance and the Trade Facilitation Task Force of the APEC Subcommittee on Standards and Conformance.

Following the discussions at the PASC annual meeting in Cartagena, Colombia (see above), the IEC and the PASC in September signed a cooperation agreement aimed at further improving coordination between the two organizations. The primary objectives of the agreement are to promote the development, use and adoption of IEC International Standards, to accelerate the electrotechnical standardization process in the region, to increase

- ▶ participation from the region in the IEC's work and to facilitate world trade.

Furthermore, the agreement offers a channel for non-IEC members of PASC to be kept abreast of IEC-related activities and developments.

Europe

The IEC organized a training session for experts in Bulgaria to familiarize them with procedures for standards development as well as the latest Information Technology (IT) tools.

The IEC and the Polish National Committee organized jointly a roundtable in Katowice for the Polish electrotechnical sector. The event focused on promoting active participation by industry in electrotechnical standardization and sharing information relevant to small and medium companies.

Middle East and Persian Gulf countries

An IEC workshop on safety of household appliances and electrical installations was held in Riyadh, Saudi Arabia in April. The event, which was open to participants from Gulf Cooperation Council (GCC) member states, was organized by the Saudi National Committee and the Gulf Cooperation Council Standardization Organization (GSO). The event targeted a broad range of participants from industry and government. This included companies that manufacture, export, and sell electrical appliances in the GCC States, petroleum and petrochemical companies, household electrical and equipment manufacturers, water and electrical utilities, electrical and engineering consultants, ministries of industry and commerce, customs authorities, national standards systems and universities and technical colleges.

IEC President Renzo Tani and Vice-President Frank Kitzantides participated in a special IEC event in Israel in June attended by 200 experts from the electrical and electronic industries as well as other interested stakeholders from academia and government. ▶



Training session for experts in Bulgaria.



Roundtable for the electrotechnical sector in Katowice, Poland.



Saudi Arabia and the UAE joined the IECEE.



The November 2007 tour of the Gulf countries began in Bahrain.

-
- ▶ At the request of several countries in the Gulf, the IEC held country dialogues in Bahrain, Kuwait, Oman and the United Arab Emirates (UAE). The visits helped to reassure the respective countries of the simple steps necessary to establish national committees.

As a result of these efforts, IEC member Saudi Arabia and non-member the UAE joined the IEC's Worldwide System for Conformity Testing and Certification of Electrotechnical Equipment and Components (IECEE) scheme in the fourth quarter.

As a follow-up to the workshop in Riyadh, a brief tour of Bahrain, Kuwait, the UAE and Saudi Arabia was organized at the end of 2007. In Manama, Bahrain, the IEC held a briefing session for the Directorate of Standards and Metrology at the Ministry of Industry & Commerce. In Kuwait City, the IEC met with the senior management of the Public Authority for Industry. In Dubai, the IEC visited the Emirates Authority for Standardization & Metrology (ESMA). The ESMA management was briefed on the necessary steps for the establishment of the UAE National Committee pending the country's formal application for IEC membership. In Riyadh, the IEC spoke at an

International Standardization and Conformity Assessment Seminar organized by the Saudi National Committee under the auspices of the Saudi Arabia Standards Organization (SASO). Before some 30 representatives from the IEC National Committee, the IEC briefed on IEC standards development and why it was so important to involve Saudi experts in the two most relevant conformity assessment schemes, the IECEE and the IEC Scheme for Certification to Standards Relating to Equipment for use in Explosive Atmospheres (IECEX).

Lower fees to encourage membership from developing countries

In keeping with the IEC's goal, as expressed in its Masterplan 2006, to expand the IEC Family and to enhance the participation of developing countries, the IEC Council approved a programme to rationalize the membership fees charged to smaller economies and to assist IEC members (National Committees) in sustaining their financial stability. In 2007, Associate Members paid a reduced flat rate. Other developing countries members paid reduced variable rates depending on their gross national product (GNP), per capita GNP and per capita electricity consumption.

Affiliate Programme goes from strength to strength

Six developing countries – Afghanistan, Gabon, Guinea, Honduras, Myanmar, and Trinidad and Tobago – joined the IEC Affiliate Country Programme. This brought the number of participating countries to 77, with 235 representatives registered to monitor



ACP participants.

-
- ▶ IEC standards development work. More than 2 400 IEC Standards were adopted nationally by 28 of the participating countries (up from 22 since 2006). Fifty-three Affiliates have started basic libraries of IEC Standards in electronic format.

The Affiliate Country Programme was launched in 2001 in response to calls from the World Trade Organization for increased efforts to encourage the participation of developing nations in the IEC's standards development and conformity assessment activities. The free programme, which uses the IEC's 100 % electronic working environment, encourages greater participation in IEC standardization activities and conformity assessment by developing countries that are not members and unlikely to see a need to become members.

The Programme offers access to IEC technical work, IEC Standards to start a basic national library and a facilitated procedure to adopt relevant IEC Standards as bases for national standards or regulations.

IEC Affiliate Leader Carlos Rodriguez continued to support the programme by attending the IEC's 71st General Meeting in Paris in October. Executive Director of the Instituto de Normas Técnicas de Costa Rica, he submitted reports about the Programme to the IEC Standardization Management Board and to the Conformity Assessment Board and delivered an update about the Affiliates' participation. He particularly insisted on the need for Affiliates to establish true national committees and renewed his commitment to assist them in this task.

Twenty-one delegates from 12 countries in the Affiliate Programme attended 16 technical meetings during the General Meeting in Paris. The countries were: Angola, Benin, Bhutan, Costa Rica, Côte d'Ivoire, Dominican Republic, Ghana, Lebanon, Senegal, Sudan, Tanzania and Uruguay.



General Meeting highlights

The IEC General Meeting was held in Paris, France on 21-26 October 2007. Hosted by the French National Committee, l'Union Technique de l'Electricité, the event gathered 843 delegates from 62 countries to attend technical, conformity assessment and management meetings.

Addressing his last Council meeting as president, Renzo Tani said that the IEC faced two main challenges in the years to come: how to respond to the market and how to deal with the membership.

In his annual performance presentation to the Council, IEC General Secretary & CEO Aharon Amit briefed on the Commission's results over the period from the fourth quarter of 2006 through the third quarter of 2007. On the technical front, Amit told members that the IEC had now reduced the average time for standards development to only 36 months from 38 months. He reviewed the initiatives carried out during the IEC Centenary

- ▶ celebrations of 2006, which promoted increased participation in the IEC National Committees, and assured members that the investments made would continue to reap dividends. From the re-branding of the IEC Standards themselves to the production of promotional brochures and videos, the IEC had been successful in providing its members with effective tools for reaching out to new stakeholders, he said.

Following the implementation of Masterplan 2006, the IEC Council approved the appointment of former German National Committee Secretary Enno Liess as Vice-President and Convenor of the newly-established Market Strategy Board. The Board will help set priorities for standardization development and conformity assessment, and carry out technology road mapping.

At a ceremony at the end of the IEC Council meeting, Derek Johns, Don Mader and Per-Åke Svensson were given the prestigious IEC Lord Kelvin Award for 2007. This honour distinguishes experts who have made outstanding contributions to electrotechnical standardization.



IEC Lord Kelvin awardees: left to right: Don Mader, Per-Åke Svensson, Derek Johns.

On the periphery of the General Meeting, some 40 IEC members and participants from the Affiliate Country Programme attended a workshop on rural electrification. IEC Technical Committee 82: Solar photovoltaic energy systems, presented IEC series 62257 on small renewable energy and hybrid systems for rural electrification. Presentations included applications in Europe and Latin America and case studies from Africa and the Asia-Pacific. The workshop was co-chaired by Affiliate Leader Rodriguez and the UTE.

INTERNATIONAL PARTNERS

World Standards Cooperation

The three worldwide international standardization organizations – the IEC, the International Organization for Standardization (ISO) and the International Telecommunication Union (ITU) – consolidated their cooperation through the World Standards Cooperation (WSC). Experts from the three gathered at the 78th Geneva International Motor Show for the third edition of their “Fully Networked Car Workshop”, during which they examined the standards that will facilitate the convergence of information and communications technologies in motor vehicles.

The three organizations also adopted and implemented joint IEC/ISO/ITU patent rights policies and procedures.

In October, the WSC organized a workshop on public transit security standards. The event addressed the strategic role for international standards and conformity assessment ▶

-
- ▶ programmes. It also identified the international standards needs and gaps for public transit security, encompassing urban, suburban and regional commuter transportation by bus, rail and the land side of urban ferry operations.

The three organizations celebrated World Standards Day on 14 October as a means to recognize the collaborative efforts of the thousands of experts who develop international standards. They released a joint message and a poster highlighting the year's theme of "Standards and the citizen: Contributing to society".

A number of other activities demonstrated the high level of cooperation between the IEC and its sister organization, the International Organization for Standardization. A joint IEC-ISO session on the importance of standards in the area of energy efficiency and renewable energies was held at the 20th World Energy Congress in Rome, Italy. In addition, the IEC and the ISO published joint brochures on copyright and on using IEC and ISO Standards as national regulations. They also continued to publish their joint IEC and ISO Guides.

The operational relationship between the IEC and the ITU was further enhanced to facilitate the exchange of working documents and IEC Standards. All IEC Standards of relevance to the ITU community were located on a dedicated web page at www.iec.ch/itu. The IEC and the ITU met to strengthen their cooperation in providing assistance to developing countries. It was expected that this new area of cooperation would start to bear fruit in 2008.

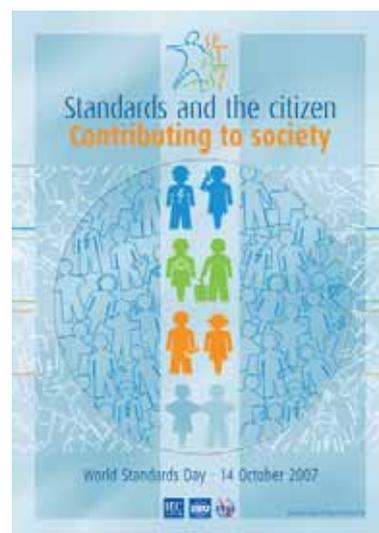
Cooperation with WTO

IEC collaboration with the World Trade Organization (WTO) was consolidated through regular participation in the Technical Barriers to Trade (TBT) committee meetings and at regional workshops in Bahrain, Botswana and Malaysia.

At the workshop in Botswana, participants from 16 African countries interacted on methods to reduce or prevent importation of cheap and unsafe electrical products, which were seen as contributing to the economic plight of Africa. The workshop provided an opportunity for the IEC to reach out to a wider and relevant audience. The delegates showed a real interest in finding ways to overcome forgeries and to ensure the credibility of test ▶



Committed team to advise on public transit security.



The poster highlighted the year's theme of "Standards and the citizen: Contributing to society".

- ▶ certificates. The IEC pointed out that IEC conformity assessment systems use online verification, rendering paper forgeries unnecessary and meaningless.



Attendees at the WTO workshop in Kuala Lumpur, Malaysia.

The IEC also attended the WTO's Asia Pacific Regional Workshop in Kuala Lumpur, Malaysia, where the IEC's standards development and conformity assessment activities were seen as useful tools for countries using Electrotechnical equipment as opposed to manufacturing.

IEC helps UNIDO experts understand conformity assessment



In May, the IEC trained experts from the United Nations Industrial Development Organization (UNIDO). This offered an opportunity for the IEC's peer assessment-based approach to conformity assessment to be presented alongside the accreditation model of the International Laboratory Accreditation Cooperation (ILAC). The UNIDO experts were able to appreciate what the IEC conformity assessment systems can provide and the cooperation between the IEC and the ILAC.

A partner in support to developing nations

The IEC continued its participation in the Joint Committee on Co-ordination of Assistance to Developing Countries in Metrology, Accreditation and Standardization (JCDCMAS), which comprises the IEC and all the major standardization, conformity assessment and metrology organizations. Members of the committee share information on their respective activities related to developing countries and coordinate mutually-beneficial events.

REACHING OUT

Promotional activities target industry and government

The IEC focused its promotional campaigns to industry and government on the critical areas of electrical energy efficiency and renewable energy. A series of brochures and supporting web pages were developed to highlight the IEC's work in both the development of standards in these fields as well as the accompanying conformity assessments available or being developed. These brochures were sent to all countries through IEC National Committees and through relevant diplomatic missions in Geneva, Switzerland. In addition, all relevant international organizations – both governmental and non-governmental – were targeted to highlight the role of the IEC.

Following on from the promotional "investments" made during the IEC's Centenary in 2006, the Commission produced a series of videos outlining the role and functioning of the IEC and the importance of small and

- ▶ medium enterprises (SMEs) in international standardization and conformity assessment.

IEC and Academia

Following on from the success of the IEC Centenary Challenge (www.iecchallenge.org) in late 2006, the IEC established a dedicated zone on its website for use by academia (www.iec.ch/academia). The site aims to help both teachers and students understand the critical role of standardization in today's global economy, and to provide them with resources for use in their own work and studies. It includes relevant academic papers; a series of lectures, audio and video presentations explaining standardization and IEC operations; sample working documents; and a sample IEC Standard.

wattwatt

To reach out to a wider audience about the importance of electrical energy efficiency, the IEC launched a new "Web 2.0" website: wattwatt.com (a play on the words 'what' and 'watt'). Launched at the IEC General Meeting, the site quickly established itself as a reference centre for people interested in and sensitive to electrical energy efficiency. The site also listed electrical energy efficiency initiatives in countries around the world (see www.wattwatt.com/wikiwatts). The IEC Central Office monitors the contributions to wattwatt.com and keeps relevant IEC technical experts abreast of any potentially interesting content. ▶

As one of its first major initiatives, wattwatt.com appealed to the world's school children for help. It organized a worldwide contest called **care4it**, which challenges the school children to submit their ideas for saving electricity. The deadline for entries is the end of 2008. The contest was organized with the support of the International Energy Agency, which advises its member governments on energy policy. ■



care4it contest challenges the world's school children to submit ideas for saving electricity.



INTERNATIONAL STANDARDS FOR THE MARKET

Priorities for greater energy efficiency

While most of the IEC's work in the past 100 years has been devoted to improving electrical energy efficiency, the awarding of the Nobel Peace Prize to the Intergovernmental Panel on Climate Change (IPCC) and to former US Vice-President Al Gore highlighted the critical role to be played by technical standards in mitigating the effects of climate change. As a result of the IPCC's reporting on how the burning of fossil fuels is changing Earth's climate, the IEC concluded a portfolio analysis of its coverage to help governments and other interested parties to easily identify which IEC Standards can support energy efficiency drives and where improved electrical energy efficiency standards can be developed and in what priority.

In the area of electrical energy transmission, the IEC and the International Council on Large Electric Systems (CIGRE) organized an international symposium in Beijing, China, to address the need for technical standards for Ultra-High Voltage (UHV) transmission. The symposium was attended by some 350 delegates from 18 countries. Numerous IEC and CIGRE experts were also present. A joint IEC-CIGRE working group was established to coordinate the development of UHV standards.

Strategic Business Plan tested by TC/SCs

The Standardization Management Board (SMB), at its meeting in June, decided to establish a trial period for the use of strategic business plans by certain representative technical committees. The strategic business plans are aimed at replacing the present

strategic policy statements that the technical committees publish to remind themselves of the global focus of their activities.

The technical committees selected for the trial were:

- TC 3: Information structures, documentation and graphical symbols
- TC 9: Electrical equipment and systems for railways
- TC 25: Quantities and units, and their letter symbols
- TC 31: Equipment for explosive atmospheres
- TC 44: Safety of machinery - Electrotechnical aspects
- TC 48: Electromechanical components and mechanical structures for electronic equipment
- TC 77: Electromagnetic compatibility
- TC 86: Fibre optics
- TC 89: Fire hazard testing
- TC 91: Electronics assembly technology
- TC 100: Audio, video and multimedia systems and equipment



► In addition to their background and business environment, or ecological and work programme sections, the strategic business plans address specific market trends in terms of client needs and technological developments. They also include a broadened approach to energy efficiency throughout the entire life cycle of a product, including material procurement. They focus on system aspects that ensure a far more global approach. Finally, they list the objectives and strategies of the technical committees and their respective subcommittees, providing a time-limited, achievable action plan that is relevant to future work.

Global relevance toolbox launched

To ensure that its Standards continue to be globally relevant, the IEC launched the global relevance toolbox. This support package contains a broad variety of techniques and examples to help technical committees achieve this goal.

In responding to the needs of the WTO Technical Barriers to Trade Agreement, the IEC obligated itself to develop International Standards that are globally relevant in order to facilitate trade on an international level. International Standards do away with unnecessary technical barriers to trade by being sufficiently global to have the broadest possible acceptance in all countries. In turn, they need to respond fairly to regulatory and market needs and scientific and technological developments. It is important then to think globally, as opposed to nationally or locally, so that publications can be adopted by as many stakeholders as possible in markets around the world. There are rare exceptions. One would be when there are differences

in infrastructure, such as mains' voltages. IEC technical committees use a number of techniques to take these differences into account, differences which could not realistically be eliminated to permit adoption of a single unified standard.



Pelamis Wave Energy Converter.

IEC starts work on marine energy

In 2007, the IEC created Technical Committee 114: Marine energy – Wave and tidal energy converters, to help establish this promising source of renewable energy as a competitive form of electrical energy production.

It is expected that the International Standards produced by the new technical committee will support the International Energy Agency's efforts to recommend best practices for the effective delivery of electricity from wave and tidal energy devices.

Standards developed by TC 114 will cover:

- Performance measurement of tidal energy converters;
- Performance measurement of wave energy converters;
- Technical Reports on assessment of wave and tidal energy resources;

- ▶ - Specification and design of grid interface for wave and tidal energy converters;
- Manufacture and factory testing of wave and tidal energy converters; and
- Certification scheme for wave and tidal energy converters.

New TC 31 subcommittee holds first meeting

As agreed between the Standardization Management Board and the ISO's equivalent body, the Technical Management Board (TMB), a new subcommittee IEC SC 31M: Non-electrical equipment and protective systems for explosive atmospheres, was established within IEC Technical Committee 31, Equipment for explosive atmospheres.

Designed to avoid duplication of effort, the hybrid subcommittee has an ISO Secretariat and Chairman with participation of ISO and IEC members to process double logo standards on non-electrical matters.

As a result of its first meeting in Kuala Lumpur, Malaysia, in November, SC 31M is expected to launch its first work item in early 2008. The voting within both the IEC and the ISO on SC 31M documents will start at the Committee Draft for Vote (CDV) stage.

Electropedia goes live

In April 2007, the IEC launched Electropedia (www.electropedia.org), an online terminology database that offers the content of the International Electrotechnical Vocabulary (IEV) free of charge in electronic format. The online database makes it significantly easier to find an internationally-agreed electrical,

electronic or related technology term, together with its definition in English and French, or to search for an equivalent term



in Spanish or German (when and where these exist). Terms in other languages (Arabic, Chinese, Italian, Japanese, Dutch, Polish, Portuguese, Russian and Swedish) will be added later.

In addition, the database, which now contains more than 20 000 entries divided into 77 main subject areas, will be updated as technical language evolves through the online collaboration of IEC TC 1: Terminology.

Collaboration tools go live

The IEC's Technical Information Support Services (TISS), with the Central Office Information Technology team, developed a number of new online facilities. For example, the IEC launched its new collaboration tools suite. The new suite will facilitate the standards development process and the



Collaboration Tools welcome page.

-
- ▶ exchange of information and documents among project teams, maintenance teams and working group members. The suite offers upload and distribution of documents, discussion fora and email notifications.

The suite is being offered to other organizations interested in making use of the applications. Several have already expressed interest. The European Committee for Electrotechnical Standardization (CENELEC) has adapted it to be used as its document server.

New formatting for IEC Standards

The IEC redesigned its publications for the first time in almost 20 years in parallel with changes to overall corporate style. Standards with the newly-designed cover became available in August. The IEC last fundamentally changed the cover of its publications in 1989.

In addition, from March, all new bilingual publications were published with the English-language content followed by the French-language

content. The interlacing of the English- and French-language pages was eliminated. This helped to simplify the publishing process, enabling efficiency gains and cost savings.

This restructuring enabled all hyperlinks in IEC working documents to be kept in PDF format and facilitated the automatic generation of electronic bookmarks in the PDF files, thus maintaining the IEC's commitment to producing bilingual publications without hindering the bilingual standards development process. ■



New look for IEC standards.

STANDARDS PRODUCTION

Average production time reduced

Five hundred twenty-one publications were produced, of which 451 were International Standards, 22 were Technical Specifications (for which the consensus was insufficient for the status of an International Standard), 27 were Technical Reports (informative documents), 21 were Publicly Available Specifications (industry specifications seeking full consensus) and one was a Guide. Of the total, 45 % were updates or maintenance of existing IEC standards.

The year's production brought the total IEC catalogue to 5 794 publications. The average production time for the development of IEC publications was reduced by two months to 36 months with 63 % of all publications produced in less than three years, 24 % in three to five years, and 13 % in more than five years. Fourteen IEC publications were produced in less than 12 months. Germany, Japan and the the United States of America were the leading countries proposing new work items for standards development.

The average time to prepare Final Draft International Standards (FDIS) for circulation to members for final voting was less than two months, while the publication time from approval of the FDIS to publication was less than one month.

In terms of the number of IEC Standards produced, TC 65: Industrial-process measurement control and automation, was by far the most prolific, producing 85 Standards. It was followed by TC 86: Fibre optics, with 35; TC 100: Audio, video and multimedia

systems and equipment, with 21; and TC 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories, with 20. The high number of standards produced by TC 65 is explained in part by the publication during the year of the complete series of Fieldbus Standards.

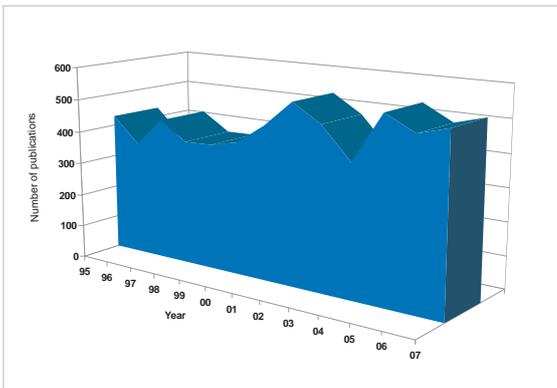
While by no means the only measure by which the IEC production should be judged, these figures nonetheless give an indication of the technology areas that are most active.

The electronics sector accounted for 195 publications, while the electrotechnical industry had 159, followed by safety, measurement and household appliances with 91. In terms of new projects started, the electronics sector also led the field, accounting for more than half of the IEC's new work programme. ▶



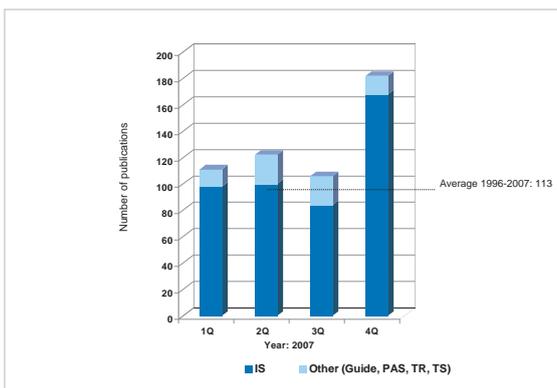
TC 65 covers industrial-process measurement, control and automation such as this car assembly line.

► PRODUCTION OF PUBLICATIONS

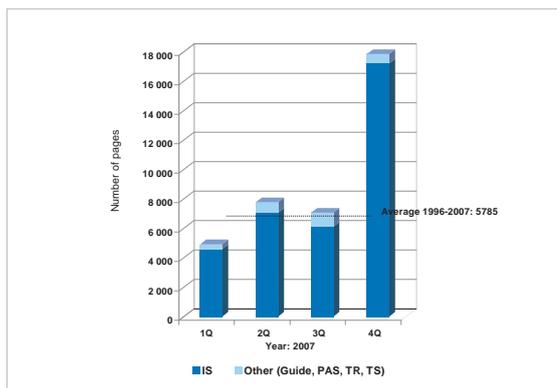


The number of publications issued went up again in 2007 to 521.

NUMBER OF PUBLICATIONS ISSUED (BY QUARTER)

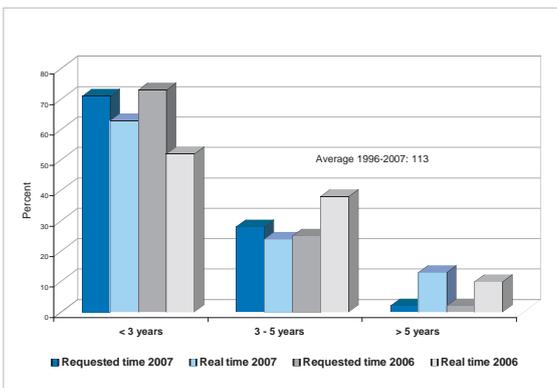


NUMBER OF PAGES ISSUED (BY QUARTER)



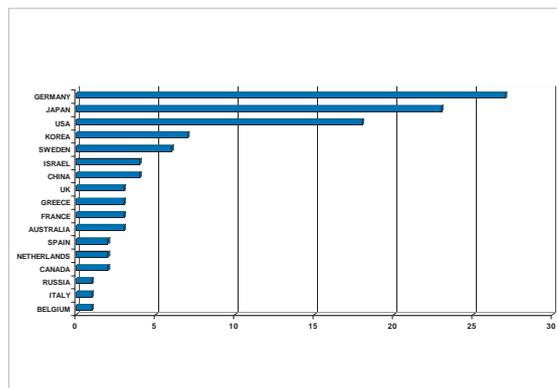
The 2007 production brought the total IEC catalogue to 5 794 publications.

AVERAGE DEVELOPMENT TIME



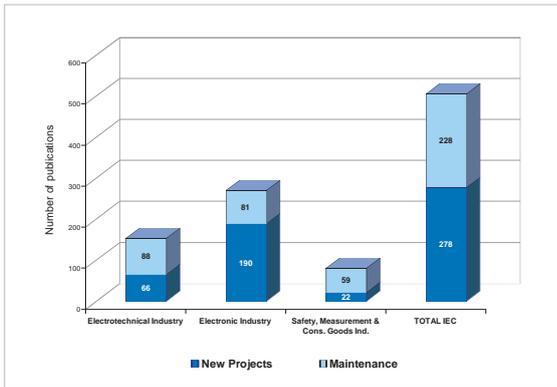
Average development time of IEC publications went down from 38 months in 2006 to 36 months in 2007.

NPs BY PROPOSERS (FROM NATIONAL COMMITTEES)

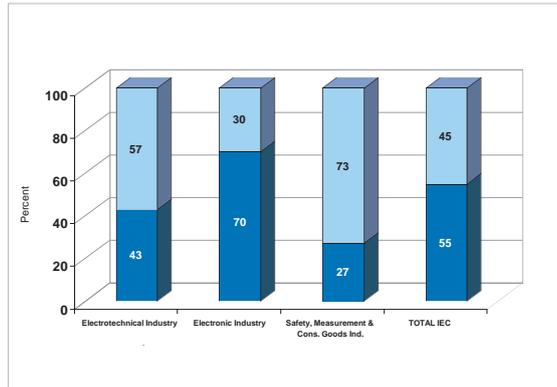


A total of 183 new projects were initiated in 2007, a figure higher than in 2006. Germany, Japan and the United States led the way in proposing new work.

DEVELOPMENT OF NEW PROJECTS COMPARED TO MAINTAINING EXISTING PUBLICATIONS

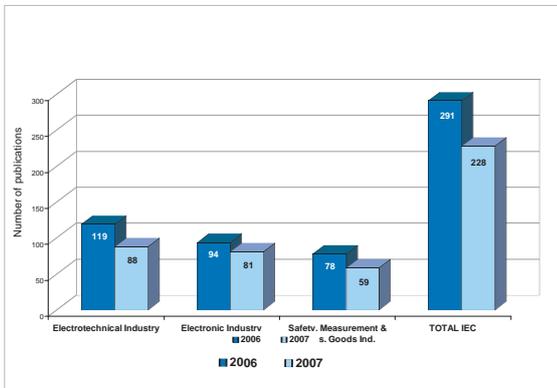


NUMBER OF PUBLICATIONS BY SECTOR (%)



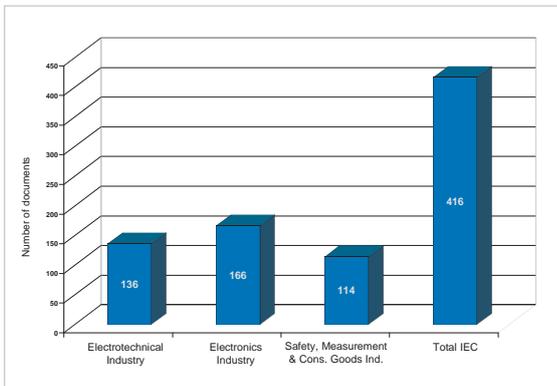
In 2007, more efforts were placed in developing new standards than in maintaining existing ones.

MAINTAINING EXISTING PUBLICATIONS IN 2007 AS COMPARED TO 2006

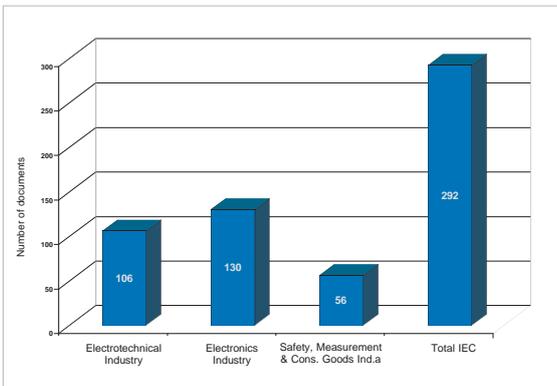


In 2007, maintenance work for the electrotechnical and electronics industries decreased in all sectors compared to 2006.

CIRCULATED CDVs

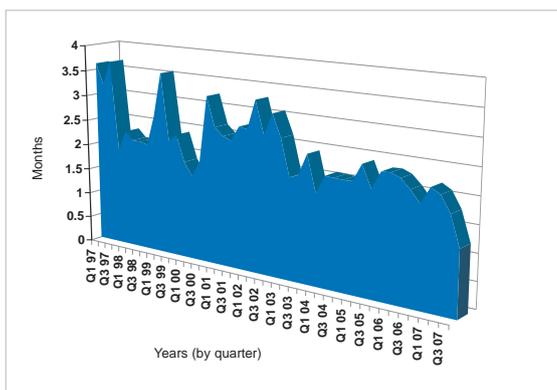


CIRCULATED FDISs

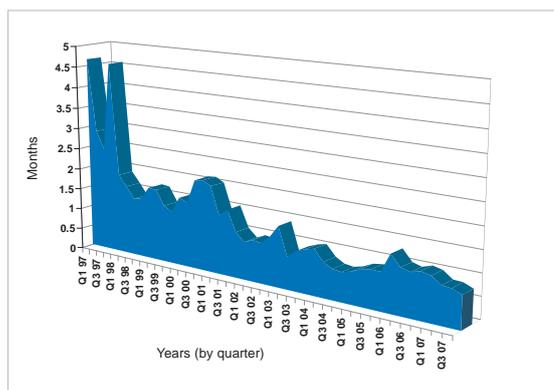


In 2007, the IEC circulated to its National Committees 416 Committee Draft for Vote documents and a total of 292 Final Draft International Standards.

▶ **AVERAGE TIME IN MONTHS TO PREPARE FDIS FOR CIRCULATION BY CENTRAL OFFICE (1997-2007)**



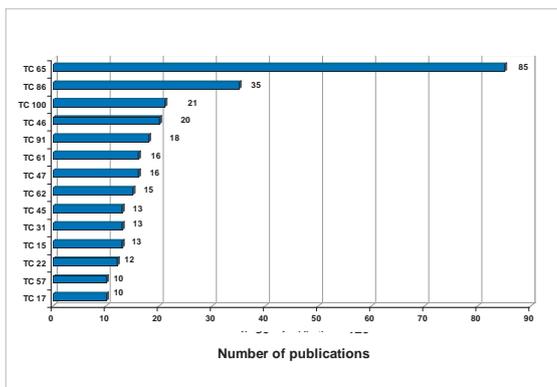
AVERAGE PUBLICATION TIME* IN MONTHS FOR IS (1997-2007)



*Time from approval of the FDIS to Publication

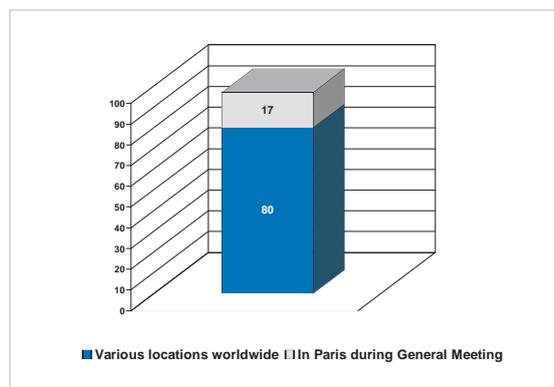
When it comes to administrative procedures, circulation time for Final Draft International Standards continues to be efficient with a time period of two months in 2007. Transformation time into publications was about one month or less on average.

TCs PRODUCING 10 OR MORE PUBLICATIONS



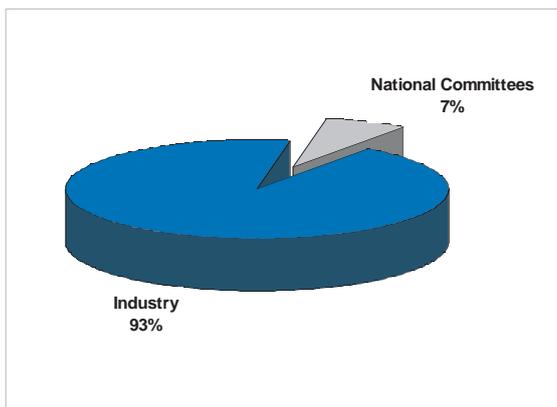
TC 65: Industrial-process measurement, control and automation, led the way in 2007, thanks to the publication of the fieldbus series of standards, and 13 other IEC TCs produced 10 or more publications in 2007.

MEETINGS



IEC technical committees and subcommittees held a total of 97 meetings in 2007 around the world compared to 116 in 2006.

TC/SC OFFICERS' AFFILIATION



Industry remains the predominant source for TC and SC officers.

WORLD CLASS CERTIFICATION

The key activity for the Conformity Assessment Board (CAB) – the management body that oversees all three IEC Conformity Assessment schemes – concerned electrical energy efficiency. The CAB established a working group to assess the Conformity Assessment needs in this field. Its findings are expected in early 2008.

Several Information Technology systems were developed to support the IEC's Conformity Assessment activities. These covered the new IECEE CB Bulletin Database on adherence to IEC standards, the refinement and testing of the IECEE's online database of CB Scheme certificates, along with the IECQ online database, and development of its new IECQ online Certificate of Conformity System utilizing a system similar to the IECEX online Certificate of Conformity System for equipment and service facilities.

While all schemes saw increased participation, the IEC also continued its close cooperation with the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF) to pursue the goal of joint assessments and the use of a common set of documents.

IECEE

IECEE membership increased to 50 countries. In the IECEE CB Scheme for the mutual recognition of test certificates for electrical equipment, the latest countries to join were Bulgaria, Saudi Arabia and the United Arab Emirates. This brought the total number of national certification bodies (because there can be more than one per country) to 65, comprising 249 testing laboratories.

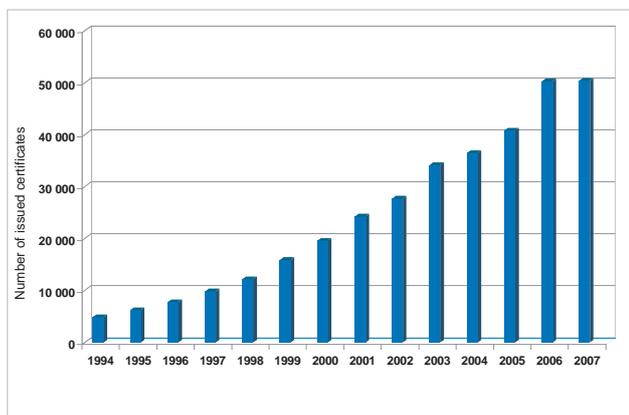


The new IECEE Brochure provides an excellent source of information about the IECEE conformity assessment scheme.

The CB Scheme deals with the certification of 19 categories of electrical equipment representing more than 1 000 Standards. IECEE provides more than 240 000 valid certificates in its online database. More than 50 000 certificates were issued during the year. Some 7 000 manufacturers in industrialized and developing countries now benefit from the CB Scheme.

The IECEE's CB-Full Certification Scheme, or CB-FCS, which allows manufacturers

CB TEST CERTIFICATES ISSUED



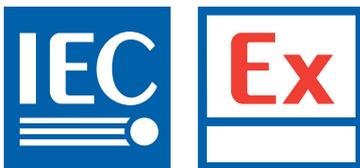
As in 2006, the growth in number of CB Test Certificate continued, with 50 392 certificates issued in 2007.

-
- ▶ to reduce the steps required to obtain certification at the national level, has 16 participating countries and 17 national certification bodies. The CB-FCS goal is to offer the most comprehensive product certification scheme in the world. The operation of the scheme is based on mutual recognition of the certificates issued by its members as the basis for the certification of electrical products at the national and international levels.

Further information may be obtained from www.iecee.org

IECEX

The IECEx Scheme, which addresses the use of equipment in explosive or potentially explosive environments, counted 26 countries as members of the IECEx Managing Committee, with many more countries using the IECEx Scheme. Highlights of the year included the launch of its new Scheme covering Certification of Service Facilities, starting with Repair and Overhaul of Ex equipment, and the approval by the IEC Council Board of the new IEC mark of conformity for the “Ex” field. The new mark of conformity is expected to be operational in 2008.



Over the last four years, the IECEx Scheme has issued almost 4 000 certificates of conformity, test reports and quality assessment reports.

IECEX now operates two separate certification programmes: “IECEX 02” for Ex equipment and

“IECEX 03” for service facilities, covering repair and overhaul.

Introduction of the new IECEx Program covering Services to the Ex industries has resulted in an increased level of industry participation in IECEx: management, from manufacturers, end-users (mainly oil and gas companies) and regulators.

Further information may be obtained from www.iecex.com

IECQ

Serving a largely non-regulated area, the IECQ, which stands for Quality Assessment System for Electronic Components, continued to make solid progress. The Scheme continues to respond to the component industry’s demand for its Hazardous Substance Process Management (HSPM) certification programme to address environmental regulations being introduced around the world, and through its Electronic Component Management Plan (ECMP) to facilitate the continued supply of electronic components over the life of commercial aircraft.

With Australia and Singapore the latest members to join the scheme, the Asia-Pacific region has become one of the major areas of expansion.

IECQ introduced a series of “fast-track” specifications to help meet the challenges presented by new and emerging technologies.

IECQ continues to be recognized as the world’s leader in business to business supply chain management for the electronic component and related industries.

Further information may be obtained from www.iecq.org

FINANCIAL PERFORMANCE

The IEC is financed by a combination of membership dues and revenues from the sales of its publications.

Total membership dues amounted to CHF 11,65 million while revenues from sales (both direct sales and royalties) came to CHF 8,35 million, which along with other revenues resulted in a total net income of CHF 23,11 million.

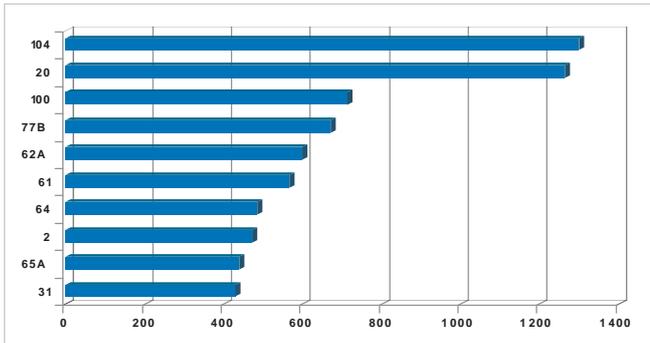
With total expenses for the year at CHF 21,44 million, of which personnel costs represented CHF 13,74 million, the IEC produced a net surplus for 2007 of CHF 1,67 million.

KEY INDICATORS FOR THE IEC (INCLUDING CONFORMITY ASSESSMENT) CONSOLIDATED PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2007

	2007	% of total income 2007	2006	% of total income 2006
	CHF		CHF	
Dues	11 645 907	50.38%	12 072 720	54.78%
- Group A* dues	4 765 000	20.61%	4 765 000	21.62%
- Associate Members	432 000	1.87%	439 000	1.99%
Sales	8 350 654	36.13%	7 813 209	35.45%
- Net paper and electronic sales	3 080 806	13.33%	2 906 844	13.19%
- Royalties	5 269 848	22.80%	4 906 365	22.26%
Conformity Assessment Schemes operations	2 000 832	8.66%	1 390 475	6.31%
TOTAL NET INCOME	23 114 338	100%	22 039 102	100%
Personnel costs	13 738 660	64.08%	14 150 435	66.46%
TOTAL EXPENSES	21 440 543	92.76%	21 290 261	96.60%
SURPLUS FOR THE YEAR	1 673 795	7.24%	748 841	3.40%

* Group A comprises France, Germany, Japan, the United Kingdom and the United States.

TC/SC SALES: TOP 10 BY QUANTITY



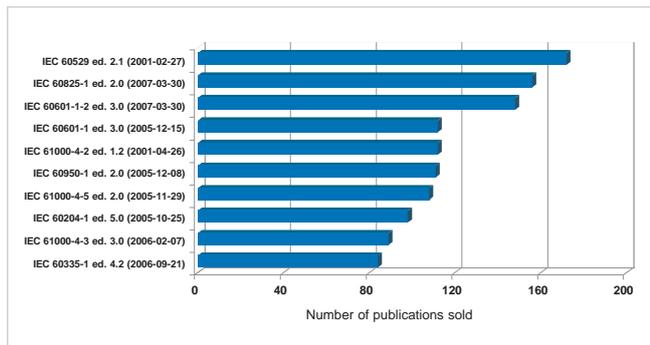
With a total of 1 299 publications sold, TC 104: Environmental conditions, classification and methods of test, took the top spot for sales in 2007, followed by last year's leader, TC 20: Electric cables, with 1 265 publications.

► Sales

IEC Central Office sales of IEC Publications were once again outstanding, reaching a total of CHF 4.9 million in 2007, an increase of 6.6 % compared to 2006. The sales were the highest since 2001. And for the first time, webstore sales were more than CHF 3 million, an 8.8 % increase over 2006.

Royalties received from National Committees and resellers were also successful with a total of CHF 6 million, or 7 % higher than in 2006. ■

BEST SELLERS BY NUMBER



IEC 60529 is again taking the lead this year, followed by IEC 60825-1 and last year's number one publication IEC 60601-1.



ANNEX 1

THE IEC IN FIGURES (as of 2007-12-31)

The IEC Family

- ▶ **Members** **68 National Committees**
- ▶ **Affiliate Country Programme** **77 Participants**

Technical work

- ▶ **Technical committees / Subcommittees** **171**
- ▶ Working groups 413
- ▶ Project teams 259
- ▶ Maintenance teams 426
- ▶ **FDISs issued in 2007** **292**
- ▶ In CENELEC parallel vote 215
- ▶ **CDVs issued in 2007** **416**
- ▶ In CENELEC parallel enquiry 348
- ▶ **Total active projects** **1 378**
- ▶ **Average development time for IEC publications in 2007** **36 months**

Publications

- ▶ **Total publications** **5 794**
- ▶ International Standards 5 213
- ▶ Technical Specifications 173
- ▶ Technical Reports 325
- ▶ IEC/PAS 63
- ▶ **Publications issued in 2007** **521**
- ▶ International Standards 451
- ▶ Technical Specifications 22
- ▶ Technical Reports 27
- ▶ IEC-PAS 21

Conformity Assessment

IECEE CB Scheme

- ▶ Participating countries 50
- ▶ National Certification Bodies 65
- ▶ Testing laboratories 249
- ▶ CB Scheme certificates issued in 2007 50 392

IECQ

- ▶ National Authorized Institutions (members) 16
- ▶ Supervising Inspectorates (certification bodies) 18

IECEX

- ▶ Members 26
- ▶ Accepted Certification Bodies (ExCBs) 34 for Equipment, 6 for Service Facilities
- ▶ Ex testing laboratories (ExTLs) 37

ANNEX 2

LIST OF MEMBER COUNTRIES (as of 2007-12-31)

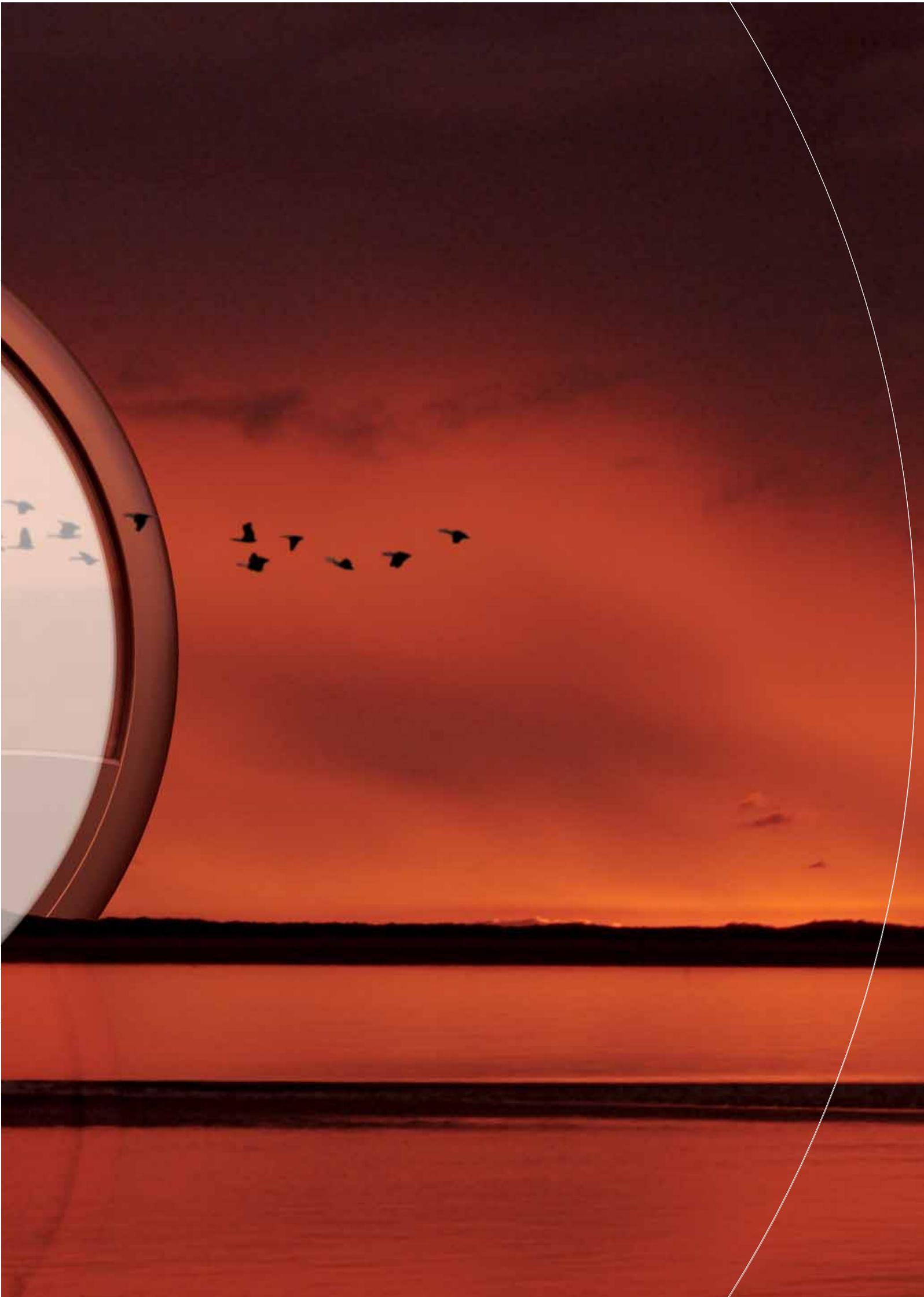
ARGENTINA	EGYPT	LATVIA (AM)	SLOVAKIA
AUSTRALIA	ESTONIA (AM)	LITHUANIA (AM)	SLOVENIA
AUSTRIA	FINLAND	LUXEMBOURG	SOUTH AFRICA
BELARUS	FRANCE	MALAYSIA	SPAIN
BELGIUM	GERMANY	MALTA (AM)	SRI LANKA (AM)
BOSNIA & HERZEGOVINA (AM)	GREECE	MEXICO	SWEDEN
BRAZIL	HUNGARY	NETHERLANDS	SWITZERLAND
BULGARIA	ICELAND (AM)	NEW ZEALAND	THAILAND
CANADA	INDIA	NIGERIA (AM)	THE FYR OF MACEDONIA (AM)
CHINA	INDONESIA	NORWAY	TUNISIA (AM)
COLOMBIA (AM)	IRAN	PAKISTAN	TURKEY
CROATIA	IRELAND	POLAND	UKRAINE
CUBA	ISRAEL	PORTUGAL	UNITED KINGDOM
CYPRUS (AM)	ITALY	ROMANIA	UNITED STATES OF AMERICA
CZECH REPUBLIC	JAPAN	RUSSIAN FEDERATION	VIETNAM (AM)
D.P.R. OF KOREA (AM)	KAZAKHSTAN (AM)	SAUDI ARABIA	
DENMARK	KENYA (AM)	SERBIA	
	KOREA, REPUBLIC OF	SINGAPORE	

AM = Associate member

ANNEX 3

AFFILIATE COUNTRIES (as of 2007-12-31)

AFGHANISTAN	COSTA RICA	KYRGYZSTAN	PARAGUAY
ALBANIA	CÔTE D'IVOIRE	LAO PDR	PERU
ANGOLA	DOMINICA	LEBANON	RWANDA
ANTIGUA AND BARBUDA	DOMINICAN REPUBLIC	LESOTHO	SAINT LUCIA
ARMENIA	ECUADOR	LIBYAN ARAB JAMAHIRIYA	SENEGAL
BANGLADESH	ERITREA	MADAGASCAR	SEYCHELLES
BARBADOS	ETHIOPIA	MALAWI	SIERRA LEONE
BELIZE	FIJI	MALI	SUDAN
BENIN	GABON	MALTA	SWAZILAND
BHUTAN	GEORGIA	MAURITANIA	TANZANIA
BOLIVIA	GHANA	MAURITIUS	TOGO
BOTSWANA	GRENADA	MOLDOVA	TRINIDAD AND TOBAGO
BRUNEI DARUSSALAM	GUATEMALA	MONGOLIA	TURKMENISTAN
BURKINA FASO	GUINEA	MOZAMBIQUE	UGANDA
BURUNDI	GUINEA BISSAU	MYANMAR	URUGUAY
CAMBODIA	GUYANA	NAMIBIA	VENEZUELA
CAMEROON	HAITI	NEPAL	YEMEN
COMOROS	HONDURAS	NIGER	ZAMBIA
CONGO (DEM. REP. OF)	JAMAICA	PANAMA	ZIMBABWE
	JORDAN	PAPUA NEW GUINEA	





INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

3, rue de Varembe
PO Box 131
CH-1211 Geneva 20
Switzerland

Tel: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch