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

International

1. WTO members adopt roadmap for reducing technical barriers to trade

WTO members achieved a breakthrough at a 14-15 November meeting of the Committee on Technical Barriers to Trade (TBT) by agreeing on a list of recommendations that aim at reducing obstacles to trade and improving implementation of the WTO's TBT Agreement. Members also discussed 62 specific trade concerns at the committee meeting, including eight new concerns. In addition, the committee welcomed a new "best practices" guide for national TBT Enquiry Points.

8th Triennial review

WTO members agreed on almost thirty recommendations that will improve the way members deal with standards, regulations and trade in the TBT committee. The triennial review recommendations are contained in G/TBT/41.

Every three years, WTO members evaluate how they are applying the TBT Agreement. The review process started in November 2017 and was driven by members' proposals for new work relating to specific topics addressed by the committee.

The recommendations approved by members cover the following areas:

- **Transparency**:
  - o notifying final TBT regulations when adopted and making it easier to access them online;
  - o improving access to national websites that make available all adopted final regulations;
  - o notifying impact assessments conducted as part of regulatory processes;
  - o improving the quality of information in notifications such as the products affected, relevant documents, and international standards used as a basis for the regulations;
  - o enhancing coordination between regulators and TBT enquiry points, including through ePing
- **Testing, inspection and certification:**
  - o work on guidelines to help regulators when choosing and designing conformity assessment procedures;
  - o find better ways to avoid duplicating procedures or restricting trade in the area of conformity assessment.
- **Standards**: Members agreed to hold a workshop on the role of gender in the development of standards. They also agreed to discuss best practices on incorporating standards by reference in regulation, taking account of existing guidelines and policy considerations.
- **Marking and labelling**: Members agreed to discuss how to facilitate compliance with marking and labelling requirements for products.
- **Technical assistance**: Members agreed to explore the feasibility of either expanding the present Standards and Trade Development Facility (STDF) to encompass measures covered by the TBT Agreement, or setting up a separate and dedicated TBT development facility
- **Organizing debates in the committee**: Members agreed to apply new procedures for raising specific trade concerns (STCs), on a trial basis, in order to give members more time to engage with each other and domestic stakeholders in advance of meetings

Specific trade concerns

WTO members discussed a total of 62 specific trade concerns, 8 of which were new. Below is a summary of the new concerns. A full list of the trade concerns is available here. For more information on previous trade concerns see the 19-21 June 2018 and 20-22 March 2018 meeting summaries.

TBT Enquiry Point Guide Launched

Over 2,750 notifications related to product requirements have already been circulated in 2018, a process involving 80% of member TBT Enquiry Points. Improving the functioning of Enquiry Points is key to making transparency work.

At the committee meeting, the TBT Enquiry Point Guide was launched. The guide was developed in response to a request by the TBT Committee at the end of 201, that the WTO secretariat prepare a guide on best practices for enquiry points. In 2016, the secretariat conducted an online survey for enquiry points to collect information on members' experiences. The results of the survey formed the basis for this guide. Input was received from 66 members and one acceding country.

The guide compiles practical information on how Enquiry Points are performing their tasks and overcoming everyday challenges, drawing from the practices of members It is structured according to the tasks that an enquiry point or other governmental entity might normally undertake when implementing the TBT Agreement's transparency provisions. The guide includes insights ranging from different models for coordination with domestic stakeholders to useful tips on how to complete the TBT notification format. This new tool supports the WTO's TBT training and capacity-building activities for enhancing the capacity of Enquiry Points.

More on the guide can be found here.

ePing update: notifications alert system

The committee received an update on ePing, the notification alert system for TBT and sanitary and phytosanitary (SPS) measures. ePing enables swift access to regulatory information and facilitates dialogue among the public and private sector in addressing potential trade problems at an early stage. Since its launch 2 years ago, over 5,000 users from 169 countries have registered on ePing.

Source: https://www.wto.org/english/news_e/news18_e/tbt_16nov18_e.htm

2. Aid for Trade Global Review 2019 to examine economic diversification and empowerment

The next Global Review of Aid for Trade will take place from 3 to 5 July 2019 at the WTO under the theme "Supporting Economic Diversification and Empowerment for Inclusive, Sustainable Development through Aid for Trade". Proposals to organize sessions at the event may be submitted up to 31 March 2019.

Plenary sessions will address the main theme of the Review. Other sessions will provide further insights on this theme including from a regional, private sector or practice perspective. These sessions may also address trade and development themes more generally. Proposals for sessions

may be submitted by WTO members and the Aid for Trade community, including organizations engaged in Aid for Trade implementation or research.

WTO Director-General Roberto Azevêdo said: "Over the last 12 years, our Aid for Trade initiative has been a powerful instrument for building trade capacity and trade-related infrastructure in developing and least-developed countries. It aims to make trade more inclusive and ensure that its benefits are spread further and wider. Our focus in 2019 will be how trade can do even more to contribute to economic diversification and empowerment. I encourage WTO members and our key Aid for Trade partners to actively participate in this work. I look forward to welcoming them to the WTO for the flagship Global Review event in July."

The WTO-led Aid for Trade initiative helps developing countries, and particularly least-developed countries, to trade by seeking to mobilize resources to address their trade-related constraints. Many developing countries face a range of supply-side and trade-related infrastructure obstacles which constrain their ability to engage in international trade.

Global Reviews are attended by ministers of trade and development, international financial institutions, private sector firms and associations, development research organizations, together with participants drawn from the broader trade and development community. Registration for participation in the 2019 edition will be opened in January 2019.

The event typically attracts over 1,500 registered participants. Past editions of the Global Review have examined digital connectivity, reducing trade costs and global value chains.

Proposals to organize sessions at the Global Review should be submitted using this form to aft.wto@wto.org no later than 31 March 2019. Multiple proposals may be made but the number of sessions (plenary and other sessions) will not exceed 60.

Past programmes and more details on Aid for Trade can be found here.

3.   WTO members discuss implementation of Information Technology Agreement

Participants in the WTO's Information Technology Agreement (ITA) met on 30 October to discuss implementation issues related to the ITA and to report on work on non-tariff measures.

Implementation issues concerning India and China were flagged once more at the Committee meeting. WTO members raised concerns about the import duties that India has introduced on mobile phones and their parts, which members consider to be covered by the ITA.

They also expressed concern about India's latest rectification notification, which sought to "unbind" the duties relating to these products. They felt that the Indian proposal would alter the scope of India's concessions and thus could not be considered rectification of a purely formal character.

Members also sought clarifications from China on the new tariffs on certain semi-conductor products covered by the ITA.

Members urged India and China to bring their trade measures in line with the ITA and to grant duty-free market access for those products.

Under the work programme on non-tariff barriers, Switzerland updated the Committee on the work of the informal group of members, which is focusing on issues such as conformity assessment, transparency and e-labelling.

Reporting to the Committee on behalf of the ITA Expansion group, Canada said it was pleased to note that all 26 participants (representing 55 WTO members) in the ITA Expansion have now submitted their ITA Expansion commitments under the 1980 Decision for Modification and Rectification of Schedules of Tariff Concessions.

Background

The Information Technology Agreement (ITA) was concluded by 29 participants at the Singapore Ministerial Conference in December 1996. Since then, the number of participants has grown to 82, representing about 97 per cent of world trade in IT products. The participants are committed to completely eliminating tariffs on IT products covered by the Agreement.

The ITA Expansion was concluded at the Nairobi Ministerial Conference in December 2015, with 26 participants representing 55 WTO members. Trade under the ITA Expansion covers an additional 201 products valued at over $1.3 trillion per year.

The benefits of concessions under both the ITA and ITA Expansion are being extended to all 164 WTO members, meaning they all enjoy duty-free access to the markets of the members eliminating tariffs on these products.

Source: https://www.wto.org/english/news_e/news18_e/ita_30oct18_e.htm

4. WTO members engage in technical discussions on agricultural market access

At a meeting of the Agriculture Committee on 22 October, WTO members discussed agricultural market access and the proposed Special Safeguard Mechanism (SSM). In line with the approach proposed by the Chair of the Committee, Ambassador John Ronald Dipchandra Ford (Guyana), the discussions were geared towards technical and analytical exchanges. The Chair commended members on their active engagement in moving the process forward.

Members' discussions

Members engaged in a discussion on a wide range of issues, including water in the tariffs, tariff reduction formulas, tariff simplifications, tariff peaks, TRQs, regional trade agreements (RTAs), erosion of preferences, tariff escalation as well as the SSG.

Discussions on various technical issues, which were taking place after a break of several years, were welcomed by many members, but there were clear differences between members on the broad issues of linkage and sequencing between market access and domestic support. Some members also referred to the linkage with market access in sectors outside of agriculture.

On the issue of tariff simplification, some members stressed the varying level of complexity that the various types of non-ad valorem tariffs entail. The point was also made that "water" in tariffs may be an important policy flexibility and reducing it would constitute a concession in the negotiations.

A number of developing members emphasized the importance of special and differential treatment (S&D) for developing countries while some importing members referred to non-trade concerns. Members who have joined the WTO since 1995 - through accession negotiations - emphasized the need to acknowledge the extensive commitments taken on during their membership negotiations.

Regarding the SSG, some members called for eliminating the SSG as an early confidence-building outcome since it was rarely invoked and seemingly easy to abolish. However, members with SSG rights said the elimination can only be considered in the wider context of the reform process.

Some members referred to broader food security and sustainability challenges and highlighted the need for a balance between domestic production and accessing international markets to fulfil domestic food needs. In addition, some members shared concerns about the "thin" global agriculture markets and the associated price volatility risks and emphasized the need to strengthen global trade through open markets and enhanced market access.

In spite of the complexity and divergences in the discussions, the Chair was "heartened" by the fact that all members stand ready to constructively engage in further discussions and to advance agricultural reform.

Special Safeguard Mechanism (SSM)

On behalf of the G33 (Coalition of developing countries pressing for flexibility for developing countries to undertake limited market opening in agriculture), Indonesia made a presentation in the dedicated session on the SSM. It recalled the repeated mandates from the Doha Ministerial Declaration (WT/MIN(01)/DEC/1), the Hong Kong Ministerial Declaration (WT/MIN(05)/DEC) and the Nairobi Ministerial Decision (WT/MIN(15)/43- WT/L/978) for an SSM for developing countries. The SSM, once agreed, would allow developing countries to temporarily increase import tariffs in cases of import surges or a decline in prices.

Indonesia reiterated the socio-economic conditions in developing countries, especially in low-income and least developed countries (LDCs), where 60%-70% of employment depends on the agriculture sector and where the average landholding size is very small. Indonesia justified the need for an SSM to support food security and rural development by highlighting international price volatility and its potential impact on the livelihoods of many small and poor farmers. Indonesia also associated the importance of the SSM with the United Nations' Sustainable Development Goals (such as SDGs 1, 2 and 17.4).

A number of developing members supported the G33 demand for an SSM. One member shared its own experience of increased sugar imports, which put severe pressure on its domestic sugar sector and strongly supported the case for a safeguard mechanism for developing countries. Some G33 members expressed the view that an SSM was not intended to block normal international trade but to address the impact on small farmers' livelihoods.

Other members stressed that they could envisage an outcome on an SSM only in the context of a broader outcome improving market access. These members questioned some of the underlying assumptions behind the G33 position and asked proponents a number of specific questions, including on the country exemptions, the need for an SSM despite "water" in tariffs, transmission of internal prices to domestic markets, the effect of an SSM in potentially aggravating price volatility and why the negotiating efforts should not be devoted to addressing agriculture distortions rather than seeking an SSM to remedy those distortions.

On the issue of "water" in tariffs, the G33 argued that the SSM would be a more targeted remedy compared to the general raising of tariffs on the relevant products. The G33 also expressed a willingness to further engage in technical discussions.

Next steps

Commending the good interactions and candid substantive exchanges among members, the Chair encouraged WTO members to engage in further technical discussions in the coming months. He cautioned against invoking difficult linkages at this stage. Based on members' engagement and written contributions, he proposed to keep open the possibility to revert to the topics already addressed - i.e. domestic support, public stockholding for food security purposes, market access and the SSM - during the forthcoming Committee meetings in November and December.

The Chair underlined the concerns expressed regarding the current adverse global trade environment and said that this has a broader effect on the negotiations and is not just limited to agriculture. "Therefore, we should continue our efforts and engagement so that we can get ready to make decisions and compromises in a more enabling and conducive negotiating environment," he said. He also urged members to adopt a sense of urgency, especially as they move into 2019, when there would normally be a Ministerial Conference, even if the dates for the next Ministerial Conference have been fixed for June 2020.

The next meetings of the Committee on Agriculture are scheduled for 15-16 November. They will include discussions on export competition and export restrictions.

Source: https://www.wto.org/english/news_e/news18_e/agri_26oct18_e.htm

ISO

1. Improving farm safety: standards for agricultural machinery just updated

Ensuring the safety of tractors and other agricultural equipment means ensuring the control systems that are in place work as they are meant to. The internationally trusted set of standards for such systems has just been updated, making it even fitter for the farm.

Tractors and self-propelled ride-on machines used in agriculture and forestry have evolved over the years since Old MacDonald's days and now feature as many electronic parts and systems as your modern car. A number of these are designed to reduce risks by preventing unintended movements and recognizing errors and other possible hazards, because ensuring the vehicles function correctly is as important as the functions themselves.

The series of standards ISO 25119, *Tractors and machinery for agriculture and forestry – Safety-related parts of control systems,* is widely used by the agricultural industry and its suppliers and has recently been updated. It sets out the general principles for the design and development of safety-related parts of control systems on tractors and self-propelled ride-on machines used in agriculture and forestry. It can even be applied to mobile equipment used in municipalities such as street-sweeping machines.

ISO 25119 helps designers and manufacturers ensure that safety-related parts perform as intended, and covers the system structure, fault detection mechanisms, reliability of components, operating stress, environmental conditions and more.

Dipl.-Ing Hans Jürgen Nissen, Chair of the ISO technical subcommittee that developed and revised the series, said the new edition includes a number of improvements based on feedback from end users.

"The key objectives of the revision were to harmonize ISO 25119 with, and ultimately replace, a European standard, under the Vienna Agreement, thus improving its relevance in the EU regulatory area," he said.

"What's more, changes were made to incorporate suggestions from end users, certification bodies and experts involved in standardization to make it more user-friendly, understandable and useful."

The standards in the series are:

- ISO 25119-1, Tractors and machinery for agriculture and forestry – Safety-related parts of control systems – Part 1: General principles for design and development
- ISO 25119-2, Tractors and machinery for agriculture and forestry – Safety-related parts of control systems – Part 2: Concept phase
- ISO 25119-3, Tractors and machinery for agriculture and forestry – Safety-related parts of control systems – Part 3: Series development, hardware and software
- ISO 25119-4, Tractors and machinery for agriculture and forestry – Safety-related parts of control systems – Part 4: Production, operation, modification and supporting processes

The ISO 25119 series was developed by ISO technical committee ISO/TC 23, Tractors and machinery for agriculture and forestry, subcommittee SC 19, Agricultural electronics, the secretariat of which is held by DIN, ISO's member for Germany. Australia is not a member of ISO/TC 23.

Source: https://www.iso.org/news/ref2343.html

2. ISO standards help develop new toilet technology that will save millions of lives

The new ISO International Standard for revolutionary sanitation systems was launched at the Reinvented Toilet Expo, supported by the Bill & Melinda Gates Foundation, held in Beijing Tuesday 6 November, 2018.

"International Standards are key to the progression of new sanitation technology and developing an industry that saves lives," said ISO Secretary-General Sergio Mujica at the Reinvented Toilet Expo held in Beijing, China. Mujica was speaking on a high-level panel as part of the opening plenary that featured Bill Gates, Co-Chair of the Bill & Melinda Gates Foundation, and Dr Jim Yong Kim, President of the World Bank, as well as other leading representatives from industry and government.

The panel, which is part of the three-day Reinvented Toilet Expo summit, discussed commitments to non-sewered sanitation and actions required to develop the industry, including standardization. Reinvented toilet technology is all about stand-alone sanitation systems that safely treat waste without the need to be connected to a traditional sewerage system. It is designed to revolutionize the lives of billions of people around the world who lack sufficient clean sanitation systems, saving lives and improving well-being.

Keynote speaker Bill Gates said: "This expo showcases, for the first time, radically new and pilot-tested approaches to sanitation that will provide effective alternatives for collecting, managing and treating human waste. The technologies you'll see here are the most significant advances in sanitation in nearly two hundred years."

This technology can be supported and further developed with the launch of the world's first dedicated International Standard. ISO 30500, Non-sewered sanitation systems – Prefabricated integrated treatment units – General safety and performance requirements for design and testing, provides safety and performance requirements that will not only enable their effective manufacture, but the development of the sector as a whole.

Commenting on China's "toilet revolution" and action plan for progressing safe sanitation, Gates added: "We look forward to China adopting a high-level standard (ISO 30500) for the non-sewered sanitation industry, which will further accelerate its leadership of a new commercial sanitation sector."

Other highlights of the event include the "sanitation change-makers speaker series", which features members from governments, industry and international organizations sharing their inspiring stories and achievements to improve sanitation services for the 4.5 billion people worldwide who live without them.

The Reinvented Toilet Expo is a three-day summit for governments, development banks and private-sector leaders wanting to accelerate the adoption of innovative sanitation technologies in developing regions around the world. These technologies are at the forefront of a growing movement to improve sanitation for the world's poorest and contributes towards global water and sanitation targets outlined in the United Nations Sustainable Development Goal (SDG) 6.

The Expo features companies from around the world displaying new sanitation solutions that eliminate harmful pathogens and convert waste into by-products without the need to be attached to mains sewers.

It also highlights the recent publication of ISO 30500 and the fact that many of the new technologies and products in this area are expected to meet the requirements of the standard to demonstrate that they are safe and perform effectively.

Find out how ISO standards contribute directly to all of the SDGs.

Source: https://www.iso.org/news/ref2346.html

3. Reference framework for the Internet of Things

The number of connected devices worldwide is growing exponentially and this "Internet of Things" affects every area of our lives from electricity to agriculture. A recently published International Standard will help ensure these systems are seamless, safer and far more resilient.

From autonomous vehicles to precision agriculture, smart manufacturing, e-health and smart cities, the Internet of Things (IoT) is already everywhere – and growing. It involves integrating "things" within IT systems, thus enabling electronic devices to interact with the physical world.

The applications are endless, but as the phenomenon explodes, so too does the need for trust, security and a base from which the technology can be developed further, with robust measures and systems in place.

ISO/IEC 30141, Internet of Things (IoT) – Reference architecture, provides an internationally standardized IoT Reference Architecture using a common vocabulary, reusable designs and industry best practice.

Dr François Coallier, Chair of the joint technical committee of ISO and the International Technical Commission (IEC) that developed the standard, said the IoT is growing fast due to rapid developments in ICT.

"So we saw a need for a reference architecture to maximize the benefits and reduce the risks", he said.

ISO/IEC 30141 aims to do just that, providing a common framework for designers and developers of IoT applications and enabling systems that are "trustworthy", meaning they are reliable, safe, secure, respect privacy and can withstand disruptions such as natural disasters and attacks.

"There are already many published standards for resilience, safety and security," adds Coallier, "and this standard will provide the reference architecture to apply them to IoT systems."

ISO/IEC 30141 was developed by joint technical committee ISO/IEC JTC 1, Information technology, subcommittee SC 41, Internet of Things and related technologies, the secretariat of which is held by KATS, ISO's member for Korea. Australia is a Participating Member of ISO/IEC JTC 1/SC 41 with National Mirror Committee IT-042 *Internet of Things and Related Technologies*. For more information or to get involved, please contact Stakeholder Engagement Manager, Vi Le at vi.le@standards.org.au.

Source: https://www.iso.org/news/ref2340.html

4. Tracking it back: a new standard to support responsible use of wood just published

Deforestation and forest degradation are ravaging our planet, threatening biodiversity and contributing to climate change havoc and global warming. As consumer awareness grows, so too does the demand to know the origins of wood in the products they buy. A new ISO standard for tracing wood back to its sources will help to provide this information.

With many players in the wood supply chain, and many different types of wood, tracing its origins to legal sources is complex. A robust method of traceability, therefore, will help businesses favour timber that comes from legal sources, thus enabling the industry to grow. ISO 38200, Chain of custody of wood and wood-based products, specifies the requirements for a chain of custody of wood and wood-based products that allows users to trace the origins of wood and wood products every step along the supply chain.

This new International Standard lets users determine if the material is "verified", for which evidence of compliance with the requirements of a due diligence system can be provided; "specified", where it meets specific publicly available documented requirements set by organizations; "certified", when it satisfies the requirements of a particular certification scheme; or "recycled", if it has been recovered, or otherwise diverted, from the waste stream.

Dr Jorge E. R. Cajazeira, Chair of the ISO technical committee that developed the standard, said ISO 38200 provides a common framework, allowing players in the wood supply chain to "speak the same language".

"It will also help purchasers track timber from different sources, thus helping to avoid timber from illegal sources from entering the supply chain."

ISO 38200 was developed by ISO project committee ISO/PC 287, Chain of custody of wood and wood-based products, whose secretariat is held by DIN, ISO's member for Germany, and ABNT, ISO's member for Brazil. Australia is an Observer Member of ISO/PC 287 with National Mirror Committee FR-001, Chain of custody of forest-based products. For more information or to get involved, please contact Senior Stakeholder Engagement Manager, Alison Scotland, at Alison.scotland@standards.org.au

Source: https://www.iso.org/news/ref2343.html

5. Measuring up to the Fourth Industrial Revolution in the latest ISOfocus

The Fourth Industrial Revolution has been getting a lot of press. What does it really mean, and how will it affect us?

The Fourth Industrial Revolution is expected to create up to USD 3.7 trillion in value by 2025, according to the 2018 World Economic Forum/McKinsey & Company white paper. Contrary to some negative perceptions, countries and companies have an opportunity to counter and potentially reverse the slowdown in productivity by diffusing and adopting technology at scale.

The November/December 2018 issue of ISOfocus examines how government, businesses and societies will navigate the increasing integration of technologies into business and production processes. Among the experts interviewed are faculty, companies, small business leaders and standards professionals from around the world, in fields ranging from robots to industrial data to artificial intelligence.

"As in the first industrial revolution, when national economies and the organization of the global economy changed, we are undergoing the same transformation or revolution," says Patrick Lamboley, Chair of technical committee ISO/TC 184, Automation systems and integration, and Senior Director of Standardization at Schneider Electric, when referring to the Fourth Industrial Revolution. "And this revolution is not a long-term vision; it's a reality, taking place now."

The latest ISOfocus issue showcases some of the new opportunities for ISO standards by highlighting the industry sectors most likely to benefit. It gives examples of how some companies are already leveraging this growing market, taking advantage of the emergence of digital systems, networked communications, and large-scale data analysis. This edition of ISOfocus also considers the opportunities offered by standards not only as a way of providing a platform for performance, but, equally important, as a way of getting different systems to effectively communicate to drive efficiencies.

So how can we prepare? Organizations should look to ISO standards now, to fully embrace this revolution in the making – and it may arrive quicker than we think. As Christoph Winterhalter, CEO of DIN, the ISO member for Germany, writes in his introductory remark: "The consolidation of new concepts by means of standardization at an early stage of development is absolutely essential if they are to be rapidly implemented in industrial practice." After all, the Fourth Industrial Revolution is bound to bring significant changes to the way we live, interact and do business... if it hasn't done so already.

Read the latest ISOfocus to learn more.

Source: https://www.iso.org/news/ref2345.html

6. Writing the future on World Cities Day

Urbanization is alive and growing: our cities are tipped to house an additional 2.4 billion people over the next 30 years. "Building Sustainable and Resilient Cities" is the theme of this year's United Nations World Cities Day, and ISO standards are proving to be essential tools to do exactly that.

How do you enhance a city's attractiveness, and preserve its environmental, social and cultural assets, when faced with a growing population?

Since becoming the first community in Europe to be certified to ISO International Standard ISO 37101, Sustainable development in communities – Management system for sustainable development – Requirements with guidance for use, Sappada in Italy now benefits from better managed local complexities, new initiatives for education and environmental protection, new ways of promoting their area and a system to measure and monitor sustainability performance – all the while increasing community engagement.

ISO 37101 is part of a suite of standards dedicated to future-proofing cities and making them sustainable and resilient, thus contributing to the goal of this year's World Cities Day and United Nations Sustainable Development Goal 11 for sustainable cities and communities.

Developed by ISO's committee of experts from more than 50 countries, ISO/TC 268, Sustainable cities and communities, it joins other standards dedicated to developing frameworks and measuring performance, such as the ISO 37150 series on smart community infrastructures and the recently updated ISO 37120, Sustainable cities and communities – Indicators for city services and quality of life.

Dr Bernard Gindroz, Chair of ISO/TC 268, said the cities of tomorrow face many challenges but also great opportunities, such as increasing citizen engagement and improving city living.

"The future of cities affects everyone as it touches everything from public transport, public facilities, water and energy supplies to social engagement, health and more," he said.

"Building sustainable cities is no easy task, as cities are, by their nature, a highly complex interaction of systems. These standards help city leaders to define their own vision of how they want their city to be, how they will deal with the many challenges of a growing population and how they will get there with clear strategies, targets and roadmaps," he adds.

Continuing the global conversation on sustainable cities, ISO joins fellow standards organizations – the International Electrotechnical Commission (IEC) and the International Telecommunication Union (ITU) – at the World Smart City Forum in Santa Fe, Argentina, on 29 November 2018.

The Forum will bring together leading international figures in the smart and sustainable cities space to discuss challenges and solutions in smart city development.

For details and registration, check the World Smart City Website.

Source: https://www.iso.org/news/ref2341.html

IEC

1. IEC General Meeting 2018 – a recap

This year, Standards Australia CEO and Energy Stakeholder Manager travelled to Busan, Korea, to participate in and contribute to the annual IEC General Meeting. They were accompanied by a strong delegation of Australian technical experts and IEC contributors, including Dr Ian Oppermann, the Australian National Committee President.

This year the theme of the IEC GM was standards for Smart Cities and Sustainable Societies, with a focus on the fourth industrial revolution and its core enabling technologies such as AI, IoT, self-driving cars, cyber security and smart homes. This saw Busan being named the "IEC City" for the duration of the GM, and the theme was further promoted through the IEC Smart City exhibit in the Busan Exhibition and Convention Centre, also the location of the GM.

The week provided many opportunities for collaboration, information sharing and innovation among colleagues from all over the world.

The Standards Australia team attended a number of governance meetings such as the Standardisation Management Board (SMB) meeting, the IEC Council meeting, as well as the National Secretaries Forum, where Dr Bronwyn Evans facilitated a discussion about IEC standards and international trade agreements. Dr Ian Oppermann also attended the National Presidents' Forum, as well as the Market Strategy Board (MSB). The governance meetings provide a great opportunity for Australia to take a leadership position in the future of IEC and to ensure that the Australian perspective is heard at a senior level.

The meeting was also vital for promoting Australia's interests in greater regional balance at the IEC, as well as the promotion of a greater harmonisation between IEC and ISO. The team also participated in discussion about the future budget of the IEC, the Masterplan Implementation Plan, and the approval of the full funding of the plan over a 3 year period, as well as discussions about future content distribution platforms and methods of delivering standards to users.

The Australian Delegation faced an election upset, when our SMB Candidate, Alex Baitch was not successful in securing the role. The election saw Canada secure a second term onto the SMB, and the addition of Austria onto the management board.

Standards Australia looks forward to carrying forward many of the relationships established and strengthened over the week, and following the progression of initiatives that were launched and advanced over the IEC GM week.

Find out more information about the IEC GM at the IEC Blog page.

2. New feature to share committee "Supporting Documents" with the general public through the committee dashboard

The IEC has the pleasure of informing you that they have implemented a new feature in the IEC committee dashboard that allows committee members to share committee "Supporting Documents" with the general public. With this approach committees can provide and maintain documents supporting its activities.

The type of documents suitable as supporting documents are those created and maintained by the committee that provide, for example:

- information in relation to one or more publications,
- promotional materials about the committee,
- a list of the committee documents relating to a particular topic.

These documents are uploaded under the responsibility of the committee and are provided as is. The IEC is not liable for the content of these documents.

The documents:

- shall not be IEC publications, software supplements (as defined in AC/40/2009) and project drafts,
- shall observe any known copyright and IP rights,
- shall be compliant with and support the IEC values and brand, and
- shall not contain personal data relating to committee members.

The "Supporting Documents" function shall not be used to bypass the standards development process.

The following are examples of committee "Supporting Documents" that are already available:

- ACEA: short presentation for TCs/SCs/SyCs, describing what ACEA is, what it does, when to contact ACEA, and who can become a member of ACEA and how.
- ACSEC: list of IEC publications related to security
- ACTAD: Past ACTAD recommendations and past ACTAD workshop programmes
- TC 57: light code component packages and XML validation schemes
- TC 59: list of contact information for testing materials' suppliers
- TC 106: CAD files (head and car model for EMF testing) and antenna pattern Excel file which can be used to configure spectral analysers

All "Supporting Documents" are managed by the committee. The committee's officers have "write access", and are responsible for ensuring that the uploaded documents are relevant to the activities of the committee and do not contain information that is not conformant with the rules specified above. Furthermore, the committee's officers are responsible for maintaining all "Supporting Documents", and for ensuring that the document quality is such that it promotes the IEC brand. Lastly, it is important to recall that poorly maintained web content gives a negative message; "Supporting Documents" are publicly available and their maintenance shall be performed on a regular basis.

Committee members are invited to contact Standards Australia and their Project Managers for further information.

3. IEC awards highest honour in electrotechnology to Wim De Kesel

The IEC has awarded the 2018 Lord Kelvin Award to Wim De Kesel for his outstanding technical contribution to the growth, development and promotion of the global relevance of IEC Standards. The Lord Kelvin Award is the highest honour in the global electrotechnology industry.

IEC President, Jim Shannon, presented the gold medal to Mr. De Kessel, who is the 36th laureate and the first from Belgium. Mr. Shannon said, "This year's Lord Kelvin Award honours excellence and outstanding commitment that has helped advance the IEC field of activity as a whole and the mission of the IEC in particular."

Mr De Kesel is Vice President Standardization of the Legrand Group and has played an active and important role at the IEC for more than 20 years. He has brought his leadership skills to standardization work in such areas as energy efficiency, low voltage direct current, electric vehicles and home and building automation.

Mr De Kesel has made an outstanding technical contribution to the growth, development and promotion of the global relevance of IEC Standards and through his work at Legrand he has had a major influence on the image of the IEC in the business world. As CENELEC Vice-President Policy he has helped to improve collaboration with European standardization and he has always taken every opportunity to encourage the use of IEC Standards on regional and national level.

Mr De Kesel has helped IEC to implement a systems approach to standardization in such areas as Smart Homes and Office Building Systems. He has been instrumental in building bridges between technical committees and improving collaboration between technical experts in Europe and around the world. TC 23, Systems Committee (SyC) LVDC, System Evaluation Group (SEG) 4 and SEG 9 are just some of the IEC groups and committees that have benefitted from Mr De Kesel's experience, expertise and energy.

About the Lord Kelvin Award

The prestigious IEC Lord Kelvin Award takes its name from the first IEC President, who was a distinguished scientist and prolific inventor. Lord Kelvin contributed significantly to the advancement of modern physics and the practical applications of electrotechnology.

Lord Kelvin, together with Charles Le Maistre, the first IEC General Secretary, can be considered the true fathers of standardization. They put in place the processes and methodologies that allow companies to spread new technologies broadly, and enable countries to build more sustainable infrastructure.

Today the Lord Kelvin Award honours their vision and drive to understand and improve the practical applications of the millions of electrical and electronic devices and systems that are part of our daily lives.

Source: https://www.iec.ch/newslog/2018/nr1118.htm

3.   The police force getting off to a flying start

A California-based start-up has provided police in the United Arab Emirates with flying motorbikes.

Hoversurf has given Dubai Police its first serial production of the S3 2019 hoverbike — an electric vertical take-off and landing (eVTOL) vehicle — and has begun training officers to fly it. It could give a whole new meaning to the Flying Squad.

The hoverbike is also available to civilians, although the company will screen prospective customers to ensure that they are capable of handling the new technology. In the US, there is no need for a pilot's licence to fly the hoverbike as the vehicle has met Federal Aviation Administration guidelines.

The development comes at a time when manufacturers around the world are working to merge aircraft and automotive technologies in a bid to produce flying cars. Some of these strange hybrid objects were on show at the 2018 Geneva International Motor Show (GIMS).

A European aircraft manufacturer, a German automotive giant and an Italian design and engineering outfit have joined forces to produce a prototype. Pop.Up was launched at the 2017 show but since then, the latching and locking system coupling the ground capsule and the air module have been improved and the flying car is much lighter than the initial version.

A clever eye tracking and facial recognition interface has been installed inside the capsule, reading the passenger's moods and wishes. Once it has landed, Pop.Up's ground capsule is intended to operate as an autonomous electric vehicle (EV), using sensors, cameras and radars as well as light detecting and ranging (LIDAR) technology.

A number of IEC technical committees (TCs) and their subcommittees (SCs) prepare International Standards relating to the components found in these technologies. IEC TC 47 publishes IEC 62969, which specifies the general requirements of power interfaces for automotive vehicle sensors. IEC TC 100 develops Standards on digital cameras. IEC TC 69 issues Standards pertaining to EV power charging.

The IEC has publishing a number of Standards which are paving the way for an electric vehicle future. Several of these deal with charging and batteries.

For instance, Technical Committee (TC) 21 develops IEC 62660-1, which specifies the ways of testing lithium-ion batteries for the propulsion of electric road vehicles. Australia is an Observer Member of IEC/TC 21 with National Mirror Committee EM-001 *Electric Vehicle Operation*.

Source: https://blog.iec.ch/2018/11/the-police-force-getting-off-to-a-flying-start/

4. Interest growing in blockchain for renewable energy trading

Grid operators in Singapore and the United States have joined the growing number of companies around the world that are experimenting with blockchain. They hope the technology can radically simplify renewable energy trading.

In Singapore, a blockchain-powered system is enabling companies to engage in renewable energy certificates trading. Those using the system can purchase RECs from companies producing surplus clean energy to offset their fossil fuel-based production.

In the US, a company operating a grid from Washington, D.C. to Chicago is developing a blockchain system to track electricity from wind and solar power plants as it's produced, delivered and traded. They hope it will make transactions faster and cheaper, as well as attracting more participation than existing mechanisms.

Another example is a blockchain energy trading platform project in Britain backed by several household energy suppliers, the National Grid and a German electrical conglomerate. The trading platform is built on the Ethereum blockchain and uses simulated data from 53 million metering points and 60 energy suppliers.

In the IEC White Paper Edge intelligence, blockchain technology is defined as "a well-ordered distributed database that maintains a list of all transactions and which grows continuously over time". Each of these recorded transactions is called a "block".

Blockchain was invented by Satoshi Nakamoto in 2008 and was originally developed as the accounting method for the virtual currency Bitcoin. Blockchain uses cryptography to allow anyone granted access to a distributed database to digitize and insert data, as well as its metadata, in a secure way.

Unlike traditional centralized databases, which are situated within a central cloud, the blockchain is not located and maintained on a single server that belongs to a central authority (a bank, for instance). It is spread across multiple points, making it much harder for hackers to gain access to it.

The technology was primarily devised to verify transactions but it is possible to code, digitize and insert practically any document in such a database. Once a block of data is recorded, it's extremely difficult to change or remove.

The authenticity of the record can be verified by the entire community using the blockchain, instead of by a single centralized authority. Each time a block of data is completed, a new one is generated.

The blocks are connected to each other, like links in a chain, in a proper linear chronological order. If an attacker gets hold of a component of data and attempts to tamper with a block, the system will try to locate the one that differs from the rest. If it is located, it is simply excluded from the chain and recognized as false.

Source: https://blog.iec.ch/2018/11/interest-growing-in-blockchain-for-renewable-energy-trading/