

International Update

International and regional items of interest for November 2016 are as follows:

1. WTO: New global trade alert system launched to boost market access for developing countries [More>>](#)
2. WTO issued new editions of Trade Profiles and World Tariff Profiles [More>>](#)
3. ICT products at the centre of discussions at standards and regulations committee [More>>](#)
4. Chair encourages WTO members to “put train on track” for services negotiations [More>>](#)

ISO items of interest for November 2016 are as follows:

1. ISO and SAE International announced a pilot agreement to develop intelligent vehicle systems standards [More>>](#)
2. ISO 21101 *Adventure tourism—Safety management systems—A practical guide for SMEs* is now published [More>>](#)
3. ISO 37101:2016 *Sustainable development in communities* is now published [More>>](#)
4. ISO 24521:2016 *Activities relating to drinking water and wastewater services* is now published [More>>](#)
5. ISO 14034:2016 *Environmental management—Environmental technology verification (ETV)* is now published [More>>](#)
6. Updated ‘Getting started toolkits’ for ISO committee Chairs and working group Convenors are now available [More>>](#)

IEC items of interest for November 2016 are as follows:

1. The first wind turbine certificate has been issued by the IECRE [More>>](#)
2. 2016 Thomas A. Edison Award recognised outstanding contributions of 8 technology leaders [More>>](#)
3. IEC’s work on increasing energy efficiency in appliances, lighting and Smart Cities [More>>](#)
4. Decisions and actions resulting from the SMB meeting held in Frankfurt on 10 November 2016 [More>>](#)

**** For further information about any article please email: mail@standards.org.au**

International

1. New global trade alert system launched

The United Nations Department of Economic and Social Affairs (DESA), the World Trade Organization (WTO) and the International Trade Centre (ITC) launched a new online alert system—ePing—to promote trade on 8 November. This new online alert system is designed to help government agencies and small and medium-sized enterprises (SMEs) keep track of the latest information on regulatory requirements for international trade.

The system, known as ePing, was launched at a special meeting of the Technical Barriers to Trade (TBT) Committee at the WTO. This new system allows access to WTO members' notifications of TBT and sanitary and phytosanitary (SPS) measures. It also facilitates dialogue among the public and private sector in addressing potential trade problems at an early stage. Users of ePing will be able to easily keep up-to-date with notifications affecting foreign markets and products of particular interest to them.

In recent years, the number of technical regulations and standards adopted by countries has grown significantly. Consequently, the need to comply with different foreign technical regulations and standards involves significant costs for producers and exporters.

Each year, the WTO receives more than 3,500 TBT and SPS notifications proposing new measures that may affect international trade. By improving access to this information, ePing will help avoid disruptions caused by these measures.

"Accessing relevant information on product requirements in export markets can be a huge challenge, especially for SMEs," said Karl Brauner, WTO Deputy Director-General, at the launch. "More transparency makes trade more inclusive—making information on regulations and standards more accessible for all stakeholders is essential. This is what ePing is all about."

New regulatory requirements for international trade are applied by WTO members to ensure food safety and animal and plant health. For example, an SPS measure can regulate the treatment of imported fruit to prevent pests from spreading. A technical regulation may set out requirements (for example, labelling, safety, environmental performance) and testing procedures for products. WTO members need to ensure that these requirements do not create unnecessary obstacles to international trade.

"ePing is about moving from making trade possible to making it happen," said Arancha Gonzalez, Executive Director of the International Trade Centre. "Using information technology we will help small and medium businesses comply with product regulations in foreign markets and thereby reduce obstacles to trade."

"This is an excellent example of how practical and innovative solutions can address key trade-related obstacles to sustainable development," said Lenni Montiel, Assistant Secretary-General for Economic Development, UN DESA. "Today, this inter-agency collaboration shows the world that by using the expertise of different development partners we can address real-life problems, reach more people and move from dialogue to action."

For more information about ePing, please visit the website: www.epingalert.org.

2. WTO issued new editions of Trade Profiles and World Tariff Profiles

The WTO issued new expanded editions of two of its annual statistical publications, Trade Profiles and World Tariff Profiles on 2nd November. These new editions complement the WTO's new flagship publication, World Trade Statistical Review, which was launched in July.

The revamped Trade Profiles provide a series of key indicators on trade in goods and services for 195 economies. For each economy, the data is presented in a handy two-page format, providing a concise overview of global trade. The profiles begin with a snapshot of the importance of trade for each economy—indicating its world ranking for trade in both goods and commercial services.

World Tariff Profiles, produced in cooperation with the United Nations Conference on Trade and Development (UNCTAD) and the International Trade Centre (ITC), has been expanded to provide information on tariffs and non-tariff measures imposed by over 170 economies. The publication starts with summary tables showing the average tariffs imposed by each economy. This is followed by individual one-page profiles, providing a more detailed breakdown of tariffs. The profiles display the tariffs each economy imposes on its imports (by product group) as well as the tariffs it faces for exports to major trading partners.

A new section covers the use of non-tariff measures, which are becoming increasingly important in international trade. The special topic for this edition is the 2017 version of the Harmonised System for classifying goods, which will enter into force on 1 January 2017. A section on data sources and frequently asked questions forms the final part of the publication.

Both publications can be downloaded from the WTO website. Short-term data in both merchandise trade and commercial services is published on a monthly and quarterly basis on the WTO statistics webpage.

3. ICT products at the centre of discussions at standards and regulations committee

WTO members raised a number of concerns about regulations on information and communications technology (ICT) and electronic products when they met as the Committee on Technical Barriers to Trade on 10-11 November 2016.

WTO members discussed a total of 57 specific trade concerns (STCs). These included nine measures concerning ICT and electronic products. These measures deal with the management and disposal of electronic waste (e-waste), regulations to ensure security in the area of ICT, the use of 4G/LTE technologies in smartphones, and other regulations, such as conformity assessment procedures for electronics and IT goods.

The Technical Barriers to Trade (TBT) Committee gives WTO members a regular opportunity to discuss "specific trade concerns" regarding each other's product regulations and standards and the impact these have on companies and consumers.

According to the WTO's Technical Barriers to Trade (TBT) Agreement, WTO members can regulate their products to protect consumer safety, health and the environment, but they need to do it in a way that does not unnecessarily restrict trade in these products and without discriminating against other WTO members. Discussions of trade concerns in the Committee can help to avoid trade frictions escalating into disputes brought to the WTO's Dispute Settlement Body.

From 7-9 November, WTO members held "thematic sessions" on transparency and regulatory cooperation, with a special focus on food labelling, as well as on technical assistance. These sessions, which are part of the committee's 2016-2018 work plan, are a forum for members to exchange information and expertise in topics covered by the TBT Agreement.

In parallel to the TBT Committee meeting, the WTO Trade and Environment Division organised a technical assistance workshop on TBT transparency principles and related online tools such as ePing, the TBT IMS and TBT notification submission systems (TBT NSS). A total of 29 participants working in TBT Enquiry Points (the offices established by WTO members to answer questions on regulations and standards) attended the three-day workshop to enhance their knowledge and skills in the TBT transparency area through interactive training. The workshop provided an opportunity to sharpen knowledge about TBT transparency, and to discuss challenges and good practices with peers and experts.

4. Chair encourages WTO members to “put train on track” for services negotiations

The new chair of the WTO's services negotiations, Ambassador Marcelo Cima of Argentina, welcomed delegations' “readiness to engage” and called on them to “intensify work” over the coming months. Ambassador Cima was speaking at a 14 November meeting of the WTO's Services Council, where he was elected as the new chair.

The chair said that headway would be possible if negotiating demands were realistic, if leadership was exercised, and if balance, flexibility and development considerations were duly taken into account. He called on negotiators to move towards specific proposals and to focus on both process and content.

Ambassador Cima said three priority areas for work had emerged from previous discussions among members: domestic regulation of services, e-commerce and market access.

Many delegations welcomed recent proposals in the Working Party on Domestic Regulation and the intensification of negotiations. These negotiations relate to qualification requirements and procedures for service providers, technical standards and licensing requirements. Some members also referred to services trade facilitation, on which a proposal was submitted in early October, as an area of interest.

Services aspects of e-commerce were highlighted by several delegations as a negotiating priority as services play such an important role in this area.

Some members indicated a readiness to resume market access negotiations. A number of delegations said that progress was long overdue because commitments under the WTO's General Agreement on Trade in Services have not kept pace with trade opening that has occurred around the world.

Several developing countries reiterated the need for flexibilities for developing and least-developed countries, stressing the importance of balance across negotiating areas and underscoring the importance of development considerations. The chair said that negotiating work could progress if members combined their readiness to engage with due consideration for the needs of developing countries and for balance.

ISO

1. Agreement to develop intelligent vehicle systems standards

ISO and SAE International have announced a pilot agreement for the joint development of new technical standards and harmonization of existing standards. SAE International, a global association committed to being the ultimate knowledge source for the engineering profession, has 700 standards development technical committees and 17,000 technical professional volunteers from countries around the world.

The new Partnership Standards Development Organization (PSDO) cooperation agreement will apply in two areas, Road Vehicles (ISO/TC 22) and Intelligent Transportation Systems (ISO/TC 204).

“This important agreement is a response to the transformational changes taking place in many global industries, including mobility engineering. Increasing technological complexity must be addressed through collaborative efforts in standardization to avoid duplication and reduce cost across the global network of automotive business partners,” said David L. Schutt, PhD, Chief Executive Officer of SAE International. “We look forward to a successful collaboration with ISO.”

Standards highlighted for joint development include those related to wireless charging, vehicle interoperability, automated vehicle level definition, and automotive cyber security, and their development will consider both SAE and ISO processes for balloting and approval.

In addition, the standards developed will benefit from the combined expertise of ISO and SAE, and optimise stakeholder resources, making the standards more effective and relevant to the market.

“ISO’s aim is to bring together experts to share knowledge and develop market relevant International Standards, to provide solutions to global challenges,” said ISO Acting Secretary-General Kevin McKinley. “Collaborating with standards development organizations in specific industries can only help to achieve this aim.”

The agreement was approved by the respective governing bodies of ISO and SAE in consultation with the ISO national member body where SAE has its legal seat (ANSI).

2. New ISO handbook for adventure tourism safety

Developing, implementing and maintaining a safety management system (SMS) requires a big effort. To assist adventure tourism providers in this task, a new handbook, ISO 21101 *Adventure tourism—Safety management systems—A practical guide for SMEs*, has been published.

ISO 21101 has been designed to provide a systematic approach to safety. The SMS outlined in the standard can be used by small and large companies alike, operating anywhere in the world. By giving simple step-by-step guidance for adventure tourism safety management, it aims to help:

- enhance safety performance;
- meet expectations for participant and staff safety;
- demonstrate safe practice; and
- support compliance with applicable legal requirements.

Garth Gulley, co-author of the handbook, is eloquent about the importance of having a safety management system in place: “The benefits of having an SMS that conforms to ISO 21101 include demonstrating a strong reputation as a safe provider and improving overall service delivery. Not only will an effective SMS help keep your participants safe, it can result in more positive feedback, more bookings, revenue growth, better staff engagement, and improved relations with business partners, suppliers, regulators and other interested parties.”

“All adventure tourism providers, no matter where they operate in the world, are responsible for people’s safety. Adventure tourism activities involve risks and providers have to manage those risks. The consequences of not doing so can be catastrophic,” says Garth. “But thanks to this new easy-to-use handbook, adventure tourism operators now have clear, practical advice on how to maximise the chances of keeping participants safe every time. What makes this handbook especially useful is that it is written for the small-to-medium business owner or manager, the person working at an operational level but with big strategic risks to manage. Because we wrote this handbook with SMEs in mind, we are confident it can really make an impact in the global adventure tourism sector.”

3. ISO 37101:2016

ISO 37101:2016 *Sustainable development in communities—Management system for sustainable development—Requirements with guidance for use* is now published. It establishes requirements for a management system for sustainable development in communities, including cities, using a holistic approach, with a view to ensuring consistency with the sustainable development policy of communities.

The intended outcomes of a management system for sustainable development in communities include:

- managing sustainability and fostering smartness and resilience in communities, while taking into account the territorial boundaries to which it applies;
- improving the contribution of communities to sustainable development outcomes;
- assessing the performance of communities in progressing towards sustainable development outcomes and the level of smartness and of resilience that they have achieved;
- fulfilling compliance obligations.

ISO 37101:2016 is applicable to communities of all sizes, structures and types, in developed or developing countries, at local, regional or national levels, and in defined urban or rural areas, at their respective level of responsibility. It can be used in whole or in part to improve the management of sustainable development in communities. Claims of conformity to ISO 37101:2016, however, are not acceptable unless all its requirements are incorporated into an organization's management system for sustainable development in communities and fulfilled without exclusion.

Australia do not currently participate on the committee developing this Standard.

4. ISO 24521:2016

World Toilet Day (19 November) draws attention to the importance of sanitation in creating a strong economy, improving health and protecting people's safety and dignity. Ensuring access to toilets for everyone everywhere by 2030 is a global development priority included in the United Nations Sustainable Development Goals.

ISO 24521:2016 *Activities relating to drinking water and wastewater services--Guidelines for the management of basic on-site domestic wastewater services* is now published. It aims to provide guidance for the management of basic on-site domestic wastewater services, using appropriate technologies in their entirety at any level of development.

ISO 24521:2016 supplements and is intended to be used in conjunction with ISO 24511. It includes the following:

- guidelines for the management of basic on-site domestic wastewater services from the operator's perspective, including maintenance techniques, training of personnel and risk considerations;
- guidelines for the management of basic on-site domestic wastewater services from the perspective of users;
- guidance on the design and construction of basic on-site domestic wastewater systems;
- guidance on planning, operation and maintenance, and health and safety issues.

It offers advice on training users and operators, evaluating risks and designing and building basic on-site domestic wastewater systems, including alternative technologies that can be set up using local resources. ISO 24521 can be used by both publicly and privately operated sanitation wastewater services for one or more dwellings, regardless of the type of facility model.

"The demand for this guidance came from government agencies looking to bring sanitation services into many rural and some underprivileged urban communities that do not have such infrastructure, or that have it but do not know how to manage it and offer better services to their users," explains Gerryshom Munala, Convenor of the working group that developed ISO 24521.

But more is needed. Current technologies are failing to address underlying challenges behind the lack of sanitation, including poverty, infrastructure and resources. To help tackle this issue, ISO has created a new project committee to develop a standard focusing on product features and criteria for new technologies. ISO/PC 305 will guide product developers looking for solutions so that they can save precious time and resources, and facilitate adoption by governments and NGOs who will have confidence that these new units meet their requirements and are suitable for local conditions. The future standard for on-site facilities is expected to address recycling and resource recovery within the unit, safe treatment, positive user experience and affordability. The standard is expected to be available in 2018.

ISO's two-step solution to the sanitation challenge comprises ISO 24521, a systems management and maintenance standard to optimise existing wastewater services, and a future standard that will offer guidance on new technologies and solutions. Together, both standards will improve health, reduce the environmental impact of wastewater treatment and offer affordable options for users and communities to help change the lives of 2.4 billion people.

Australia are an active participant on the committee developing this Standard (ISO/TC 224).

5. ISO 14034:2016

ISO has just published a new standard to help companies that are developing innovative environmental technologies reach new markets. ISO 14034:2016, *Environmental management – Environmental technology verification (ETV)* will provide independent verification of the performance of new environmental technologies. This will help manufacturers prove the reliability of their performance claims and help technology purchasers identify innovations that suit their needs.

Verifying performance is a key step for market acceptance of green technology innovations. With proof of performance credibly assured, innovations can expect an easier market access and/or a larger market share and the technological risk is reduced for technology purchasers.

ISO 14034 reflects an international consensus that standardization of the performance verification process is an effective way of establishing the global credibility of innovative environmentally sound solutions. The new standard features specific sections on verification principles, accepted testing practices and reporting requirements, to help create a level playing field for technological innovators and encourage greater market acceptance of innovative technologies. This helps build vendor credibility and buyer confidence by providing the marketplace with the assurance that environmental performance claims are valid, credible and supported by high-quality, independent test data.

The global economy requires independent, quality-assured data on the performance of innovative technologies. Business leaders and public organizations must balance the requirements for change and adaptation against the risks of adopting innovative solutions. Equally important, industry and utilities need effective, scalable technologies to improve their environmental performance, address emerging regulations and meet stakeholder expectations. Lastly, when going to market, entrepreneurial technology companies need streamlined options to demonstrate and validate their innovative technologies and service offerings.

ISO 14034 is designed to deliver multiple benefits that enhance confidence in the selection of technologies demonstrating an environmental added value. These include:

- levelling the playing field for technological innovators;
- harmonizing the ETV process across international boundaries;
- providing credible, independent assessment of innovative environmental technologies;
- enabling informed decisions when identifying and selecting suitable technologies; and
- achieving sustainable environmental targets that benefit citizens around the world.

ETV paves the way towards technology performance assessments where sustainability and innovation are inextricably linked. Benefits are expected from the international recognition of verifications and the progressive emergence of an eco-innovation marketplace that promotes performance-based competition and the greening of public procurement.

Australia are an active participant on the committee developing this Standard (ISO/TC 207/SC4)

6. The updated 'Getting started toolkits'

The 'Getting started toolkits' brochures have been updated to reflect the latest changes in the ISO/IEC Directives (7th edition, May 2016) and to include links to new information, such as the policy on communication and social media guidelines.

Getting started toolkit for ISO committee Chairs can be accessed at:

http://isotc.iso.org/livelink/livelink/15508281/Getting_started_Chairs.pdf?func=doc.Fetch&nodeid=15508281.

Getting started toolkit for ISO working group Convenors can be accessed at:

http://isotc.iso.org/livelink/livelink/15507518/Getting_started_Convenors.pdf?func=doc.Fetch&nodeid=15507518.

IEC

1. Wind industry: Harmonised certification facilitates global market access

On 30 October 2016, the first wind turbine certificate has been issued by the IECRE, the IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications.

Developed by industry players, including equipment manufacturers, power producers, insurance companies, test laboratories and certifying bodies, the System streamlines a complex process and benefits not only the wind, but other renewable energy industries such as solar and marine.

“The IECRE System for certifying wind turbines harmonises the process and makes it less costly, so that one certificate is valid for multiple markets. It’s what the whole wind community has been waiting for. Based on mutual recognition, all stakeholders will have confidence and trust that devices are built to International Standards and perform as promised”, said Kerry McManama – Executive Secretary of the IECRE Conformity Assessment System.

This simplified a complex process. Previously, wind turbines had to be certified in each country by private certification bodies, according to different criteria. This was more costly, time consuming and required repeat testing. It also took much longer to get product to market. Additionally, the IECRE System provides a common language for a very technical product, which gives greater clarity to standards developers, product manufacturers, authorities and users, as to what is being certified. The IECRE also enables broader industry stakeholder participation in defining the certification process, which guarantees the certificates will meet the needs of the broader industry.

The first certificate was issued to Vestas, a wind power solutions company, which designs, manufactures, installs, and services wind turbines around the world. Anders Vedel, Vestas Chief Technology Officer commented, “What is unique about the IECRE System is that end-users, mainly our customers, together with equipment manufacturers and other stakeholders have substantially contributed to defining the new standards against which wind turbines are evaluated. Vestas began work in 2012 with other stakeholder to create such a System, so we are especially pleased that the first certificate has been issued for a Vestas turbine”.

From the Certification Body testing lab perspective, DNV GL as one of the first approved Renewable Energy Certification Bodies (RECBs), was instrumental in both the development of the IECRE and the certification body that issued the first IECRE Certificate to Vestas.

About the IECRE

IECRE has been created in recognition that the ever-increasing demand for electricity and the need to reduce the share of fossil fuels in power generation have led to rapid development and growth of the renewable energy (RE) sector.

The System aims to facilitate international trade in equipment and services for use in RE in the Solar PV Energy, Wind Energy and Marine Energy sectors, while maintaining the required level of safety. Each of these sectors will be able to operate IECRE Schemes that cover products, services and personnel, to provide testing, inspection and certification.

Currently IECRE focuses on these three energy sectors; however, the door remains open for consideration of other technologies such as concentrated solar power (CSP), geothermal energy and fuel cells.

Australia are not currently members of the IECRE.

2. Outstanding contributions of 8 technology leaders recognised

At the IEC 80th General Meeting in Frankfurt, the IEC has paid tribute to the dedication and work of eight leaders of the IEC family who, through their outstanding commitment and expertise, have contributed to making products and electrical systems safer, more energy efficient and more compatible.

The Thomas A. Edison Award is in the spirit of Thomas Alva Edison, 1847-1931, one of the greatest inventors in history. Edison developed a system of electric power generation and distribution which was a major development in the modern industrialised world. His over 1,000 patents included improving the incandescent lamp, film projection and sound recording, which still have an impact on our daily lives.

The following were recognised with the 2016 Thomas A. Edison Award:

- Robert Arseneault, Secretary, TC 4, Canada
Robert Arseneault has been Secretary of IEC TC 4, Hydraulic turbines, since 1992, when Canada took over the responsibility of the Secretariat. In the last five years, Arseneault worked closely with the Chair of TC 4 to launch two new working groups, MT31 on Turbine residual life and WG33 on pressure fluctuations.
- Giovanni Cassinelli, Secretary, SC 23E, Italy
Giovanni Cassinelli has served as Secretary of SC 23E, Circuit-breakers and similar equipment for household use, since January 2003. Cassinelli has helped ensure highest quality results in the development, editing and translation of SC 23E documents. His contributions led to 23 new publications, including new IEC International Standards and amendments of existing ones, and over 400 official SC documents.
- Marie-Elisabeth d'Ornano, Chair, IECQ, France
IECQ Chair since 1 January 2014, Marie-Elisabeth d'Ornano has embraced her role, responsibilities and duties with enthusiasm and a dynamic hands-on approach. IECQ has been reinforced as an international "best practice" model for supplier assessment and as an extremely valuable Supply Chain Management tool for the many industries involved in the manufacture, supply and distribution of electrical/electronic components, parts and assemblies.
- Geoffrey S. Ibbott, Past Chair, SC 62C, United States
During his term as Chair of IEC SC 62C, Equipment for radiotherapy, nuclear medicine and radiation dosimetry, Geoffrey S. Ibbott outstandingly promoted the development and recognition of IEC Standards for medical radiation therapy equipment, nuclear medicine and radiation measurement. About 20 IEC publications have been issued under his leadership, and these have been widely accepted in the regulatory environments of EU, US, China, Japan and other jurisdictions.
- Yoshiaki Ichikawa, Chair, TC 11, Japan
Dr Yoshiaki (Yoshi) Ichikawa has led environmental standardization in TC 111 Environmental standardization for electrical and electronic products and systems for 11 years. He served as the Convenor of WG2 Environmentally Conscious Design (ECD) and published IEC 62430 *Environmentally conscious design for electrical and electronic products*. He is an expert of IEC TC 62 Electrical equipment in medical practice, where he is supporting the Convenor of PT 62926, addressing the systems aspects of real-time radiation therapy.
- Maurice Montavon, Secretary, TC 5, Switzerland
With his personal engagement during the last 44 years Maurice Montavon has devoted countless hours to IEC. Today TC 5 has 4 MTs and 2 WGs, with more than 70 experts. In the area of cogeneration he has recently also achieved a collaboration with ISO following the advice given by SMB. Montavon founded the Swiss Mirror Committee of TC 117 Solar thermal electric plants, as Chair in 2011 and he acts as liaison officer between TC 5, TC 117 and TC 120.

- Heribert Schorn, IEC Coordinator, ISO CASCO WGs, Germany

Heribert Schorn has been recognised for exceptional current and long-term achievement in representing the IEC CAB in ISO/CASCO Working Groups, for the development of conformity assessment standards, specifically the ISO/IEC 17000 series. Schorn has been active as an IEC representative and Coordinator in CASCO Working Groups for the last ten years.

- Bernd Sisoletsky, Past Chair, CISPR CIS/B, Germany

Dr Bernd Sisoletsky, former Chair of CISPR, the International special committee on radio interference, is an experienced EMC expert who has been active in IEC work since the early 1990s. During the last 25 years he has made countless contributions and held several offices in technical bodies under the CISPR roof. He also worked constantly within other technical bodies of CISPR, in particular in CISRP/F, which is responsible for radio interference suppression of household and similar electrical appliances and of lighting equipment, and in CISPR/I especially in the field of radio interference suppression of powerline telecommunications equipment.

3. Increasing energy efficiency in appliances, lighting and Smart Cities

The IEC is working behind the scenes helping to increase energy efficiency and reduce the amount of energy that is lost in everyday consumption. According to the IEA Energy Efficiency Market Report 2016, “Where standards have been in place, efficiency levels have risen by at least 16% across all the major appliance categories over the last decade.”

Standards can serve as the basis for regulations and legislation in the energy efficiency field. The IEC has a whole catalogue of International Standards that deal with safety requirements for appliances and equipment, and also provide metrics and testing specifications to achieve optimum energy consumption.

Manufacturers of appliances and equipment for domestic use can rely on IEC International Standards to develop state-of-the-art products that meet the strictest safety and energy-efficiency requirements. Going a step further, they can rely on the IECEE, the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components, to have their products tested and certified.

- **Technology coordination is vital**

The IEC can help achieve coordination between all stakeholders to ensure technical feasibility is guaranteed globally and standardization is consistent internationally. This, together with the right regulations and financial support will allow increasing business up-take of energy-efficiency measures. Already many energy rating systems such as Energy Star rely broadly on manufacturers complying with IEC efficiency Standards.

Working Group 9 of the International Electrotechnical Commission (IEC) Technical Committee TC 59 prepared the International Standard IEC 62301, *Household Electrical Appliances – Measurement of Standby Power*, which allows measuring the standby power consumption of a broad variety of household appliances. It provides measurement methodology and guidance with regard to reporting requirements and instrumentation.

- **IEC TC standardization work helps cap energy use for lighting**

As nearly 20% of the world’s total electricity production is consumed by electric lighting, and as global demand for artificial light is projected to be 80% higher by 2030, the introduction of energy-efficient lighting solutions is seen as a priority for many countries in limiting their energy consumption. The lighting sector is undergoing a profound transformation as most countries, seeking to limit increases in their energy consumption, adopt energy-efficient solutions. IEC Technical Committee (TC) 34: Lamps and related equipment, and its Subcommittees (SCs), develop International Standards for electric light sources and a significant proportion of their activity is focused on energy-efficient lighting solutions.

- **Smart, energy efficient cities**

As well as being home to around half the world's population and generating around 80% of global GDP, cities and urban areas are responsible for around 70% of global energy consumption and energy-related greenhouse gas emissions. Today's cities need to substantially increase the efficiency in which they operate and use their resources. A Systems approach in energy efficiency management can lead to better outcomes and this is supported by IEC International Standards.

Major energy efficiency improvements in cities can be achieved by horizontally interconnecting individual systems such as electricity, water, sanitation and waste management, transportation, security, environmental monitoring or weather intelligence. This approach gives increased information sharing and coordination and helps manage incidents in one sector that impact the others. It also offers considerable opportunities for cost-reduction.

Many IEC Technical Committees (TCs) enable the development of Smart Cities including the following:

- IEC TC 8: Systems aspects for electrical energy supply. Subcommittee (SC) 8A develops Standards for the grid integration of large-capacity renewable energy (RE) generation
- IEC TC 57: Power systems management and associated information exchange
- Standards prepared by IEC TC 82 and IEC TC 88 cover generation from solar photovoltaic and wind energy sources, form an integral part of the overall portfolio of Smart Grid Standards
- IEC Project Committee (PC) 118: Smart grid user interface develops standardization in the field of information exchange for demand response and in connecting demand side equipment and/or systems into the Smart Grid
- TC 65: Industrial-process measurement, control and automation, and its SCs, as well as TCs involved in storage (rechargeable batteries) and fuel cell technologies (TC 21 and TC 105)

To move the world towards greater energy efficiency internationally accepted metrics and technological expertise such as those developed by the IEC need to be applied to achieve optimal outcomes and eliminate market confusion.

4. Decisions and actions resulting from the SMB meeting held in Frankfurt

The following is some highlights from the SMB meeting held in Frankfurt on 10 November 2015.

- **SMB/CAG proposal concerning Horizontal Standards**

SMB decided to set up an ahG 72 to review the role of horizontal standards, including definition of horizontal standards, normative and informative guides and basic safety and EMC publications. Furthermore, the ahG will review the current list of horizontal standards to determine if they are still appropriate.

- **SMB/CAG proposal concerning Interpretation**

In applying conformity assessment of standards, sometimes there is a need for interpretation by the formulating TC of some aspects of a published standard. SMB confirmed that interpretation of standards by TC/SCs must be undertaken through a formal process, including a formal decision, or else assign the interpretation to a group designated for this purpose.

- **SMB/CAG proposal concerning liaisons between TC/SCs and CA systems**

It was the practice that TC/SCs could not establish liaisons with IEC CA systems. SMB agreed that TC/SCs could establish liaisons with the IEC/CA systems and appropriate communication between CA systems and IEC TC/SCs is encouraged.

- SMB/CAG proposal concerning Translations

SMB took two decisions relating to the provision of translations during the standards development process. The first concerned the decision taken at the previous SMB meeting, decision 156/5, relating to eliminating the time allocated to translation of documents at the FDIS stage. SMB agreed to suspend implementation of this decision until the next SMB meeting to permit discussions to take place between the French NC and Central Office on implementation procedures. SMB also agreed to look at the possibility of eliminating translations completely from the standards production process. SMB set up an ahG 73 to prepare a ballot for SMB explaining the potential risks and benefits of such a step.

- New SyC on LVDC and LVDC for Electricity Access

SMB approved the report of SEG 4 on LVDC and LVDC for electricity access. A formal ballot will now be circulated to National Committees to approve the setting up of a new SyC (Systems Committee) on LVDC and LVDC for Electricity Access. SMB also agreed that the contents of the final report should be published and made publicly available, for example in the form of a technical brochure. (See presentation SMB/5988/INF).

- New TC on Wearable Smart Devices

SMB approved the report from SG 10 on Wearable Smart Devices. This emerging field is seen to be an important area and an IEC group is needed to serve as a focus point of broad activity across many TCs. SMB agreed to the setting-up of a new TC with the provisional title "Wearable Smart Devices". The Korean NC will prepare a proposal for a new TC for circulation to NCs, taking into account the comments made on the SG 10 report.

- New TC on Electrotechnical Aspects of Management of Assets for Power Networks

SMB took note of the report prepared by ahG 65, as well as the results of voting on the proposal for a new field of technical activity, circulated as C/1961/DV. SMB approved the setting-up of a new TC 123 and assigned the secretariat to the Japanese NC.

- Disruptive technologies – ahG 60

SMB had sent the report from ahG 60 to MSB for review. MSB was sensitive to the issue but was not resourced nor structured to carry out continuous review and search for potentially disruptive technologies. Therefore SMB members requested that this issue be included as a strategic item in the new IEC Masterplan. SMB members were invited to be on the lookout for potentially disruptive technologies of which they are aware and to propose presentations on these subjects. The proposal of a new type of group known as a "Technology Evaluation Group (TEG)" was felt to be similar to the "Systems Evaluation Group (SEG)" so the matter is referred to ahG 70 looking at how to broaden the function of the SEG to include the meaning of the TEG and possibly renaming the SEG to become "Standardization Evaluation Group".