International Update

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

** Please note that no March 2016 edition was published and the newsletter will now be released mid-month.

1. WTO Standards committee reaches its 500th trade concern

WTO members raised the 500th specific trade concern at a meeting of the Committee on Technical Barriers to Trade on 8-10 March 2016, marking a milestone in their discussions about product regulations and standards. Director-General Roberto Azevêdo qualified this work as "essential to avoid concerns escalating into disputes and to keep trade flowing."

The Technical Barriers to Trade (TBT) Committee gives WTO members an opportunity to discuss each other's product regulations and standards and the impact these have on companies and consumers. These discussions are called "specific trade concerns" — STCs for short.

According to WTO rules, members can regulate their products to protect consumer safety and health, but they need to do it in a way that does not make trade in these products unnecessarily burdensome. This preliminary discussion may contribute to avoid trade frictions from reaching the WTO's Dispute Settlement Body (DSB). Since 1995, less than 2 per cent of STCs discussed in the TBT Committee have become trade disputes.

Following the trend from 2015, STCs on food and drink regulations were at the top of the agenda of this meeting. Among the eleven new trade concerns raised, seven related to food and drinks. In total, 60 specific trade concerns were raised.

Members launched the work program for 2016-2018 (agreed in the Seventh Triennial Review) by discussing how they are working with each other in their Regional Trade Agreements and Free Trade Agreements to reduce barriers to trade from testing and certification, as part of their work on conformity assessment procedures.

Members also discussed how they use regulatory impact assessments (RIAs) to assess the impact that regulations have on trade. Five Members (Korea, China, US, Australia and EU) shared their approaches, and the Organization for Economic Cooperation and Development (OECD) explained their work on regulatory policy and governance. Some main points were the importance of public consultations, methodologies for identifying and assessing the trade impacts of regulation in RIAs, and which regulations should be subject to RIA.

The next meeting of the TBT Committee would be held from 14-16 June 2016 where delegations will continue discussions on standards and commence an exchange in the area of regulatory cooperation.

2. Theme of WTO 2016 Public Forum is to be 'Inclusive trade' (September 2016)

The theme of the 2016 Public Forum, to be held at the WTO's headquarters in Geneva on 27-29 September, is "Inclusive Trade".

The Forum will be an opportunity for participants to discuss how a wider range of individuals and businesses can participate in the trading system and how WTO rules can help to ensure everyone benefits from trade. At a time when the business environment is changing and world growth is slowing, it is important to ensure that trade is truly inclusive, allowing small enterprises, women and innovative businesses to take an active role in the global trading system.

This year's Forum will examine in particular how the WTO can foster the participation of small and medium-sized enterprises (SMEs) in the global market, how the trading system can support innovation and how women can participate more fully in international trade.

The Forum will also see the launch of the WTO's flagship publication, the World Trade Report, which will focus on SMEs. A number of other books will also be launched during this year's Forum.

Stands organized by both internal and external partners will display information concretely showcasing how to make trade more inclusive.

This year marks the 15th anniversary of the Public Forum. Several side events and exhibitions will highlight how civil society organizations have influenced the WTO's agenda over the last 15 years.

The annual Public Forum is the WTO's flagship event. It provides a unique platform for heads of state and leading global businesspeople, academics and non-governmental organizations to come together and discuss some of the major trade and development issues of the day. Over 1,500 participants attend the Forum each year.

1. New field of technical activity proposed by Australia - Blockchain

Australia submitted a formal proposal to ISO for a new field of technical activity on blockchain and electronic distributed ledger technologies. The scope of the proposal is the following: Standardisation of blockchains and distributed ledger technologies to support interoperability and data interchange among users, applications and systems.

Blockchain and electronic distributed ledger technologies are an emerging peer-to-peer data base tool for managing and recording transactions. The technology behind blockchains is open source.

This new disruptive technology offers the prospect for sharing financial, legal, physical or electronic information more readily across multiple sites (nationally and internationally) and from government to business or business to business.

Blockchain has the potential to support efficient and secure transactions and reduce process management issues across a range of economic sectors including:

- government
- consumer products and services
- health
- minerals and precious stones
- financial services
- real estate
- business

Standards Australia will be consulting with stakeholders on this proposal with the aim to lead the ISO work if approved. For more information or to make a submission please contact varant.meguerditchian@standards.org.au by 19th April 2016.

2. Shining a light on management consultancies with new standard in development

Management consultancies have the potential to help businesses fly, if they are used correctly. A new standard in development aims to help consultancies and their clients achieve the best from their consultancy projects.

Bringing a product to market, innovation, organisational design and optimization, IT design or training are just some of the ways management consultancies can help organizations work better. The industry also has a strong influence on the political landscape, with government spending on consultants having grown 1 000 % in recent years.

With a powerful role to play in business and government, influencing major decisions and commanding an ever growing chunk of an organization's budget, the consultancy industry now faces higher expectations, more stringent requirements and greater evidence of a return on investment.

The upcoming standard ISO 20700, Guidelines for management consultancy services, aims to help consultancies and their clients improve transparency and understanding in their consultancy projects in order to achieve better business results. It is currently under development and has just reached the Draft International Standard (DIS) stage, meaning ISO members have the opportunity to vote and comment on the text before it goes to final draft and publication.

The standard is based on the research and experience of a wide range of consultancies and their clients and features recommendations to improve the specification and delivery of management consultancy services. The standard will offer best practice guidance to both parties, ensuring everyone is clear on what is required for an effective and efficient consultancy process, the objectives and their own responsibilities. This will enable organizations to get better results from their consultancies and for consultancies in turn to better demonstrate the value they can offer.

ISO 20700 is due to be published by early 2017. Australia is not currently participating in the Standard's development.

3. New policy on communication of committee work and revised social media guidelines

A new policy has recently been approved to clarify for ISO members and experts involved in the technical work who can share what information, when, how, and with whom. This policy has been adopted to ensure that the integrity of ISO's processes are protected while respecting ISO's WTO obligations to maintain transparency in standards development. Access the new policy on 'Transparency, communication and document retention in the standards development process' here. The ISO social media guidelines are also being updated to reflect this new policy.

4. New projects for better choice and redress for consumers

ISO has recently initiated two new projects that will improve consumer information and redress.

The new ISO/PC 294 Guidance on unit pricing will develop guidance to inform suppliers and retailers on proper display of prices on packaging and labelling, especially in some countries that lack national legislation. The standard will enable easy comparison of products of different sizes or quantities, allowing consumers to make an informed choice. Australia leads the work of this committee providing the Chair and Secretary to progress this important work.

ISO/PC 303, Guidance on consumer guarantees and warranties will fill a gap left by absence of national legislation in many jurisdictions, through provision of internationally agreed best practices on establishing a guarantee or warranty. This will help set the baseline in many countries for policy-makers and suppliers alike to achieve greater post-purchase customer satisfaction. Australia is not currently participating in the development of the guideline.

5. Highlights from the February Technical Management Board meeting

The ISO Technical Management Board (TMB) met in February 2016. Highlights from the meeting included:

1. **2016 TMB Action Plan** - Every year, the TMB develops an 'action plan' where it defines its priorities and selects projects to focus on that support the overall ISO strategy. Some of the TMB's priorities for 2016 include: project management, quality of standards and coordination of work with partner organizations.
2. **Task Force on Coordination and Coherence of ISO's technical work** - The TMB established a Task Force on Coordination and Coherence in 2015 which has explored a generic approach to improve the effectiveness, coordination or consolidation of ISO's technical work. The final part of the work reviewing the consolidation of work in the energy sector was considered and the TMB resolved to establish a new committee, ISO/TC 301, on Energy management and energy savings, consolidating ISO/TC 242 Energy management and ISO/TC 257 Evaluation of energy savings and also establishing a procedure to ensure the smooth transition of current work.
3. A new **procedure** to deal with objections to deal with withdrawal ballots – There has been an increase in the number of objections received since ISO has started issuing withdrawal ballots using e-balloting. Because the comments received often do not provide sufficient information for the TMB to take an informed decision on the case, the TMB approved a new procedure for dealing with these cases. If a member body objects to the withdrawal of a standard, it will be given 3 months to gather information to demonstrate that the standard is being used in at least 5 countries. If the member body does not wish to undertake this task, the standard will be withdrawn.

4.   Approval of new editions of ISO/IEC Directives Parts 1 and 2 (see Item 6 of the update).

6. Changes in the new editions of the ISO/IEC Directives Parts 1 and 2 to be introduced in May 2016

A new edition of the ISO/IEC Directives Part 1 and Consolidated ISO Supplement will be published on 1 May 2016 (7th edition). The following is a brief summary of the key changes.

1. **Mandatory voting on Systematic Review (SR)**: It will become an obligation for Participating members of the committee that developed a deliverable to vote on its systematic review ballot.
2. **Minor revision**: When revising a deliverable using the minor revision process (for changes that do not impact the technical content of the standard), the Foreword of the new edition of the deliverable will now indicate that it is a minor revision and list the updates and editorial changes made.
3. **New role of 'chair elect'**: Committees will soon have the option of selecting a replacement Chair one-year before the end of the term of the current Chair. The replacement Chair would have the role of "Chair Elect", allowing for a one-year overlap during which the incoming chair can learn about the committee from the outgoing chair before taking over the role.
4. **Chair terms can be sub-divided as necessary (but 9 years max)**: In 2015, ISO introduced a 2-term limit for committee chairs (first term maximum of 6 years, with one renewal for 3 years). In the new edition of the Directives, this restriction will be removed. Chairs will be able to serve any number of terms, as long as the first term does not exceed 6 years, and the total number of years served does not exceed 9.
5. **Voting periods will be changed from 'months' to 'weeks'**: ISO is making this change to align with the IEC. All voting periods in the Directives will now be expressed in weeks rather than months, where 1 month = 4 weeks.
6. **Justification statements will no longer be required for approval votes**: The requirement to add justification statements to approval votes was introduced as a pilot in 2015. Having evaluated the results of the pilot, the TMB has decided not to maintain this requirement. However, justification statements are still required for disapproval votes.
7. **NWIPs must be approved by correspondence**: This requirement was introduced as a pilot in 2015 and will now become permanent.
8. **Negative votes at DIS with no technical justification**: A member body voting negatively on a DIS must state the technical reasons why (this is not new). The 2016 edition of the directives will simply clarify that if no justification is submitted with a negative vote, it is automatically not counted. There is also a new procedure to deal with justifications that are not clearly of a technical nature – the committee secretary must contact the ISO/CS Technical Programme Manager within 2 weeks of the ballot closure.

These and other changes approved by the TMB will be effective as of the publication of the next edition of the Directives Part 1 and Consolidated ISO Supplement on 1 May 2016.

A new edition of the ISO/IEC Directives Part 2 will be published on 1 May 2016 (the 7th edition). The overall approach to this revision has been to simplify, eliminate duplication and ambiguities, and adopt a new structure that presents the material in a more coherent manner. Each provision has been reviewed in depth to assess whether it remains relevant and appropriate.

The Directives are available at: http://www.iso.org/directives.

7. Workshop on 'Next generation toilets'

ISO have notified members that an International Workshop Agreement meeting will be held on *next generation toilets* in June 2016 in Singapore.

According to the World Health Organization (WHO), an estimated 2.5 billion people have no access to safe, clean toilets. The consequences are drastic: poor sanitation contributes to about 700,000 child deaths from diarrhea each year.

Next generation "reinvented toilets" remove pathogens and do not require traditional infrastructure, such as sewer, water connection, or electricity. They also cost less than 5 cents per user, which would provide an opportunity for developing countries to utilize safer, cleaner and cost-efficient toilet alternatives.

As part of a multi-phased initiative to facilitate the development of a globally recognized consensus standard for safer, cleaner reinvented toilets, ANSI (the Standards body in the US) – with support from the Bill & Melinda Gates Foundation – will hold an International Workshop Agreement (IWA) workshop on sustainable non-sewered sanitation systems in the last week of June.

The IWA will serve as the first step toward the goal of developing an international standard that will ensure safety aspects of next generation toilets, and that the treated discharged products pose no user, operator health, or environment risks.

The standard would be applicable to individual and community sanitation systems that are self-contained, meet defined discharge requirements, and aim for sustainability.

More information about International Workshop Agreements is as follows:
An IWA is an ISO document produced through workshop meeting(s) and not through the technical committee process.
Any interested party can propose an IWA and can participate in developing one. An ISO member body will be assigned to organize and run the workshop meeting(s) resulting in the IWA. Market players and other stakeholders directly participate in IWA and do not have to go through a national delegation. An IWA can be produced on any subject.
- An IWA can be developed swiftly (published in less than 12 months) to address a rapidly emerging market need or public policy requirement.
- The ISO brand can give international recognition and credibility to your organization's work.
- IWAs can be used as precursors to International Standards

For more information or for registration information please contact daniel.chidgey@standards.org.au.

1. Advancing sustainable cities through technology and data interventions – recent smart cities hangout

Melanie Nutter, Principal of Nutter Consulting LLC, discussed advancing sustainable cities through technology and data interventions in the recent smart cities hangout held on Monday, 18 April.

The hangout session can be viewed at the following link:
http://blog.iec.ch/2016/04/watch-our-worldsmartcity2016-google-hangout-with-melanie-nutter/

Previous #worldsmartcity2016 hangouts have included:
- Scott Mauvais on 'Data privacy' Hangout in March 2016
- Graham Colclough on 'Pain points for urban mobility for World Smart City Forum' in February 2016

2. 3D printing entering a new dimension

3D printing, also known as additive manufacturing, is the computer-controlled sequential layering of materials to create three‑dimensional shapes. Originally developed more than 30 years ago, it is only in recent years that applications of the technology have expanded in fields as diverse as aerospace, medicine and dentistry, construction, the automotive industry and clothing and footwear.

The main 3D printing technologies include Fused Deposition Modelling (FDM: melting of thermoplastic material by heating and then extruding it to create an object layer by layer), Selective Laser Sintering (SLS: using a high power carbon dioxide laser to fuse small particles of metal or plastic powder into 3D objects), Electron Beam Melting (EBM: using a cathode ray as a heat source to melt metal powder in a high vacuum, layer by layer, to create a product) and Stereolithography (SLA: producing 3D models layer by layer by curing a photo-reactive resin with a UV laser).

The additive nature of 3D printing helps in reducing wastage of materials and the associated costs. It now has a growing range of uses beyond rapid prototyping. Although 3D printers are still not cost-effective for most high-volume commercial manufacturing, they are faster and easier to use than they were, and can handle multiple materials. The expiry of key patents has allowed many small companies to produce cheap desktop 3D printers aimed at consumers.

A number of IEC Technical Committees (TCs) and Subcommittees (SCs) develop and coordinate International Standards covering the safety aspects of 3D printing and the electric and electronic components and technology used in additive manufacturing equipment.

Research is now under way on the next stage, dubbed "4D printing", which involves the use of 3D-printed objects and materials able to change shape over time when immersed in liquids or exposed to external energy sources.

The next few years will see rapid advances in metal 3D printing to produce a wider range of finished goods, including more medical implants than is possible today. The speed of printers is expected to increase. Research is underway on how to combine different types of materials such as metals and plastics in a single build cycle, and how to embed components such as sensors, electronics and batteries.

The emerging technology of 4D printing brings exciting possibilities. 4D printing involves the use of shape-shifting materials, where the fourth dimension relates to the time taken for self‑transformation. These programmable or 'smart' materials can adapt their properties and shape on demand after 3D printing, when immersed in water or exposed to external sources of energy such as heat, current or light. Potential applications include tissue engineering and medical implants that change their shape inside the body.

3. Accelerating sustainable carbon neutral development

The Jeju Special Self-Governing Province, Korea, aims to lead global low carbon green growth. By 2030, the island is planning to put in place a carbon-free infrastructure comprising a Smart Grid, broad electric vehicle (EV) network, renewable energy generation and more.

The IEC (International Electrotechnical Commission), the Jeju Special Self-Governing Province and the Korean Agency for Technology and Standards (KATS) have today signed a Memorandum of Understanding (MoU) with the aim to accelerate sustainable, carbon neutral development.

As part of this engagement Jeju will – whenever applicable – give preference to IEC International Standards for its infrastructure development and participate in IEC standardization activities via the Korean IEC National Committee (KATS). In return, the three entities will share information and needs that will help close gaps and improve IEC International Standards.

In the words of IEC General Secretary and CEO Frans Vreeswijk: "Proprietary Standards reduce interoperability and cross-manufacturer solutions. In terms of infrastructure development they can increase cost if every technical solution were to be taken into consideration. By building infrastructure and regulations that are based on IEC International Standards, governments such as Jeju are able to better satisfy the needs of citizens while reducing costs."