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

International

1. [Indonesia-Australia Comprehensive Economic Partnership Agreement \(IA-CEPA\) Signed](#)

The Australian and Indonesian Governments signed the Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA) earlier this month in Jakarta.

The IA-CEPA is recognised as more than a trade agreement between two countries, but a mechanism to strengthen economic relations, security, politics, development and people-to-people relations. The Agreement provides a framework for Australia and Indonesia to unlock the vast potential of bilateral cooperation and boost economic growth, supporting communities and individuals.

IA-CEPA enables the simplified trade of goods and services between Australia and Indonesia and reduces non-tariff barriers to trade. It provides greater opportunity, clarity and certainty to exporters importers between the two countries.

Standards Australia contributed to the development of the Partnership Agreement through the [Standards for Enabling Trade – Mapping and Gap Analysis Study](#), which was an IA-CEPA Early Outcomes Initiative.

To learn more about what the IA-CEPA means for Australian individuals and business, visit <https://dfat.gov.au/trade/agreements/not-yet-in-force/iacepa/pages/indonesia-australia-comprehensive-economic-partnership-agreement.aspx> and https://trademinister.gov.au/speeches/Pages/2019/sb_sp_190304.aspx

2. [WTO Trade Indicator points to slower trade growth into first quarter of 2019](#)

Trade weakness is likely to extend into the first quarter of 2019, according to the [WTO's latest World Trade Outlook Indicator \(WTOI\)](#) released on 19 February. The simultaneous decline of several trade-related indicators should put policy makers on guard for a sharper slowdown should the current trade tensions remain unresolved.

The most recent WTOI reading of 96.3 is the weakest since March 2010 and below the baseline value of 100 for the index, signalling below-trend trade expansion into the first quarter. Weakness in the overall index was driven by steep declines in the component indices, which appear to be under pressure from heightened trade tensions. Indices for export orders (95.3), international air freight (96.8), automobile production and sales (92.5), electronic components (88.7) and agricultural raw materials (94.3) have shown the strongest deviations from trend, approaching or surpassing previous lows since the financial crisis. Only the index for container port throughput remained relatively buoyant at 100.3, showing on-trend growth.

Temporary factors may have influenced some of the indices. Front-loading of imports ahead of anticipated US-China tariffs may have sustained container shipping to some extent, while technical problems in the German automotive sector may have contributed to weakness in automobile

production and sales. It should be noted that below-trend growth in an index does not necessarily imply a decline in the underlying data.

This sustained loss of momentum highlights the urgency of reducing trade tensions, which together with continued political risks and financial volatility could foreshadow a broader economic downturn. The WTO downgraded its trade forecast last September amid escalating trade disputes and tighter credit market conditions. Trade growth is currently forecast to slow to 3.7% in 2019 from an expected 3.9% in 2018, but these estimates could be revised downward if trade conditions continue to deteriorate. Nevertheless, greater certainty and improvement in the policy environment could bring about a swift rebound in trade growth.

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. It aims 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 below trend growth.

Source: https://www.wto.org/english/news_e/news19_e/wtoi_19feb19_e.htm

[3. Members start implementing 2019-2021 work plan on Technical Barriers to Trade](#)

WTO members began carrying forward their new 2019-2021 work plan to review the operation and implementation of the WTO's Agreement on Technical Barriers to Trade (TBT). In line with the work plan, two thematic sessions on good regulatory practices and conformity assessment procedures were held on 5 March at WTO headquarters. Members then convened a regular meeting of the TBT committee on 6-7 March, where they discussed 59 TBT-related trade concerns, 11 of which were addressed for the first time.

Webcasts are available online for the first two thematic sessions of the TBT for 2019:

1. [Thematic session on Good Regulatory Practice](#)
2. [Thematic session on Conformity Assessment Procedures](#)

On the second day of the TBT committee meeting, members discussed 59 specific trade concerns, including 11 new concerns. A summary of the concerns which were raised and discussed can be found online here, https://www.wto.org/english/news_e/news19_e/tbt_07mar19_e.htm

The committee heard a [report from the secretariat](#) on trends in notifications on specific trade concerns in 2018 and identification of the key findings in this report.

To read the full report on the TBT committee meeting and find out more about the side event hosted by UNCTAD, observers in attendance and further information about discussions, visit the WTO page: https://www.wto.org/english/news_e/news19_e/tbt_07mar19_e.htm

ISO

1. New ISO standard puts humans at the centre of business

Gone are the days when the workplace was built around a fairly straightforward structure, consisting of employer, employee, customer. The winds of technological change may be sweeping away traditional models, but ISO 27501 is helping managers build a more sustainable one for the future.

From the advent of the Internet to what is now known as the Fourth Industrial Revolution, the latest cutting-edge technologies – among them robotics, artificial intelligence (AI), the Internet of Things – are fundamentally changing how we live, work and relate to each other. The issue for business in this new era is not so much about the bottom line, or even just corporate social responsibility, it is also about taking a human-centred approach to the future of work and finding the right tools to ensure that organizations are successful and sustainable.

The likes of AI are presenting a great opportunity to help everyone – leaders, policy makers and people from all income groups and countries – to lead more enriching and rewarding lives, but they are also posing challenges for how to harness these technologies to create an inclusive, human-centred future.

ISO 27501:2019, The human-centred organization – Guidance for managers, can help organizations to meet these challenges. In this brave new world, organizations will not only have an impact on their customers but also on other stakeholders, including employees, their families and the wider community.

The standard is based on ISO 27500, which explains to executive board members the values and beliefs that make an organization human-centred. The standard's requirements and recommendations are intended to be applicable to organizations large or small, and in the public or private sector.

It outlines managers' responsibilities that range from the organizational strategy to the development of procedures and processes that enable human-centredness, to the implementation of those procedures and processes.

Peter Frener, Chair of the subcommittee that developed the new standard, says: "While not all parts of this International Standard will be of equal use to all types of organizations, all core subjects are relevant to every organization." He goes on to say that it is the organization's responsibility to identify which parts are "relevant and significant for the organization to address, through its own considerations and through dialogue with stakeholders".

ISO 27501:2019 was developed by ISO technical committee ISO/TC 159, Ergonomics, subcommittee SC 1, General ergonomics principles. Australia is not a member of ISO/TC 159.

Source: <https://www.iso.org/news/ref2376.html>

2. [A better picture: International Standard gives photography a new exposure](#)

The new technology of the digital age has made photography easier, faster and less expensive and cameras on smartphones and other sophisticated devices have turned us all into happy snappers. The International Standard for photography ensures that we are all up to speed on image quality – whatever the weather.

From photographs posted on the likes of Instagram of breakfast eggs “sunny side up” to chilling out on beaches in Thailand, digital technology has given us the ability to capture a moment in time. Never before has the minutiae of our lives been so well documented!

Young people today are the first generation to grow up in a digitized world and are becoming a creative force in photography. According to a Pew Research Center survey last year, 92 % of millennials own a smartphone – and the baby boomers are catching up.

But whether you want to see the world in black and white or full colour, all photographers expect the cameras on their increasingly sensitive devices to produce high-quality images. ISO 12232:2019, Photography – Digital still cameras – Determination of exposure index, ISO speed ratings, standard output sensitivity, and recommended exposure index, helps to ensure just that.

ISO 12232 was developed by industry experts from a large number of international companies in the photographic industry, including Apple, Canon, Google, Nikon, Olympus and Sony.

Ken Parulski, Project Leader for ISO 12232 since the first edition (published in 1998) and Head of the US Technical Advisory Group to ISO technical committee ISO/TC 42, says the International Standard is used for setting the proper camera exposure, either manually or automatically, when taking pictures. The reported values are similar to ISO film speed values, which enable a film camera to properly expose images on photographic films having different light sensitivities.

ISO 12232 is also used to record the camera exposure as metadata in the image files of almost all current smartphone and digital cameras. It provides a standard method for comparing the photographic sensitivity of different digital cameras and smartphone cameras.

So, as well as helping consumers make better purchasing decisions, the standard enables different products to operate seamlessly with one another and allows manufacturers of digital imaging equipment to introduce technology into products that conform to internationally agreed specifications.

Parulski sums up: “This revised version of ISO 12232 expands the ratings to include higher values, since cameras are becoming increasingly sensitive. Many are now able to capture high-quality photos at very low light levels. ISO 12232:2019 also simplifies and clarifies some of the processes and mathematical functions used to determine the reported values.”

ISO 12232 was developed by ISO technical committee ISO/TC 42, Photography, whose secretariat is held by ANSI, ISO’s member for the USA. Australia participates on ISO/TC 42 with National Mirror Committee MS-065 *Photography*. To find out more or get involved contact Stakeholder Engagement Manager, Vi Le at vi.le@standards.org.au.

Source: <https://www.iso.org/news/ref2375.html>

3. [The new dawn of disease control](#)

In our evermore complex, interconnected world, with health systems undergoing new challenges and stresses, risk management in the healthcare industry has never been more important. Three ISO standards play a significant role in matching clinical quality with patient safety and best practice, helping not only to deal with risks but also to prevent them in the first place.

Only the lucky few get through life in continuous good health, free from the pains and aches of growing older. Not many of us escape painful and debilitating ailments, such as sore joints that eventually require artificial replacements, and most of us, at some time or other, have to resort to health professionals and the healthcare industry in search of cures.

And it is reasonable for us to expect that those healthcare solutions and treatments will return us to our lives as healthier people, feeling better and fit for daily tasks. We put our trust in health professionals when we are at our most vulnerable and the health professionals, for their part, try to ensure that patient safety is paramount and aspire to best practices to reduce medical errors.

[Learn more](#) about the standards developed by ISO/TC 212 *Clinical laboratory testing and in vitro diagnostic test systems* playing a crucial role in disease control. Australia participates on ISO/TC 212 with National Mirror Committee HE-029 *Clinical laboratory testing and in vitro diagnostic test systems*. To find out more or get involved contact Stakeholder Engagement Manager Emilie Mortensen at emilie.mortensen@standards.org.au

4. [Looking for health advances? Latest ISOfocus examines healthcare hot topics](#)

Whether you are being admitted to the hospital, getting medical treatment or simply doing your annual check-up, take a look at some of the specific ways ISO standards are changing healthcare for the better in the latest ISOfocus.

The March/April 2019 issue of ISOfocus provides updates on developments in the health sector and is a vital source of information about the health and healthcare industry. With its focus on driving quality and improving efficiency and cost-effectiveness, it undoubtedly speaks to the most pressing issue of our time.

“We need to overcome our contradictions to make decisions that improve and support healthcare worldwide... for present and future generations,” says Alexey V. Abramov, Head, Federal Agency on Technical Regulating and Metrology of the Russian Federation, in his introductory remark.

“Standards have always played a central role in healthcare, their scope expanding over the years to include the fields of medical services, medical equipment and management systems,” he observes. “Currently, the ISO portfolio contains 1 400 standards for health to help ensure that individuals and communities receive the quality of care they deserve. The guidance they deliver makes it easy to compare health services, exchange information, aggregate data and safeguard patient privacy.”

Inside the latest ISOfocus, you'll find out about the continuous technological developments in healthcare which have saved countless lives and improved the quality of life for even more, from safe syringes and injections to risk management and health records.

We put the spotlight on how ISO standards have changed experiences for patients and their families, and highlight the huge impact they have on medical processes and the practices of healthcare professionals. Here, we share the stories of the sector's thought-leading and top-achieving researchers, activists and standards experts.

Plus, our interview section underlines our global health-related challenges and reveals the art of collaboration with the World Health Organization – looking toward the United Nations' 2030 Global Goals – as part of a worldwide strategic plan for ensuring healthy lives and well-being for all mankind.

Access the new ISOfocus here: https://www.iso.org/isofocus_133.html or contact Standards Australia for a hard copy of the magazine.

IEC

1. [New international standard will offer risk management framework for AI](#)

As the use and application of artificial intelligence (AI) systems increases, addressing the trust aspect of these systems is key to widespread adoption.

Examples include the effects of data or algorithmic bias, ensuring data privacy, and also the lack of transparency and accountability.

A new international standard is being developed by IEC and ISO, which will provide guidelines on managing risk faced by organizations during the development and application of AI techniques and systems. It will assist organizations in integrating risk management for AI into significant activities and functions, as well as describe processes for the effective implementation and integration of AI risk management.

The application of these guidelines will be able to be customized to any organization and its context.

Risk management in the AI context

New technologies bring new challenges, where the unknown is greater than the known. Risk management can help deal with uncertainty in areas where no recognized measures of quality have been established.

“For a specific AI product or AI service, a risk management process ensures that ‘by design’ throughout the product or service lifecycle, stakeholders with their vulnerable assets and values are identified, potential threats and pitfalls are understood, associated risks with their consequences (or impact) are assessed, and conscious risk treatment decisions based on the organization’s objectives and its risk tolerance are made”, said Wael William Diab, Chair of ISO/IEC JTC 1/SC 42, the IEC and ISO joint technical committee for artificial intelligence.

More about the standard

The new standard builds on the principles and guidelines described in ISO 31000 (Risk management – Guidelines), which help organizations with their risk analysis and assessments. It also provides guidance that arises when AI is applied to existing processes in any organization or when an organization provides an AI system for use by others. This project is envisioned to provide a platform and framework for the trustworthiness standardization.

The newly approved work item proposal for the standard is being developed by ISO/IEC JTC 1/SC 42, as part of its comprehensive programme of work that is looking at standardization of the entire AI ecosystem. Australia is a member of ISO/IEC JTC 1/SC 42 with National Mirror Committee IT-043 *Artificial Intelligence*. To find out more or to get involved, contact Stakeholder Engagement Manager Vi Le at vi.le@standards.org.au

To read the full story visit: <https://blog.iec.ch/2019/03/new-international-standard-will-offer-risk-management-framework-for-ai/>

2. [Surgeon reportedly performs brain surgery over 5G network](#)

According to [media reports](#), a Chinese surgeon has performed the world's first remote brain surgery using 5G technology on a patient 3 000 km away. The doctor implanted a [neurostimulator](#) into the brain of a patient with Parkinson's disease.

The doctor, who was on the island of Hainan, off China's south coast, used a computer connected to the next-generation 5G network to control surgical robots in a hospital in Beijing. Conventional 4G networks do not allow surgical operations to be performed due to latency, which is the time taken by networks to respond.

Medical robotics relies on IEC International Standards to help ensure that the design and manufacture of parts meet the strictest requirements. The Subcommittees (SCs) and Working Groups (WGs) of [IEC Technical Committee \(TC\) 62](#): Electrical equipment in medical practice, have been responsible for carrying out the bulk of the medical equipment standardization work required to formulate the [IEC 60601](#) family of Standards. These cover the safety requirements for medical electrical (ME) equipment and medical electrical systems (MES) in current use.

[IEC/SC 62A](#): Common aspects of electrical equipment used in medical practice, formed [Joint Working Group \(JWG\) 9](#) with ISO TC 184/SC 2: Robotics and robotic devices in June 2011; the Joint Working Group is now linked to [ISO/TC 299/JWG 5](#). The JWG 9 remit is to "develop general requirements and guidance related to the safety of medical electrical equipment and systems that utilize robotic technology. The work encompasses medical applications (including aids for the disabled) covering invasive and non-invasive procedures such as surgery, rehabilitation therapy, imaging and other robots for medical diagnosis and treatment".

Surgical robots incorporate sensors, for example to relay information or allow levels of force to be applied precisely. Manufacturers can build more reliable and efficient and safer sensors and microelectromechanical systems (MEMS) thanks to International Standards prepared by [IEC/TC 47](#): Semiconductor devices, and [IEC/SC 47F](#): Microelectromechanical systems.

Currently, 5G field tests are underway around the world and several operators have already announced plans for commercial rollout later this year. 5G will serve as the communications backbone necessary for the large growth in data and connectivity of today's modern society, from the IoT with billions of connected devices, to self-driving cars and smart cities.

With worldwide rollout planning underway, the IEC is well advanced in the development of standards for human safety and device compliance. [IEC Technical Committee \(TC\) 106](#) is playing a key role.

[IEC 62232](#), issued by TC 106, provides methods for determining the radio-frequency field strength near the radio-communication base stations with the intention of evaluating human exposure. This Standard takes into account the [mmWave](#) frequencies to be used for 5G networks.

For devices, TC 106, together with the [IEEE](#), has established a new joint working group to develop international standards for 5G device testing by 2020 and is developing a Technical Report for publication in the first quarter of 2019.

Source: <https://blog.iec.ch/2019/03/surgeon-reportedly-performs-brain-surgery-over-5g-network/>

3. [Keeping critical infrastructure safe](#)

The IEC co-organised and hosted the [Vienna Cyber Security Week](#) in Vienna, Austria which was held from 11-15 March 2019. The IEC General Secretary, Frans Vreeswijk, gave the keynote speech at the Event, which had a theme of protecting critical infrastructure.

Frans discussed the traditional importance and role of security to protect physical infrastructure, information and financial assets. He discussed the transition of society which has led to an increase in the role that cyber security must play.

The need for effective cyber security is heightened by the convergence of operational technology and information technology, and there is an increasing reliance on the standards that have been developed by the IEC to ensure effective security and security methods.

To read the full text of the General Secretary's Address, visit: <https://blog.iec.ch/2019/03/keeping-critical-infrastructure-safe/>

4. [Stretching the limits of printed electronics](#)

From consumer electronics and packaging to the automotive industry, pharmaceuticals, energy and white goods, the latest printed electronics technology enables innovative products, such as touch sensors, flexible displays, solar cells, luminescent films and smart labels.

The Organic Electronics Association (OE-A) starts its 3-day annual *Large area, Organic and Printed Electronics Conference (LOPEC)* in Munich today. Well-being is one of the focus topics and covers a broad field of applications ranging from medicine and healthcare to sports and recreation.

During the OE-A General Assembly, held at the start of the event, Alan Hodgson, Chair, IEC Technical Committee (TC) 119: Printed electronics, has been invited to give an update on the work of [IEC/TC 119](#) and [IEC/TC 124](#): Wearable electronic devices and technologies.

Hodgson will also give a presentation on standardization, during the Encapsulation working group meeting, which will explain the work of [IEC/TC 47](#): Semiconductor devices, TC 119 and ISO TC 61/SC11: Plastics – products.

“Printed electronics has applications in a number of sectors including wellness, medical and healthcare, especially for wearable electronics as markets transition from hard devices in plastic to flexible and conformable electronics. It's great to work with OE-A and have the opportunity to showcase our standardization work, which is helping to drive the development of this innovative industry”, says Hodgson.

Find out more about LOPEC [here](#).

Source: <https://blog.iec.ch/2019/03/stretching-the-limits-of-printed-electronics/>