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August 2018

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New Proposals

1. A New Field of Technical Activity – Circular Economy

ISO has received a New Field of Technical Activity Proposal from the French National Standards Body (AFNOR) to **Form a new Technical Committee in the field of Circular Economy**.

The scope of the new committee is proposed to be:

Standardization in the field of Circular economy to develop requirements, frameworks, guidance and supporting tools related to the implementation of circular economy projects.

The proposed deliverables will apply to any organization or group of organizations wishing to implement circular economy projects, such as commercial organizations, public services and not-for-profit organizations.

Excluded: specification of particular aspects of circular economy already covered by existing TCs, such as ecodesign, life cycle assessment in ISO/TC 207 Environmental management and sustainable procurement (ISO 20400: 2017 – Sustainable procurement — Guidance).

Note: the TC will contribute to sustainable development and especially to the implementation of the UN Sustainable Development Goals.

The proposed work programme for the field of activity consists of five components in the following order of priority:

1. A Management System Standard for circular economy (Type A)
2. A Standard on implementation guidance (Type B)
3. A Standard for supporting tools
4. Guidelines on the issues of circular economy projects
5. A collection of examples of implementation of circular economy projects

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 Management team at sem@standards.org.au by Friday 31 August 2018.

International

1. 2018 World Smart City Forum to be held in Santa Fe, Argentina

The location for the annual ITU, IEC and ISO combined World Smart City Forum has been announced. This year the Forum will be held in Santa Fe, Argentina on 29 November 2018. The event will be hosted by the Government of the Province of Santa Fe and the Universidad Tecnologica Nacional. The international standards development organisations seek to help make smart cities a reality through a common approach founded on standards.
The open, inclusive forum seeks to:

- Understand the needs of the smart cities communities;
- Demonstrate how international standards add value and can support cities to achieve their strategic and societal goals;
- Build upon the relevance of the SDOs to forge a stronger relationship between SDOs and cities; and
- Promote a strong commitment from the three SDOs for alignment to support the long-term development of the smart cities.

For more information, to download the program and to register for this year's event, visit the World Smart City Forum website: https://www.worldsmartcity.org/

2. Advanced training course for developing economies concludes at WTO

Twenty-six government officials from across the world took part in an Advanced Course on the Economic Analysis of Trade Policy at the WTO from 26 July to 3 August 2018. The course taught participants ways to carry out trade policy research, collect data and implement quantitative analysis in a more autonomous way.

The course highlighted the importance of analyzing economic data and assessing the impact of trade policy decisions at the national level and in multilateral, regional and bilateral trade negotiations. Participants became familiar with sources of data and methodologies to analyze trade and trade policy, including to estimate the impact of certain determinants on trade flows, and to calculate trade policy indicators. The course also provided a platform to discuss ways of enhancing the use of research in policy making.

The course was opened by the WTO's Deputy Director-General Yi Xiaozhun. In his address, he said that analyzing the economic effects of trade policy quantitatively can be very useful in helping WTO members formulate efficient trade policies.

The activity is based on two joint UNCTAD/WTO publications, "A Practical Guide to Trade Policy Analysis" and "An Advanced Guide to Trade Policy Analysis". Participants also heard from Professor Yoto Yotov of the American University Drexel about the latest advances in trade policy analysis, including a model to simulate the long-term impact of trade policy changes.

The chief of the Course Design and Training Section of the WTO's Institute for Training and Technical Cooperation (ITTC), Raymundo Valdés, closed the course by encouraging the participants to use the tools they learned, including by sharing among their colleagues, to support well-informed policy making.

The course – designed by Marc Bacchetta, Cosimo Beverelli, Jose-Antonio Monteiro and Roberta Piermartini of the WTO's Economic Research and Statistics Division – was delivered jointly with the ITTC and was offered as part of the WTO's technical assistance and capacity building courses. It represents the highest level of "specialist" training within the WTO's progressive learning framework.

Source: https://www.wto.org/english/news_e/news18_e/tech_06aug18_e.htm

3. Australia-European Union Free Trade Agreement Negotiations Underway

Australia and the European Union (EU) launched negotiations for a free trade agreement (FTA) on 18 June 2018. As a bloc, the EU is Australia's second largest trading partner, third largest export destination, and second largest services market. The EU was Australia's largest source of foreign investment in 2017.

The Australian Government invites stakeholders to submit their views on the potential opportunities and impacts of an FTA with the EU. Submissions can be made online by all stakeholders.

Why is the Government negotiating an FTA with the EU?

Australia and the EU are natural partners, with a shared commitment to the rule of law, global norms and free and open markets. As articulated in the Foreign Policy White Paper, a strong EU is vital to Australian interests in protecting and promoting a rules-based international order. The Australian Government wants an FTA with the EU to set the benchmark for what can be achieved between like-minded partners.

An FTA with the EU has the potential to open up a market for Australian goods and services of half a billion people and a GDP of US$17.3 trillion. It would provide Australian exporters with a competitive edge, and would give Australian businesses access to a larger export market in the EU. Australian consumers and companies stand to benefit from a free trade deal with the EU, through greater access to goods and services at lower prices. More details about the FTA's potential benefits are available online.

Objectives

Australia's position in the world as a global top 20 trading nation is underpinned by our advocacy for an open global economy and by our FTAs, which ensure the lowest possible barriers to our trade and investment. Australia is seeking an ambitious and comprehensive FTA with the EU to drive Australian exports, economic growth and job creation.

More details about Australia's objectives

Summary of negotiating aims and approach

Source: https://dfat.gov.au/trade/agreements/negotiations/aeufta/Pages/default.aspx

ISO

1. Anchors aweigh: ISO guidelines for lifeboat safety just updated

With more people heading out to sea over summer, safety onboard – and overboard – is under the spotlight. International guidelines for the effectiveness of sea anchors for rescue boats have just been updated.
When we climb aboard any kind of boat or ship, we don't often think of the lifeboat hanging off the side. While we hope never to use it, it is essential that it functions as intended and gets everyone to shore should the need arise.

A sea anchor is a vital component to a rescue boat, reducing the likelihood of it drifting away or spinning around, and keeps it steady in the wind. International guidelines for the performance and safety of sea anchors have just been updated to bring them in line with the International Maritime Organization's International Life-Saving Appliance Code.

Robin Townsend, Chair of the ISO technical subcommittee that developed the standard, said ISO 17339:2018, *Ships and marine technology – Life saving and fire protection* – Sea anchors for survival craft and rescue boats, specifies the requirements, including details such as minimum required drag and resistance to weather.

"*This standard is designed to provide manufacturers with what is required to ensure the anchors not only work effectively, but withstand the conditions in which they are stored*," he said. "*It also features test methods such as for strength, towing and corrosion*."

ISO 17339 was developed by ISO technical committee ISO/TC 8, Ships and marine technology, subcommittee SC 1, Maritime safety, whose secretariat is held by ANSI, ISO's member for the USA. Australia is an Observer Member of ISO/TC 8 with National Mirror Committee ME-059 *Shipbuilding*.

Source: https://www.iso.org/news/ref2313.html

2. Improving customer satisfaction with updated ISO series of standards

We all know that retaining loyal, happy customers is the key to any successful business, but the fickle consumer world is not always easy to please. A series of guidelines has just been published, bringing together international best practice on customer satisfaction.

From handling complaints to service with a smile, taking care of customers is a science in itself and one not to be taken lightly as it can have a dramatic effect on both staff morale and the bottom line. Studies abound that show that those companies that perform well in customer experience have higher revenues and returns on investments. Not to mention that most customers don't go back to a company if they have a bad experience.

Getting the customer experience right, then, is imperative. A series of international standards dedicated to improving customer satisfaction has just been updated, to ensure the information is most relevant and reflects revisions to ISO's flagship standard for quality, ISO 9001.

Stan Karapetrovic, Convener of the working group that revised the standards said they guide organizations on implementing effective systems to improve customer satisfaction.

"*These guidelines were revised simultaneously, aligning both with ISO 9001 and with each other*," he said. "*While each of the standards can be efficiently implemented by themselves, their integrated application is very effective as well*."

The standards are:

- ISO 10001, Quality management – Customer satisfaction – Guidelines for codes of conduct for organizations
- ISO 10002, Quality management – Customer satisfaction – Guidelines for complaints handling in organizations
- ISO 10003, Quality management – Customer satisfaction – Guidelines for dispute resolution external to organizations
- ISO 10004, Quality management – Customer satisfaction – Guidelines for monitoring and measuring

The series of standards was developed by subcommittee 3, Supporting technologies, of technical committee ISO/TC 176, Quality management and quality assurance, the secretariat of which is held by NEN, ISO's member for the Netherlands. Australia is a Participating Member of ISO/TC 176 with National Mirror Committee QR-008 *Quality Systems.*

Source: https://www.iso.org/news/ref2312.html

3. Getting upgraded: newly improved guidelines for testing machine-readable passports just out

Passports have come a long way since the days of clunky hand-written books and long(er) immigration queues. These days, the technology is as slick as the security is strict. Ensuring machine-readable passports work effectively and last their lifetime is therefore a rigorous procedure. ISO and IEC internationally recognized test-method guidelines have just been updated to do just that.

Machine-readable passports (MRPs) mean faster processing and more accurate matching against immigration databases and watchlists, which is why most passports these days fall into that category. To ensure they meet international regulatory requirements, they are standardized against the International Civil Aviation Organization (ICAO) Document 9303. The ISO and IEC standard for testing the durability of these MRPs is an official companion to the ICAO document, defining what is necessary for passports to be compliant. It has just been updated to make it even more robust and fit for today's globalized world.

ISO/IEC 18745-1:2018, *Test methods for machine readable travel documents (MRTD) and associated devices – Part 1: Physical test methods for passport books (durability)*, now replaces the ICAO's own technical report for durability, specifying the minimum criteria to be achieved in order to meet ICAO's expectations.

Tom Kinneging, Convener of the working group that developed the standard said it is essential not just to meet legal requirements but to ensure MRPs withstand the stresses it can be placed under.

"*Having a MRP is only useful if it doesn't fall apart or lose its readability over time*," he said. "*This standard gives details for effective testing so their feasible lifespan can be assessed, and they can thus be built to last*."

ISO/IEC 18745-1 was developed and updated by working group 3 Machine readable travel documents, which is part of the ISO and IEC technical committee ISO/IEC JTC 1/SC 17, Cards and security devices for personal identification, the secretariat of which is held by BSI, ISO's member for the UK. Australia is a Participating Member of ISO/IEC JTC 1/SC 17 with National Mirror Committee IT-012-02 *IC Cards*.

Source: https://www.iso.org/news/ref2311.html

4. Reducing the risks of information security breaches with ISO/IEC 27005

In our hyper-connected, technology driven world, data breaches and cyber-attacks remain a significant threat to organizations, and a lack of awareness of the risks is often to blame. A newly revised standard will help.
Protecting the security of a company's information – whether it be commercially sensitive or the personal details of their clients - has never been more under the spotlight. New legislation such as the European GDPR means organizations are under even greater pressure to ensure their information is secure. But having the most appropriate technologies and processes can be a minefield. The newly revised ISO/IEC 27005:2018*, Information technology – Security techniques – Information security risk management*, provides guidance for organizations on how to wade through it all by providing a framework for effectively managing the risks.

Complementary to ISO/IEC 27001:2013, which provides the requirements for an information security management system (ISMS), ISO/IEC 27005 has recently been updated to reflect the new version of ISO/IEC 27001 and thus ensure it is best equipped to meet the demands of organizations of today.

It provides detailed risk management guidance to help meet related requirements specified in ISO/IEC 27001.

Edward Humphreys, Convener of the ISO/IEC working group that developed both ISO/IEC 27001 and ISO/IEC 27005 said the updated standard is a key tool in the ISO/IEC 'cyber-risk toolbox'.

"*ISO/IEC 27005 provides the 'why, what and how' for organizations to be able to manage their information security risks effectively in compliance with ISO/IEC 27001*," he said. "*It also helps to demonstrate to an organization's customers or stakeholders that robust risk processes are in place, giving them confidence that they are good to do business with*."

ISO/IEC 27005 is one of more than a dozen standards in the ISO/IEC 27000 series that make up the cyber-risk toolkit, led by the flagship ISO/IEC 27001, Information technology – Security techniques – Information security management systems – Requirements. Others in the series include those for protecting information in the Cloud, information security in the telecoms and utility sectors, cybersecurity, ISMS auditing and more.

ISO/IEC 27005 was developed by working group 1 Information security management systems of technical committee ISO/IEC JTC 1, Information technology, subcommittee SC 27, IT Security techniques, the secretariat of which is held by DIN, ISO's member for Germany. Australia is a Participating Member on ISO/IEC JTC 1/SC 27 with National Mirror Committees IT-012 and IT-012-04, *Information Systems, Security and Identification Technology.*

Source: https://www.iso.org/news/ref2309.html

5. Invitation to an international workshop on Screening of GMOs in cotton and textiles

The National Standards Body from the Netherlands has issued an invitation for stakeholders to participate in an international workshop on screening of GMOs in cotton and textiles on 16 and 17 January in India. Ahead of the workshop, two preparatory meetings (online) will be organised in September and November.
The aim of the project is to develop an ISO protocol to screen specific (processed) cotton samples (for instance, seed, leaves, seed cotton, lint, yarn, fabric and garment; both dyed and natural) for the potential presence of known GMOs (both authorised, as well as non-authorised). This protocol would be published as an International Workshop Agreement is the outcome of open workshops of stakeholders on particular topics and can sometimes be a precursor to specific standards development.

This protocol would help to create clarity in the sector with regard to what can and cannot be tested for GMO presence in cotton and textiles.

For further information please contact international.participation@standards.org.au

6. Invitation to an international workshop on 'Using ISO 31000 guidance on risk management in management systems'

There is a steady growth in the number of organizations, of all types and sizes that are using management systems. New ISO management system standards are also being developed to address specific aspects of an organization's activities, products or services. In this context, the high level structure makes it easier for organizations to integrate different aspects within their management systems. However, a large proportion of the organizations using an ISO management system standard may have little knowledge of ISO 31000 guidance on risk management. As they will already be well acquainted with the structure of a management system, linking ISO 31000 with the high level structure will provide these organizations with an introduction to ISO 31000 and to how risk management relates to their management system.
Many small and medium-sized organizations worldwide have benefited from implementing a management system. However, many of them see a challenge in addressing an area as complex as risk management. This aim of the project is to:

a) Enable businesses and organizations to benefit from using ISO 31000 guidance on risk management in their existing management systems;

b) Promote ISO 31000 among management system standards users and promote the use of management systems to users of ISO 31000.

The guidance developed will be published as an International Workshop Agreement which will support these SMEs in starting to address risk management. An International Workshop Agreement is the outcome of open workshops of stakeholders on particular topics and can sometimes be a precursor to specific standards development.

The National Standards Body from the UK (BSI) has issued an invitation for stakeholders to participate in an international workshop on using ISO 31000 guidance on risk management in management systems' on 15 October in London. With a second workshop scheduled for November. Ahead of the workshop, a preparatory meeting (online) will be organised on 6th August 2018.

For further information please contact international.participation@standards.org.au

7. Invitation to an international workshop on 'Competence for Standards Professionals: in Companies (part1) and in Standards-Specialty Organizations (part2)

The Korean Agency for Technology and Standards (KATS) and the Korean Standards Association (KSA) invite you to attend an *International Workshop Agreement on Competence for Standards Professionals: in Companies (part1) and in Standards-Specialty Organizations (part2).* Capacity building and education is important for work-forces in companies, standards developing committees and national standards bodies. Effective capacity building should be based on the needs of companies, standards developing committees and organizations -- Competence Requirements.

This is the reason why similar efforts has been made to develop knowledge or skill set and qualifications programs for standards professionals in ISO Member countries. Also, ISO TMB TF11 has endeavored to develop capability requirements for Chairs, Secretariats, and Project Editors. The IWA may support such capacity building such activities of ISO TMB, and ISO in general.

This ISO International Workshop Agreement (IWA) proposal is designed to collect such common efforts at national, regional, and international levels and to develop commonly agreed competence requirements. The output will be a useful asset for companies and national bodies in capacity building of standards professionals. The IWA will be based on the APEC project report on "Inspiring Next Generation of Standards Professional Development" which has been proposed by Korea and co-sponsored by China, Indonesia, Japan, Malaysia, Peru, the Philippines, Thailand, the US, Viet Nam.

Workshop dates: 25-26 October 2018

Location: Busan, Korea

For further information please contact international.participation@standards.org.au

IEC

1. New and unexpected uses for barcodes

QR codes were the brainchild of the American inventor and mechanical engineer, Joseph Woodland, who was looking for a more efficient way of capturing product information at supermarket checkouts. Seventy years later, people are still finding new and unexpected uses for barcodes.

Legend has it that the idea of adapting the dots of Morse Code into lines came to Woodland while he was doodling on the sand of a Florida beach, in 1948. The striped-scan system was first used with a trackside scanner in the 1950s to identify the ownership and number of railway cars, but only reached the retail sector in June 1974, when a packet of chewing gum bearing a 'Universal Product Code' (UPC) code was scanned at a till in Ohio.

In addition to automating supermarket checkout systems, other tasks performed by QR codes have become known generically as automatic identification and data capture (AIDC). Serving numerous applications – product/item identification, point-of-purchase/use, track and trace and product distribution for healthcare, manufacturing, retail sales, service industry, supply chain and transportation – AIDC technologies are vital for global trade and among the basic enablers of e-commerce.

By providing timely and cost-effective data, they improve processes that cover product life cycles, such as ordering, back office operations, manufacture, distribution, sale, use, repair, warranty and return of products.

There is no limit to how QR codes can be used.

Homeless people in the British city of Oxford are wearing QR codes around their necks as part of a new social innovation project. It allows people with no cash in their pockets to give money with their smartphones, while also providing background details, such as how the person became homeless or what jobs they used to do.

Donors make an online payment into an account managed by a caseworker. It ensures that donations are only spent on approved targets, such as saving for a rental deposit.

Established in 1996, the work of IEC and ISO Joint Technical Committee (JTC) 1 Subcommittee (SC) 31, includes data formats, syntax, structures and encoding, as well as technologies for the process of AIDC and associated devices used in industry and mobile applications. The SC publishes International Standards for QR code symbologies and radio frequency identification (RFID). Australia is not a member of ISO/IEC JTC 1/SC 31 *Automatic identification and data capture techniques*.

Source: https://blog.iec.ch/2018/08/new-and-unexpected-uses-for-barcodes/

2. Protecting data with quantum cryptography

The science of cryptography is at the heart of cyber security. Mobile phone calls, messaging and online banking all rely on complex mathematical algorithms to scramble information in order to protect it from malicious hackers, spies and cyber criminals.

It is no exaggeration to say that there would be no confidentiality or security online without encryption and that many of the operations we take for granted would not be feasible. Faced with increasing cyber attacks against critical infrastructure—including but not limited to power utilities, transport networks, factories and the health care industry—encryption is evolving to meet the threat.

The most prevalent system nowadays is public key encryption. It works by giving users two keys: a public key, shared with everyone, and a private key.

The keys are large numbers that form part of an intricate mathematical algorithm that scrambles a user's messages. The sender encrypts a message by using the receiver's public key in order that only the intended recipient can unlock it with her or his private key.

Even though the public key is freely available, the numbers involved are sufficiently large to make it very difficult to reverse the encryption process with only the public key.

As computers become more powerful, however, and in the face of rogue states with the technology resources to pose a more serious threat, cryptographers are turning away from mathematics and looking to physics—specifically the laws of quantum mechanics—to achieve greater security. Wikipedia defines quantum cryptography as "the science of exploiting quantum mechanical properties to perform cryptographic tasks."

Computers store data using two states: on or off. These are called bits and are represented as a 1 or a 0. Quantum bits have more states that are changing continuously.

That is because quantum cryptography is based on the behaviour of quantum particles, which are smaller units than molecules. For example, an encryption system called quantum key distribution (QKD) encodes messages using the properties of light particles.

The only way for hackers to unlock the key is to measure the particles, but the very act of measuring changes the behaviour of the particles, causing errors that trigger security alerts. In this way, the system makes it impossible for hackers to hide the fact that they have seen the data.

Quantum cryptography is an area of interest for two key expert groups:

IEC Technical Committee (TC) 65: Industrial-process measurement, control and automation, which is responsible for the IEC 62443 series of standards on Industrial Communication Networks – Network and System Security.

ISO/IEC JTC 1/Subcommittee 27, part of the Joint Technical Committee (JTC) set up by the IEC and the International Organization for Standardization (ISO) to work on International Standards for information technology. SC27 is best known for the ISO/IEC 27000 series of Standards. Australia is a Participating Member of ISO/IEC JTC 1/SC 27 with National Mirror Committee IT-12 *Information Systems, Security and Identification Technology*.

Source: https://blog.iec.ch/2018/08/protecting-data-with-quantum-cryptography/

3. Addressing ethics in autonomous and intelligent systems: IEC launches an open community jointly with eight other founding organizations

Ethical issues around autonomous and intelligent systems are surfacing across a wide variety of industries and need to be addressed in an open and transparent manner. IEC today jointly launched and became a founding member of the Open Community for Ethics in Autonomous and Intelligent Systems (OCEANIS). This global forum brings together organizations interested in the development and use of standards as a means to address ethical matters in autonomous and intelligent systems.

Standards can help reassure end users and can play an important role in alleviating concerns regarding ethics. There is a real need and opportunity for broad collaboration between all relevant national and international organizations to develop locally and globally applicable solutions that support technical, business and policy decisions.

"The IEC is aware of its crucial role in building consumer trust and supporting public and private decision making. We have a responsibility to humanity and our planet to be mindful of finite resources and shield all living beings from harm. Not everything that can be accomplished with technology should be undertaken. We are happy to be a founding partner of OCEANIS; I believe it will be an important forum for providing insights on ethical matters and positively influence technology advancement," said IEC General Secretary & CEO Frans Vreeswijk.

OCEANIS participants consent to:

- Share information and coordinate on respective initiatives and programs
- Enhance understanding of the role of standards in facilitating innovation, and address problems that extend beyond technical solutions to addressing ethics and values
- Jointly organize events at local/regional/global level
- Identify opportunities for concerted activities that strengthen the development and use of standards in addressing technical, societal and ethical implications arising from technology advancement.

The OCEANIS community is open to all interested organizations.

In addition to the IEC, Founding Members include the:

- Austrian Electrotechnical Association (OVE)
- Austrian Standard international (ASI)
- British Standards Institute (BSI)
- China Electronic Standardization Institute (CESI)
- Institute of Electrical and Electronics Engineers, Inc. (IEEE)
- International Electrotechnical Commission (IEC)
- National Standards Authority of Ireland (NSAI)
- Servicio Ecuatoriano de Normalization (INEN)
- Verband und Deutsche Kommission Elektrotechnik Elektronik Informationstechnik (VDE/DKE)

Source: http://www.iec.ch/newslog/2018/nr0718.htm

4. Securing the critical supply chain

Senior information security experts from the aviation and energy sectors recently took part in a panel discussion about the challenges of securing the critical supply chain. They were taking part in a Financial Times cyber security conference in London.

The speakers gave details of the challenges they face and the solutions they deploy to meet them, bearing in mind that safety is also a major concern for them. Airbus Head of cyber security architecture Dr Kevin Jones explained that Airbus had three main activities: manufacturing commercial aircraft, helicopters and defence equipment.

“This gives Airbus a very large supplier base at a time when it is going, like many other manufacturers through a huge transformation programme,” he said.

To protect its supply chain, Airbus introduced a number of measures that include secure remote access for suppliers and a certain degree of access segregation, full audit of Airbus’s and suppliers’ production facilities and the identification of vulnerabilities. Suppliers have to review their process and make sure they meet Airbus standards.

As regards coding for safety environments, Airbus has internal teams with experts in code reverse engineering and in reliability assessment. “A lot of money, time and efforts are invested in making sure that any code we have is well validated. As any large organization, we have a very complex and extensive supply chain and the ways we handle it very much depend on the risks this supply chain poses to our business,” Jones said.

Peter Merker, CISO for Skyguide, which provides air navigation services for Switzerland and certain adjacent parts of neighbouring countries, explained that the entire air traffic control sector was going through a huge technological transformation driven by digitization. This digital transformation means moving away from a monolithic equipment base with a lifecycle of over 20 years to systems coming from the IT environment and “introducing commercial off-the-shelf software when we can, due to cost pressures and flexibility.

The entire air navigation control system is managed centrally and increasingly integrated across the continent within Eurocontrol, which means the digital transformation and the way the air traffic control sector uses suppliers are happening everywhere.”

“Skyguide buys software directly so we’re looking at contractual aspects, at source code reviews, which is new for us since we developed the codes ourselves.” Skyguide owns SkySoft, a software development company, which specializes in air traffic control management systems. “We manage what we develop ourselves together with what we buy off-the-shelf,” Merker said.

Dexter Casey, Group CISO for Centrica, a British-based multinational energy and services company, explained that Centrica had two main divisions, the first one, British Gas, for energy [gas and electricity] “has very large equipment, gas platforms and stations, thus facing challenges similar to those mentioned by the previous speakers.” The second Centrica division, he added, is Connected Home, an IoT company, “which has similar problems too with chips and chipsets coming from one place.

It is proving extremely difficult contractually to ask suppliers to change configuration or make these components unique," Casey said, adding that Centrica had 30,000+ suppliers, and a team of some 15 staff reviewing contracts and performing security assessments. "What Centrica has to do is to focus its efforts on the 100-200 suppliers that have a critical impact on delivering its services," he explained.

Several speakers mentioned the risks posed by "watering hole" attacks, in which malware is planted in certain websites of suppliers that are likely to be visited by the organizations being targeted. Software supply chain is an attractive target for attackers.

A July 2018 report by the US National Counterintelligence and Security Center (NCSC) warns that "software supply chain infiltration already threatens the critical infrastructure sector and is poised to threaten other sectors." All panellists agreed that they faced similar challenges with infrastructures and processes relying more and more on both information and communication technology (IT) and operational technology (OT), making it much more complex than before to manage supply chains when digitization was less widespread and cyber threats were not an issue.

Source: https://blog.iec.ch/2018/08/securing-the-critical-supply-chain/