International and regional items of interest for January/February 2019 are as follows:

1. Members welcome Global Review of Aid for Trade preparations More>>
2. Invitation to attend Standards and Regulatory Stewardship workshop jointly hosted by PASC and ISO More>>

ISO items of interest for January/February 2019 are as follows:

1. Better building with new International Standards for BIM More>>
2. Lighters just got safer, thanks to revised ISO standards More>>
3. Smart manufacturing: new ISO guidance to reduce the risks of cyber-attacks on machinery More>>
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IEC items of interest for January/February 2019 are as follows:

1. Looking to the future: An overview of the Market Strategy Board’s hot topics for 2019 More>>
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* For further information about any article please email: mail@standards.org.au
1. Members welcome Global Review of Aid for Trade preparations

WTO members discussed preparations for the Aid for Trade (Aft) Global Review and implementation activities at the 6 February AFT session of the Committee on Trade and Development. Members also heard presentations from two workshops on how economies can better pursue environmentally sustainable growth and be better prepared with digital skills.

The Aid for Trade Global Review will take place on 3-5 July 2019. Members welcomed the theme, "Supporting diversification and empowerment", and the suggested format for the event which will include plenary and thematic sessions together with side events. The event is a platform for WTO members and the Aid for Trade community to examine progress made in building trade capacity of developing and least developed countries through Aid for Trade.

Learn more about the Aid for Trade Global Review, including opportunities for proposals, questionnaires, workshops and other activities: https://www.wto.org/english/news_e/news19_e/gr19_06feb19_e.htm

2. Invitation to attend Standards and Regulatory Stewardship workshop jointly hosted by PASC and ISO

The Pacific Areas Standards Congress (PASC) will be holding their Annual General Meeting in Wellington, New Zealand in April 2019. Prior to this year’s meeting, ISO and PASC will be jointly hosting a one and a half day workshop on Standards and Regulatory Stewardship.

Stakeholders from across the PASC region are invited to attend the open workshop.

PASC has also invited their members to suggest regulators to attend and present at the Workshop in the following two sessions:

- Regulation in the 21st century and the role of standards
- Working together – cooperation between standards bodies and regulators

Standards Australia has made submissions for two Australian regulators to present at the workshop for consideration by the organisers.

To find out more or express your interest, visit the PASC website https://pascnet.org/ and contact Senior International Engagement Manager, Karen Batt, at Karen.batt@standards.org.au. Please note that participation at the workshop is limited.
1. Better building with new International Standards for BIM

The global construction industry is booming, bringing with it global construction projects and the need for efficient tools such as Building Information Modelling (BIM) for managing information. A new set of International Standards has just been published to enable BIM to flourish across projects and borders, benefitting the industry as a whole.

ISO 19650-1 and ISO 19650-2 were developed by ISO technical committee ISO/TC 59, Buildings and civil engineering works, subcommittee SC 13, Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM). Australia is a Participating Member of ISO/TC 59/SC 13 with National Mirror Committee BD-104, Building Information Modelling.

Learn more here: [https://www.iso.org/news/ref2364.html](https://www.iso.org/news/ref2364.html)

2. Lighters just got safer, thanks to revised ISO standards

Whether used for lighting a candle, or getting a bonfire underway, lighters remain one of the most popular and useful gadgets of all time. And with several million lighters sold every day, the need for standards in this area is clear.


Learn more here: [https://www.iso.org/news/ref2355.html](https://www.iso.org/news/ref2355.html)

3. Smart manufacturing: new ISO guidance to reduce the risks of cyber-attacks on machinery

In our hyper-connected world, IT security covers not just our data but virtually everything that moves – including machinery. Cyber-attacks or IT malfunctions in manufacturing can pose risks to the safety measures in place, thus having an impact on production and people. New international guidance to identify and address such risks has just been published.

ISO/TR 22100-4, Safety of machinery – Relationship with ISO 12100 – Part 4: Guidance to machinery manufacturers for consideration of related IT-security (cyber security) aspects, is designed to help machinery manufacturers identify and address IT security threats that can impact on the safety of their product. It complements ISO’s flagship standard for machine safety, ISO 12100, Safety of machinery – General principles for design – Risk assessment and risk reduction, which lays down the fundamentals for risk assessment, hazard analysis and documentational requirements.
ISO/TR 22100-4 was developed by ISO technical committee ISO/TC 199, Safety of machinery. Australia is a Participating Member of ISO/TC 199 with National Mirror Committee SF-041.

Learn more here: https://www.iso.org/news/ref2365.html


Tourism is one of the world’s largest and fastest-growing economic sectors, with billions of people travelling each year – and numbers are expected to grow by 3.3% annually until 2030. Tourist accommodation is one of the biggest players, meaning its potential impact on sustainable development is huge. New international guidance for accommodation facilities to help them improve their impact has just been published.

ISO 21401, Tourism and related services – Sustainability management system for accommodation establishments – Requirements, specifies the environmental, social and economic requirements for implementing a sustainability management system in tourist accommodation. It addresses issues such as human rights, health and safety for employees and guests, environmental protection, water and energy consumption, waste generation and the development of the local economy.

ISO 21401 was developed by ISO technical committee ISO/TC 228, Tourism and related services. Australia is a Participating Member of ISO/TC 228 with National Mirror Committee CS-083, Recreational Underwater Diving.

Learn more here: https://www.iso.org/news/ref2366.html

5. Stronger data protection with updated guidelines on assessing information security controls

Software attacks, theft of intellectual property or sabotage are just some of the many information security risks that organizations face. And the consequences can be huge. Most organizations have controls in place to protect them, but how can we ensure those controls are enough? The international reference guidelines for assessing information security controls have just been updated to help.

Developed by ISO and the International Electrotechnical Commission (IEC), ISO/IEC TS 27008, Information technology – Security techniques – Guidelines for the assessment of information security controls, provides guidance on assessing the controls in place to ensure they are fit for purpose, effective and efficient, and in line with company objectives.

It was developed by ISO technical committee ISO/IEC JTC 1, Information security, subcommittee SC 27, IT security techniques. Australia is a Participating Member of ISO/IEC JTC 1/SC 27 with National Mirror Committee IT-012, Information Systems, Security and Identification Technology.

Learn more here: https://www.iso.org/news/ref2367.html
1. **Looking to the future: An overview of the Market Strategy Board’s hot topics for 2019**

Within the IEC, the Market Strategy Board (MSB) has been set up to identify key technology trends and market needs in the areas of IEC work. Comprised of high-level industry leaders and IEC officers, the MSB offers strategies to help guide long-term IEC activities. It provides recommendations to the IEC on the areas that could trigger possible disruptions but also offer opportunities to the IEC in the future.

To better understand some of the key topics this year, e-tech spoke with Peter Lanctot who serves as Secretary to the board (Mr Ian Oppermann from NSW Data Analytics Centre is the Australian Member of the IEC MSB).

Learn more about the IEC MSB’s key topics for 2019 here: [https://iecetech.org/issue/2019-01/Looking-to-the-future](https://iecetech.org/issue/2019-01/Looking-to-the-future)

2. **Standards for key information technologies**

IEC and ISO develop international standards for information and communication technologies (ICT) for business and consumer applications, through their joint technical committee (ISO/IEC JTC 1).

The Joint Advisory Group (JAG) Group on Emerging Technology and Innovation (JETI) was established in 2016, in order to find and recommend opportunities to JTC 1 to facilitate standards development for future emerging and innovation technologies.

A recent JETI group survey established a list of 15 top technologies in 2018. Right now the top five include:

- Quantum computing and autonomous and data rich vehicles, for which JTC 1 has created new study groups following JETI recommendations.
- Autonomous systems, which is being worked on in JTC 1 technical committees for IoT and AI.
- Digital twin and brain-computer interface for which we are developing technology trend reports as an initial investigation and analysis process.

Learn more here: [https://iecetech.org/issue/2019-01/Standards-for-key-information-technologies](https://iecetech.org/issue/2019-01/Standards-for-key-information-technologies)

To find out more about the work of JTC 1, please speak to Stakeholder Engagement Manager, Vi Le, at vile@standards.org.au.
3. **Who needs AI**

In 2017, IEC and ISO became the first international standards development organizations (SDOs) to set up an expert group to carry out standardization activities for artificial intelligence. Subcommittee (SC) 42 is part of the joint technical committee ISO/IEC JTC 1. SC 42 is working with other JTC 1 subcommittees, such as those addressing the internet of things, IT security, and IT governance, as well as the IEC Systems Committee (SyC) for Smart Cities. SC 42 has set up a working group on foundational standards to provide a framework and a common vocabulary. Several study groups have been set up to examine the computational approaches to and characteristics of AI systems, trustworthiness, use cases and applications and big data.

Australia is a member of ISO/IEC JTC 1/SC 42 with National Mirror Committee IT-043 Artificial Intelligence. If you are interested in engaging with this work contact Policy Manager, Jed Horner, at jed.horner@standards.org.au.


4. **The challenges of cyber security in a connected world**

The growth of connected devices has accelerated the convergence of the once separate domains of Information Technology (IT) and Operational Technology (OT), resulting in Industrial IOT (IIOT).

IT and OT are increasingly complementary, but also very different. IT exists in the virtual world, where data is stored, retrieved, transmitted and manipulated. OT, in contrast, belongs to the physical world and deals with real time processes. While IT has to safeguard every layer of the system, OT is about maintaining control of systems: on-off, closed-open, and so forth. IT is about confidentiality; OT is about availability.

The most robust defences rely on both "horizontal" and "vertical" standards. Horizontal standards are generic and flexible, applicable over a broad area and covering fundamental principles, concepts, definitions, terminology and similar general information. In contrast, vertical standards address application-specific areas.

Two examples of horizontal standards stand out. The ISO/IEC 27000 family helps to protect purely information systems (IT) and ensures the free flow of data in the virtual world. It provides a powerful, horizontal framework for benchmarking against best practices in the implementation, maintenance and continual improvement of controls. IEC 62443, the other horizontal standards series, is designed to keep OT systems running in the real world. It can be applied to any industrial environment, including critical infrastructure facilities, such as power utilities or nuclear plants, as well as in the health and transport sectors.