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

New Work

1. A New Field of Technical Activity – Musical Instruments

ISO has received a New Field of Technical Activity proposal from the Chinese National Standards Body (SAC) to **Form a new Technical Committee in the field of Musical Instruments.**

The scope of the new committee is proposed to be *Standardisation in the field of musical instruments including: standardization of classification, terminology, products, safe use, test methods and conformity assessment rules.*

The areas of standardization that are set out in the proposal are as follows:

1. Common and basic standards (classification and terminology)
2. Method standards (assessment and test methods)
3. Standards for product and accessory (including piano, violin family, guitar, accordion, aerophones, bows and strings)

It is expected that 4 new international standards will be proposed in the first year of work, pending approval of this proposal.

Standards Australia will be consulting with stakeholders for this proposal. For more information on the proposal, or to make a submission, please contact the Senior Stakeholder Engagement Manager, Brett Lovett, brett.lovett@standards.org.au, by Friday 27 April 2018.

2. A New Work Item Proposal – Guidelines on Integrating a Business Excellence Framework with ISO management system standards

ISO has received a New Work Item Proposal from the United Kingdom Standards Body (BSI) and the Canadian Standards Body (SCC) to **Form a new Project Committee to develop Guidelines on Integrating a Business Excellence Framework with ISO management system standards.**

Canada circulated a similar new work item proposal in early 2017 which received some international support but did not reach the required number of approval votes in order to be successful. Canada and the United Kingdom have now worked together to incorporate the feedback received in the initial NWIP to develop the new proposal.

The scope of the standard proposed is as follows:

Organizations implementing single or multiple management systems and simultaneously the Business Excellence framework are faced with the major challenge of lack of alignment. This can be attributed to multiple factors, including but not limited to, organizational design/structure, responsibilities matrix, contextual understanding of the linkages/inter-dependencies, silo mentality and turf protection. “Guidelines on Integrating a Business Excellence Framework with ISO management system standards” will provide the roadmap on integrating the national/international business excellence frameworks with management system standards for enhancing organizational efficiency, facilitating effective decision-making, and promoting transparency, innovation and continuous improvement. Scope will exclude the development of an ISO Business Excellence standard and/or development of ISO Management System standard/s. Instead it will focus on the integration aspects, available best practices, and provision of useful practical tips for better organizational management.

Standards Australia will be consulting with stakeholders for this proposal. For more information on the proposal, or to make a submission, please contact the Senior Stakeholder Engagement Manager, Catherine Dunkerley, at Catherine.dunkerley@standards.org.au, by Friday 27 April 2018.

3. A New Field of Technical Activity – Karst

ISO has received a New Field of Technical Activity proposal from the Chinese National Standards Body (SAC) to **Form a new Technical Committee in the field of Karst.**

The scope of the activity would be as follows:

Standardization in the field of karst terminology, sustainable development of karst resources, environmental protection and management of karst environment, as well as investigation and assessment (including modeling methods and mapping of karst systems).

The initial proposed programme of work includes standards development to cover the following:

1. Karst terminology
2. Sustainable development of karst resources, environmental protection and management of karst environment
3. Investigation, assessment (including modeling methods and mapping of karst systems).

Standards Australia will be consulting with stakeholders for this proposal. For more information on the proposal, or to make a submission, please contact the Stakeholder Engagement Manager, Simona Tomevska, simona.tomevska@standards.org.au, by Friday 4 May 2018.

4. A New Field of Technical Activity – Transaction Assurance in E-Commerce

ISO has received a New Field of Technical Activity proposal from the Chinese National Standards Body (SAC) and the French National Standards Body (AFNOR) to **Form a new Technical Committee in the field of Transaction Assurance in E-Commerce.**

The scope of the new committee is proposed as:

Standardization in the field of “transaction assurance and upstream/downstream directly related processes in e-commerce”, including the following:

- *The assurance of transaction process in e-commerce (including easier access to e-platforms and e-stores);*
- *The protection of online consumer rights including both prevention of online disputes and resolution process;*
- *The interoperability and admissibility of commodity quality inspection result in cross-border e-commerce.*
- *The assurance of e-commerce delivery to the final consumer.*

The proposed new technical committee will cooperate with ISO/TC 68 *Financial Services*, ISO/IEC/JTC 1/SC 27 *IT Security Techniques*, in addition to liaising with other relevant technical committees.

Standards Australia will be consulting with stakeholders for this proposal. For more information on the proposal, or to make a submission, please contact the Stakeholder Engagement Manager, Rick Macourt, at rick.macourt@standards.org.au, by Friday 11 May 2018.

5. A New Work Item Proposal – Glass Clarity

ISO has received a New Work Item Proposal from the French National Standards Body (AFNOR) to **establish a new Project Committee to develop a standard for the classification and test methods for glass clarity, for glass including tableware, giftware, jewelry and luminaries.**

The proposed scope of the standard is as follows:

The proposed International Standard will establish requirements for the use of the designations “clear glass” and “ultra-clear glass” for non-coloured glass according to their clarity and iron content. The standard will specify a procedure for measuring the clarity of glass items by means of a spectrophotometer. The standard will cover mineral glass and glass in items where the glass component is not covered by coating or decoration, and is therefore accessible for sampling.

The scope of this International Standard includes glass used as tableware, giftware, jewellery and luminaries. It excludes glass used in construction work, containers, medicine and laboratories, or in other types of technical applications.

It is proposed that the existing document, IWA 8:2009, be used as a starting draft for the committee to commence their work.

Standards Australia is consulting with stakeholders for this proposal. For more information on the proposal, or to make a submission, please contact Stakeholder Engagement Manager Rick Macourt, at rick.macourt@standards.org.au, by Friday 18 May 2018.

International

1. Standards Australia working to drive ASEAN-Australia Digital Trade

The Australian Government today announced a joint initiative with the 10 ASEAN Member States that will be led by Standards Australia, to promote digital trade and support inclusive economic growth in our region.

The ASEAN-Australia Digital Trade Standards Initiative will provide a framework to support the understanding of the current digital situation across ASEAN and promote the adoption and use of international digital trade standards.

"The work of Standards Australia often happens in the background, but examples such as this initiative prove how far their benefits flow," said Dr Bronwyn Evans, CEO of Standards Australia. *"This initiative is also timely as it strikes at the heart of the next economic boom – digital trade."*

Standards Australia will work closely with the National Standards Bodies across the ASEAN region to strengthen relationships and determine potential areas of future cooperation in the digital sphere.

The media release from Standards Australia can be found online [here](#).

For more information on this important initiative, please contact International Engagement Officer, Lucy Chalmers, at lucy.chalmers@standards.org.au

2. Launch of news portal to raise awareness of trade development in least-developed countries

A new portal has been launched by the Enhanced Integrated Framework (EIF) to provide a platform for the exchange of news, information and experiences on trade and development in least-developed countries (LDCs).

Officially launched by the EIF at the WTO's Committee on Trade and Development's Aid for Trade meeting on 19 February, the Trade for Development News platform serves as a forum for LDC governments and stakeholders to share their successes, challenges and strategies for enhancing LDC participation in global trade.

"The Trade and Development News platform is another great contribution by the EIF to the Aid for Trade initiative," said Sainabou Taal, Trade Policy Analyst in the WTO Development Division. *"Serving as a one-stop-shop for LDC-specific trade and development news is a great way to allow LDCs and their partners to share experiences. This is an important milestone in enhancing the Aid for Trade initiative's objectives on knowledge creation and sharing, and illustrating impact on the ground."*

The 47 countries classified as LDCs - 36 of whom are WTO members - are home to 13 per cent of the global population, but account for only 1 per cent of global trade. WTO agreements include provisions aimed at increasing LDCs' trade opportunities and allowing LDCs flexibility in implementing WTO rules. The WTO Ministerial Conferences held in Bali in 2013 and in Nairobi in 2015 adopted several decisions in favour of LDCs to assist their better integration into the multilateral trading system.

The new EIF portal already features stories on trade and development news in WTO members such as Samoa, Vanuatu, Cambodia, Zambia, Senegal, the Gambia and Burkina Faso.

"We have an expansive agenda of partnership and we don't want to confine ourselves but to engage in new and different ways," added Ratnakar Adhikari, Executive Director at the Executive Secretariat of the

EIF. "That includes launching the Trade for Development News site to serve as a hub for information on LDCs, aid for trade and trade for development around the world in partnership with several organizations within the organic EIF structure as well as outside."

About the Enhanced Integrated Framework

The Enhanced Integrated Framework (EIF) brings together partners and resources to support the least-developed countries (LDCs) in using trade for poverty reduction, inclusive growth and sustainable development. The EIF is a global partnership between LDCs, donors and international agencies, underpinned by a multi-donor trust fund, which provides financial and technical support to build trade capacity in 47 LDCs and four recently graduated countries. The EIF is the only global Aid for Trade programme exclusively designed for LDCs and therefore is uniquely placed to assist countries to develop sustainable trade strategies. Through a multilateral approach, the EIF ensures a coordinated, transparent and efficient delivery of Aid for Trade. The EIF is recognized under Goal 8a of the UN's Sustainable Development Goals.

More information on the EIF is available [here](#).

Source: https://www.wto.org/english/news_e/news18_e/if_26feb18_e.htm

3. Trade Facilitation Agreement marks first anniversary since entry into force

The Trade Facilitation Agreement (TFA) marked its first anniversary since its entry into force on 22 February 2017 with WTO members making significant strides towards its implementation. WTO Director-General Roberto Azevêdo said members continue to work to fully implement the Agreement, which will benefit particularly developing and least developed countries.

Negotiations for the TFA, the first multilateral deal concluded in the 23-year history of the WTO, were concluded at the 9th Ministerial Conference in Bali in 2013. The Agreement entered into force last year when the WTO obtained the two-thirds acceptance of the Agreement from its 164 members. One hundred and thirty-one or 80 per cent of WTO members have now ratified the Agreement. Namibia is the most recent, having submitted its instrument of acceptance on 9 February.

Full implementation of the Agreement, which seeks to expedite the movement, release and clearance of goods across borders, is forecast to slash members' trade costs by an average of 14.3 per cent, with developing and least-developed countries having the most to gain, according to a 2015 study carried out by WTO economists. The TFA is also likely to reduce the time needed to import goods by over a day and a half and to export goods by almost two days, representing a reduction of 47 per cent and 91 per cent respectively over the current average.

"The TFA is one of the biggest trade reforms in a generation. By dramatically reducing trade costs, it will really bring great benefits for all WTO members, especially developing countries," DG Azevêdo said on the occasion of the Agreement's first year anniversary since its entry into force. *"We're working hard to implement the Agreement in full and deliver those benefits,"* he said.

The Agreement is unique in that it allows developing and least-developed countries to set their own timetables for implementing the TFA depending on their capacities to do so. Developed countries committed to immediately implement the Agreement when it entered into force.

Developing countries will immediately apply the TFA provisions they have designated as "Category A" commitments. For the other provisions of the Agreement, they must indicate when these will be implemented and what capacity building support is needed to help them implement these provisions, known as Category B and C commitments. These can be implemented at a later date with least-developed countries given more time to notify these commitments.

According to the TFA Database, as of 23 February, 107 members have notified their Category A commitments, 49 their Category B commitments and 39 their Category C commitments. The implementation dashboard estimates that the TFA implementation rate for the entire WTO membership stands at 58.7 per cent today based on members' notifications. Broken down, that equates to a 100 per cent implementation rate by developed members, 56.4 per cent among developing members and 1.7 per cent among least developed countries.

A Trade Facilitation Agreement Facility (TFAF) was created at the request of developing and least-developed countries to help ensure they receive the assistance needed to reap the full benefits of the TFA and to support the ultimate goal of full implementation of the new agreement by all members. Further information on TFAF is available at www.TFAFacility.org

Source: https://www.wto.org/english/news_e/news18_e/fac_22feb18_e.htm

4. Trade growth to sustain momentum in first quarter of 2018, latest trade indicator suggests

The WTO's latest World Trade Outlook Indicator (WTOI), released on 12 February, suggests that the trade recovery of 2017 should continue, with solid trade volume growth in the first quarter of 2018. The WTOI's current value of 102.3 is little changed from the 102.2 recorded last November, indicating steady merchandise trade volume growth. Strong results for air freight, container shipping and export orders in particular suggest that, while the trade recovery may moderate in due course, it will likely continue in the coming months and remain above trend.

Component indices of the WTOI are mostly favourable. Container port throughput (104.3) and air freight (103.2) are firmly above trend, indicating strong current shipments of goods. Meanwhile, export orders (102.8) have reached their highest level since 2011, pointing to sustained recovery. Weaker results are observed for automotive products (101.0), agricultural raw materials (100.8) and electronic components (94.1), which could indicate a weakening of consumer sentiment.

Overall, these results are somewhat stronger than the WTO's most recent trade forecast issued on 21 September 2017, which forecast merchandise trade volume growth of 3.6% for 2017 and 3.2% in 2018. The next WTO trade forecast update is anticipated in early April.

Designed to provide "real time" information on the trajectory of world trade relative to recent trends, the WTOI is not intended as a short-term forecast, although it does provide an indication of trade growth in the near future. Its main contribution is to identify turning points and gauge momentum in global trade growth. As such, it complements trade statistics and forecasts from the WTO and other organizations. Readings of 100 indicate growth in line with medium-term trends; readings greater than 100 suggest above trend growth, while those below 100 indicate the reverse. The direction of change reflects momentum compared with the previous month. The WTOI has recorded readings of 102 or higher since February 2017, which coincided with a strengthening of global trade flows.

The full World Trade Outlook Indicator is available [here](#).

Further details on the methodology are contained in the technical note [here](#).

Source: https://www.wto.org/english/news_e/news18_e/wtoi_12feb18_e.htm

ISO

1. Much anticipated ISO 45001 now published

The world's much anticipated International Standard for occupational health and safety (OH&S) has just been published, and is set to transform workplace practices globally.

ISO 45001:2018, *Occupational health and safety management systems – Requirements with guidance for use*, provides a robust and effective set of processes for improving work safety in global supply chains. Designed to help organizations of all sizes and industries, the new International Standard is expected to reduce workplace injuries and illnesses around the world.

According to 2017 calculations by the International Labour Organization (ILO), 2.78 million fatal accidents occur at work yearly. This means that, every day, almost 7 700 persons die of work-related diseases or injuries. Additionally, there are some 374 million non-fatal work-related injuries and illnesses each year, many of these resulting in extended absences from work. This paints a sober picture of the modern workplace – one where workers can suffer serious consequences as a result of simply “doing their job”.

ISO 45001 hopes to change that. It provides governmental agencies, industry and other affected stakeholders with effective, usable guidance for improving worker safety in countries around the world. By means of an easy-to-use framework, it can be applied to both captive and partner factories and production facilities, regardless of their location.

David Smith, Chair of project committee ISO/PC 283 that developed ISO 45001, believes the new International Standard will be a real game changer for millions of workers: “It is hoped that ISO 45001 will lead to a major transformation in workplace practices and reduce the tragic toll of work-related accidents and illnesses across the globe.” The new standard will help organizations provide a safe and healthy work environment for workers and visitors by continually improving their OH&S performance.

Smith adds: “World standards writers have come together to provide a framework for a safer workplace for all, whatever sector you work in and wherever you work in the world.” More than 70 countries were directly involved in the creation of this important document, developed by ISO/PC 283, *Occupational health and safety management systems*, with the British Standards Institution (BSI) serving as the committee secretariat.

Because ISO 45001 is designed to integrate with other ISO management systems standards, ensuring a high level of compatibility with the new versions of ISO 9001 (quality management) and ISO 14001 (environmental management), businesses that already implement an ISO standard will have a leg up if they decide to work toward ISO 45001.

The new OH&S standard is based on the common elements found in all of ISO's management systems standards and uses a simple Plan-Do-Check-Act (PDCA) model, which provides a framework for organizations to plan what they need to put in place in order to minimize the risk of harm. The measures should address concerns that can lead to long-term health issues and absence from work, as well as those that give rise to accidents.

ISO 45001 will replace OHSAS 18001, the world's former reference for workplace health and safety. Organizations already certified to OHSAS 18001 will have three years to comply with the new ISO 45001 standard, although certification of conformity to ISO 45001 is not a requirement of the standard.

The International Accreditation Forum (IAF) has developed the migration requirements to help certified organizations, certification bodies, accreditation bodies and other interested parties prepare. For more information, see the IAF Website.

Australia is a Participating member of PC 283, with National Mirror Committee SF-001. For more information on Standards Australia's activities in occupational health and safety please contact Senior Stakeholder Engagement Manager, Catherine Dunkerley at catherine.dunkerley@standards.org.au

2. Establishment of Project Committee ISO/PC 315 – Indirect, temperature-controlled refrigerated delivery services – land transport of parcels with immediate transfer

Following approval by the ISO member bodies, the Technical Management Board (TMB) adopted Resolution 4/2018, which approved a proposal to establish the above Project Committee.

The new Project Committee will have the following provisional title and scope:

Title: Indirect, temperature-controlled refrigerated delivery services - land transport of parcels with intermediate transfer

Scope: Standardization in the field of indirect, temperature-controlled refrigerated delivery services - land transport of parcels with intermediate transfer.

Australia has not indicated that they wish to participate on this committee. If you would like further information on the proposal or to speak to a Stakeholder Engagement Manager about the activity, please contact Ron Pulido, ron.pulido@standards.org.au.

3. The new ISO 31000 keeps risk management simple

Damage to reputation or brand, cybercrime, political risk and terrorism are some of the risks that private and public organizations of all types and sizes around the world must face with increasing frequency. The latest version of ISO 31000 has just been unveiled to help manage the uncertainty.

Risk enters every decision in life, but clearly some decisions need a structured approach. For example, a senior executive or government official may need to make risk judgements associated with very complex situations. Dealing with risk is part of governance and leadership, and is fundamental to how an organization is managed at all levels.

Yesterday's risk management practices are no longer adequate to deal with today's threats and they need to evolve. These considerations were at the heart of the revision of ISO 31000, *Risk management – Guidelines*, whose latest version has just been published. ISO 31000:2018 delivers a clearer, shorter and more concise guide that will help organizations use risk management principles to improve planning and make better decisions. Following are the main changes since the previous edition:

- Review of the principles of risk management, which are the key criteria for its success
- Focus on leadership by top management who should ensure that risk management is integrated into all organizational activities, starting with the governance of the organization
- Greater emphasis on the iterative nature of risk management, drawing on new experiences, knowledge and analysis for the revision of process elements, actions and controls at each stage of the process
- Streamlining of the content with greater focus on sustaining an open systems model that regularly exchanges feedback with its external environment to fit multiple needs and contexts.

Jason Brown, Chair of technical committee ISO/TC 262 on risk management that developed the standard, says: "The revised version of ISO 31000 focuses on the integration with the organization and the role of leaders and their responsibility. Risk practitioners are often at the margins of organizational management and this emphasis will help them demonstrate that risk management is an integral part of business."

Each section of the standard was reviewed in the spirit of clarity, using simpler language to facilitate understanding and make it accessible to all stakeholders. The 2018 version places a greater focus on creating and protecting value as the key driver of risk management and features other related principles such as continual improvement, the inclusion of stakeholders, being customized to the organization and consideration of human and cultural factors.

Risk is now defined as the “effect of uncertainty on objectives”, which focuses on the effect of incomplete knowledge of events or circumstances on an organization’s decision making. This requires a change in the traditional understanding of risk, forcing organizations to tailor risk management to their needs and objectives – a key benefit of the standard. Jason Brown explains: “ISO 31000 provides a risk management framework that supports all activities, including decision making across all levels of the organization. The ISO 31000 framework and its processes should be integrated with management systems to ensure consistency and the effectiveness of management control across all areas of the organization.” This would include strategy and planning, organizational resilience, IT, corporate governance, HR, compliance, quality, health and safety, business continuity, crisis management and security.

The resulting standard is not just a new version of ISO 31000. Reaching beyond a simple revision, it gives new meaning to the way we will manage risk tomorrow. As regards certification, ISO 31000:2018 provides guidelines, not requirements, and is therefore not intended for certification purposes. This gives managers the flexibility to implement the standard in a way that suits the needs and objectives of their organization.

Brown adds that the principle objective of ISO/TC 262 is to help organizations ensure their viability and success over the longer term, in the interests of all stakeholders, by providing good risk management practice. Because “failure to manage risks is inherently risking failure.”

Standards Australia is a participating member of ISO/TC 262 with National Mirror Committee OB-007 *Risk Management*.

Source: <https://www.iso.org/news/ref2263.html>

4. ISO/IEC 27000 – key International Standard for information security revised

2018 may only have just begun, but it looks like a big year for information security. With questions being raised about the security of micro-processors, and major cyber security initiatives such as the EU’s General Data Protection Regulation brought into effect this year, a new edition of ISO/IEC 27000 has come at just the right time.

ISO/IEC 27000:2018 provides the overview of information security management systems (ISMS), and terms and definitions commonly used in the ISMS ISO/IEC 27001 family of standards. Designed to be applicable to all types and size of organization from multinational business to small and medium-sized enterprises, the new version, released in February 2018, is equally valuable to government agencies or not-for-profit organizations.

There are more than a dozen standards in the 27000 family. The recently published ISO/IEC 27000 provides an understanding of how the standards fit together: their scopes, roles, functions and relationship to each other.

The ISO/IEC 27001 community will find this standard useful, since it brings together all the essential terminology used by other standards in the ISO/IEC 27000 family.

ISO/IEC 27000:2018 was developed by joint technical committee ISO/IEC JTC 1, Information technology, subcommittee SC 27, IT security techniques, whose secretariat is held by DIN, the ISO member for Germany. Australia actively participates on ISO/ITC JTC 1/SC 27 with National Mirror Committee IT-012 *Information Systems, Security and Identification Technology*.

Source: <https://www.iso.org/news/ref2266.html>

1. Artificial Intelligence is listening to you

Artificial Intelligence (AI) was one of the big buzzwords at CES 2018. From home appliances to robots and self-driving cars, AI is able to help us with our everyday activities. While an interest in intelligent machines can be traced back to Greek mythology, recent advances in computing that enable us to collect large quantities of data and then process it using algorithms, have hastened the development of AI technologies.

AI technologies rely on IEC Standards

The term artificial intelligence is generally understood to refer to a machine that can replicate cognitive functions such as learning and problem-solving. It is a broad concept that encapsulates ideas ranging from Frankenstein-like robots to voice assistants for smart phones and other devices.

The Joint Technical Committee of IEC and ISO on information technology (ISO/IEC JTC 1) and several of its subcommittees (SCs) prepare International Standards which contribute towards artificial intelligence. Given the rapid developments in AI across many industries, a new SC on artificial intelligence, ISO/IEC JTC 1/SC 42, was set up in 2017 with the mandate of providing standardization in the area of AI as well as guidance to other committees developing AI applications.

AI depends on the gathering, analysis and sharing of great volumes of data which are exchanged between applications as well as with external service providers. This makes it equally possible for an assistant-enabled device to turn on the oven or for a manufacturer to improve the safety features on its cars. ISO/IEC JTC 1/SC 41 develops International Standards for the internet of things (IoT), making connectivity possible, while ISO/IEC JTC 1/SC 38 addresses the standardization of cloud computing for the storage and retrieval of data.

In addition, AI technologies rely upon IEC Standards for hardware components such as touchscreens (IEC TC 110) and audio, video and multimedia systems and equipment (IEC TC 100).

The latest AI technologies at CES

At CES this year, assistant-enabled devices using voice recognition were ubiquitous. Improved voice recognition functionality and integration into home appliances means you can now ask your refrigerator to pull up recipes and order groceries online or your television set to change channels.

Increasingly, car manufacturers are incorporating voice recognition into their models. Voice commands can be given to modify the interior temperature or play a certain song. In one model, the car adapts to passenger preferences by, for example, suggesting directions to a favourite restaurant at dinner time. These applications rely upon the work of ISO/IEC JTC 1/SC 37, which develops International Standards for generic biometric technologies including voice recognition. In addition, Technical Area (TA) 16 of TC 100 (IEC TC 100/TA 16) addresses the issue of voice recognition within the context of active assisted living (AAL).

CES was also showcasing the latest AI technology being used to help self-driving cars understand their environment and react accordingly. Smart sensors are an essential component, allowing for the collection of the data required for vehicles to adjust their driving based on factors such as their location, the driving conditions or vehicles nearby. Other smart sensor features, such as lane-keeping, blind-spot monitoring and automatic braking systems, are already in use.

These technologies are aided by the work of IEC TC 47, which develops International Standards for the design and use of semiconductor devices, including sensors. IEC SC 47F specifically addresses microelectromechanical systems (MEMS) which are used for automotive applications, while IEC SC 47E provides International Standards for sensors used for imaging, motion and distance detection.

Other technologies used by autonomous cars are also addressed through the work of the IEC. TCs standardize on technologies such as dashboard touchscreens (IEC TC 110), cloud computing (ISO/IEC JTC 1/SC 38) for processing, analyzing and storing data, and near field communications (ISO/IEC JTC 1/SC 6). Work within IEC TC 100/TA 17 covers the areas of multimedia systems and equipment for cars and recently resulted in the release of Technical Standard IEC TS 63033, which enables drivers to spot obstacles using an intelligent wrap-around view monitor.

The market for AI technologies used in cars is on course for rapid growth. According to analysts at the research company IHS, unit shipments of AI systems are expected to rise from seven million units in 2015 to 122 million by 2025.

Keeping AI safe and secure

While the introduction of new AI technologies has generated much excitement, it also raises concerns over security and the protection of data.

The ubiquity of connected devices that are able to communicate with each other increases the number of gateways that can potentially be used to breach a system, whether at home or in a factory or car. Cyber attacks can have disastrous consequences, causing production in a factory to shut down or a home to be robbed.

Data protection is becoming increasingly important as connected devices collect vast amounts of information about their users on a daily basis. Within a home, these devices can store details such as favourite songs and television shows, but also the times of day when the home is empty. This raises considerable concerns regarding privacy that will need to be resolved.

International Standards are essential tools in the battle to provide information security and protect data against a cyber attack. ISO/IEC JTC 1/SC 27, IT security techniques, has developed the ISO/IEC 27000 family of International Standards for information security management systems (ISMS) to enable organizations to keep their data assets secure. In addition, the IEC has developed industry-specific Standards to help secure critical data. For example, IEC TC 62 provides Standards concerning the electrical equipment, electrical systems and software used in healthcare.

More industries are using AI

According to YouTube Chief Product Officer, Neal Mohan, AI accounts for 70% of the content viewed on the platform. Machine learning algorithms enable huge amounts of data to be processed and interpreted to provide patterns on which to base a prediction. As a result, YouTube can make recommendations based on our previous selections. The same approach is employed by shopping sites as well as video and music streaming platforms like Netflix and Spotify.

Deep learning is the most recent AI technique to find real world applications. It mirrors the neural networks of the human brain to create transistor connections that can be strengthened or weakened depending on whether the data is interpreted correctly. As new data is received, the machine is trained automatically to perfect its predictions. As a result, machines are now able to recognize and respond to images and voices but can also beat human competitors in games such as Go and chess.

Algorithms are used extensively in the finance industry where it is estimated that high frequency AI trades account for more than half of equity share transactions on the US market. AI technology is also used to help detect fraud and communicate with customers via chatbots.

In the manufacturing sector, AI technology provides data intelligence and automation. Processes are automated to increase efficiency while data analytics and predictive algorithms enhance operations and strategy. Even cyber security benefits from AI technology in helping detect and defend against attacks.

Applications in the medical field using AI technology can detect anomalies in images and undertake semi-automatic tasks during minimally-invasive surgery. In the future, AI technology will mine through

data to determine a patient's risk for certain diseases or provide an initial diagnosis. AI will also enable the development of individualized therapy based on the genetic profile of the patient.

Voice-recognition assistants, relatively commonplace in smartphones, are increasingly found in homes as a hub through which to connect and control household appliances, order products online and stream music. Other examples include thermostats that regulate the temperature depending on whether anyone is home and security cameras that use facial recognition to decide whether to unlock the front door. These technologies rely on IEC Standards for sensors (IEC TC 47), cloud computing (ISO/IEC JTC 1/SC 38) and biometrics (ISO/IEC JTC 1/SC 37).

In the near future, cities will be using AI technology to improve safety, traffic management and infrastructure maintenance.

Looking ahead

It is not yet clear how profound an impact AI technology will have on our lives. While one Silicon Valley CEO has compared its importance to the discovery of electricity and fire, it is not clear if this is truth or hyperbole.

While we are still many years away from machines that are as smart as – or smarter than – the human mind, technical advances are progressing rapidly. The IEC continues to follow the latest advances closely and develop the relevant International Standards.

Source: <https://iecetech.org/issue/2018-01/AI-is-listening-to-you>

2. UNECE holds 4th Session Group of Experts on Renewable Energy

According to the International Energy Agency's (IEA) Renewables Market Report series for 2017, renewables accounted for almost two-thirds of net new power capacity around the world in 2016, thanks to a strong solar PV market. The Report forecasts that though coal will still be the largest source of electricity generation, renewables are expected to halve the gap down to 17% by 2022.

Many countries around the world are working towards producing more power from and increasing the amount of renewables to be integrated into national energy supplies.

The United Nations Economic Commission for Europe (UNECE) met in November for its fourth session of the Group of Experts on Renewable Energy Efficiency (GERE). Attending the event were ministers, companies developing RE equipment and systems, and international organizations, such as the International Renewable Energy Agency (IRENA) and the International Energy Agency (IEA).

How standards and certification promote renewables

The aim of the meeting was to look at progress on implementing activities under the current two-year plan and those for the 2018-2019 period. Four themes discussed were:

Tracking progress of renewable energy (RE) development (based on the key findings in the REN21 UNECE Renewable Energy Status Report 2017)

Best practices on how to increase RE uptake

Integration of RE in future sustainable energy systems and cross-cutting collaboration

Promotion of RE investments

Jonathan Colby, Chair, Marine Energy, Operational Management Committee for IECRE, the IEC System for Certification to Standards Relating to Equipment for Use in Renewable Energy Applications, presented during the event.

He highlighted the importance of third party certification to consensus-based International Standards, which can reduce risk, improve market access and support the commercialization of marine energy.

Colby is also Chair of IEC Technical Committee (TC) 114: Marine Energy, which develops Standards that cover design and safety, including reliability and survivability; performance measurements of wave, tidal and water current energy converters; testing: laboratory, manufacturing and factory acceptance, measurement methodologies of physical aspects of the device and more. These Standards are used for certification within IECRE Marine Energy sector.

IECRE helps drive marine energy development

“The most important outcome of the GERE meeting was to have three conclusions included in the GERE Meeting Report, which is great for marine energy and for the work we do on Standards and certifications”, said Colby.

Conclusions reached:

“Requestes the Secretariat to explore how to promote dissemination and education of the value of consensus-based International Standards and Certification Systems for accelerating the uptake of renewable energy technologies, depending on availability of funding and in cooperation with key players.”

“Invite the Expert Group on Resource Classification to extend the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources (UNFC) Task Force to include Marine Energy resources in close cooperation with the Group of Experts.”

“Recommended to prepare an ECE Renewable Energy Report for the entire ECE region including the full spectrum of renewable energy technologies, depending on availability of funding.”

More about IECRE

IECRE was created in 2014, because the ever-increasing demand for electricity, and the need to reduce power generated by fossil fuels, have led to rapid development and growth of the RE sector. IECRE also addresses the specific requirements of the RE sector, which are not covered by the existing IEC Conformity Assessment Systems.

The System aims to facilitate international trade in equipment and services for use in RE in the marine, solar photovoltaic (PV) and wind 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.

Find out more at [IECRE](#).

Source: <https://iecotech.org/issue/2018-01/UNECE-holds-4th-Session-Group-of-Experts-on-Renewable-Energy>

3. Decisions and actions from first IEC SMB meeting for 2018

The IEC Standardization Management Board (SMB) is responsible for the management and supervision of the IEC's standards work. The SMB makes decisions regarding standardization processes, technical committees and engagement in new fields of activity. The body reports to the IEC Council Board.

The IEC SMB recently met for the first of three meetings to be held in 2018.

The decisions and actions of the meeting have now been released for the public. Several decisions were made in relation to the structure of technical activities, technical committee matters and future meetings. The SMB also received presentations from a number of Technical Committees and Advisory Committees as updates on the progress and interest in ongoing activity.

To find out more about the decisions please visit the webpage:

http://www.iec.ch/tcnews/2018/tcnews_0118.htm