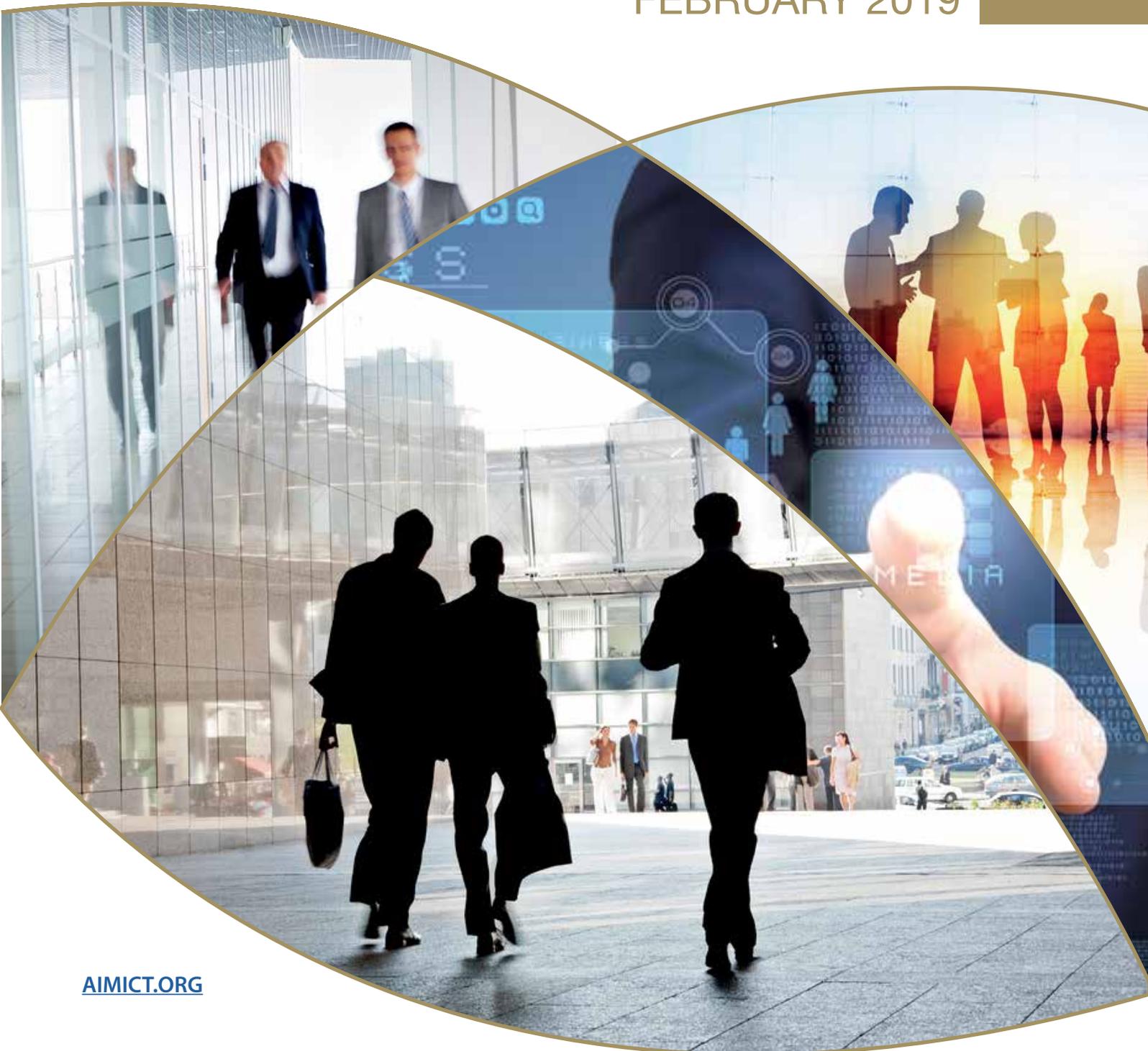


المجمع العربي الدولي لتكنولوجيا الإدارة
The Arab International Society for Management Technology (AIMICT)
Member of TAG-Foundation
عضو في طلال أبوغزاله فاؤندينشن



AIMICT NEWSLETTER

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AIMICT CONDUCTS ISO 27001 LEAD AUDITOR COURSE



AMMAN - The Arab International Society for Management Technology (AIMICT) held new sessions of ISO 27001 Lead Auditor course in February 2019 in Amman.

The program aimed at enabling the participants to develop the necessary expertise to perform an Information Security Management System (QMS) audit by applying widely recognized audit principles, procedures and techniques. During the training course, the participants acquired the knowledge and skills to plan and carry out internal and external audits in compliance with ISO 19011 and the certification process according to ISO/IEC 17021-1.

This five-day course targeted auditors seeking to perform and lead Quality ISMS audits, managers and consultants seeking to master an Information Security Management System audit process, individuals responsible for maintaining compliance with ISMS requirements, and experts who work as advisors in Information Security Management.

AIMICT CONDUCTS ILM'S "HUMAN RESOURCE MANAGER" PROGRAM IN IRBID

IRBID, Jordan - The Arab International Society for Management Technology (AIMICT) conducted a Human Resource Manager (HRM) course for a group of participants from different sectors in Irbid.

Human Resource Manager program aimed to develop the necessary skills and knowledge of employees in the field of management and Human Resource Planning.



The 40-hour program is accredited by the Institute of Leadership and Management (ILM) – UK and targets trainers, teachers and instructors, co-trainers, and HR staff, and can be given in Arabic and/or English.



AIMICT ORGANIZES PROFESSIONAL QUALITY MANAGER PROGRAM COURSE AND EXAM



AMMAN - The Arab International Society for Management Technology (AIMICT) will hold new sessions of the Professional Quality Manager (PQM) course on March 10th, 2019 in Amman.

The PQM program aims at providing the participants with the necessary knowledge to implement effective quality practices in quality and strategies implementation frameworks, in addition to developing and promoting researches and applications in the field of quality principles and practices.

It addresses a number of important knowledge frameworks such as Essentials of Quality Management, Total Quality Management Tools, Core Concepts of Leadership and People Management, Strategic Planning in Quality Management, Customer Focus for Business Excellence and Supply Chain Management.

The program, accredited by the Institute of Leadership and Management (ILM) - UK, targets companies' managers, heads of units and departments, quality control officers and professionals seeking to improve their productivity.

Those who wish to register should contact the Society's management and fill the registration application through the following link:

http://aimict.org/Certificate_Registration.aspx?title=key_pqm



HOW TO TACKLE TODAY'S IT SECURITY RISKS

BY PECB



The attraction of cybercrime to criminal hackers is obvious: tangled webs of interactions, relatively low penalties, disjointed approaches on money laundering and potentially massive payouts. The key is preparation and seeing vulnerabilities, and resilience, in terms of interactions with overall management systems, and that's where the Information Security Management Systems (ISMS) standard ISO/IEC 27001 comes in.

This is the flagship of the ISO/IEC 27000 family of standards, which was first published more than 20 years ago. Developed by ISO/IEC JTC 1, the joint technical committee of ISO and the International Electrotechnical Commission (IEC) created to provide a point of formal standardization in information technology, it has been constantly updated and expanded to include more than 40 International Standards covering everything from the creation of a shared vocabulary (ISO/IEC 27000), risk management (ISO/IEC 27005), cloud security (ISO/IEC 27017 and ISO/IEC 27018) to the forensic techniques used to analyze digital evidence and investigate incidents (ISO/IEC 27042 and ISO/IEC 27043 respectively).

These standards are not only about helping manage information security but also help identify and bring criminals to justice. For example, ISO/IEC 27043 offers guidelines that describe processes and principles applicable to various kinds of investigations, including, but not limited to, unauthorized access, data corruption, system crashes, or corporate breaches of information security, as well as any other digital investigation.

Staying ahead of the game

Keeping this family applicable to the needs of businesses, small and large, through a process of constant evolution is a serious responsibility for ISO/IEC JTC 1's subcommittee SC 27 on IT security techniques. It's in large part thanks to the contribution of people like Prof. Edward Humphreys, who chairs the working group responsible for developing ISMS, that it remains one of the most effective risk management tool for fighting off the billions of attacks that occur each year, which likewise continue to evolve in their targeting and methods.

Prof. Humphreys, a specialist in information security and risk management with more than 37 years of experience in consulting and academia talks about the fundamentals of ISMS and how you can be ahead of the criminals to protect businesses and consumers. “It’s true that risks that threaten information, business processes, applications and services are continually evolving. ISO/IEC 27001 is a continual improvement standard, which means the built-in risk management process allows businesses to keep up to date in their fight against cybercrime.”

According to Prof. Humphreys, the continual improvement aspect of ISO/IEC 27001 means that an organization can assess its risks, implement controls to mitigate them, and then monitor and review its risks and controls, improving its protection as necessary. In that way, it’s always on the ready and prepared for attacks: “If used properly, ISMS enables the organization to keep ahead of the game, responding to the evolving risk environment that the Internet and cyberspace present.”

From Threats to Opportunities

At the business level, it remains a formidable task to model and mitigate threats from all conceivable angles. There’s a clear need to use a unified, integrated security system across the whole business and, given the complexity of interrelationships, we can ask whether ISMS could apply to small and medium-sized enterprises (SME).? Prof. Humphreys further explains

“ISMS are applicable to all types of organization and all types of business activities, including those of SMEs. Many SMEs are part of supply chains, so it’s essential that they are in control of, and manage, their information security and cyber-risks in order to protect themselves and others.”

Prof. Humphreys explains that a business’s obligations are typically defined in service-level agreements (SLA), contracts between partners of the supply chain that detail service obligations and requirements and establish legal liabilities, and that ISMS often form an integral part of such agreements.

Of course, there are challenges attached to online business for SMEs, but they are far outweighed by the enormous potential that has been opened up by the Internet. It could be argued that it is smaller businesses that have been the most enabled by technology, a point made recently by Ambassador Alan Wolff from the World Trade Organization. Speaking at the 2018 ISO General Assembly, Wolff observed that “anybody – who has a design; who has a computer; who can get on the Web; has access to a platform – can become a part of international trade.”

Such as ISMS is needed to mitigate the downsides. Prof. Humphreys reminds us that, “a cyber-attack on one part of the supply chain could disrupt the whole of the chain” and the impacts can reach way beyond your own business, or even your direct clients. That’s as true for artisan toymakers from Bali as it is for government national health services in Europe.

The right to privacy and the need for confidence

Our private lives may be less complex than global business, but just as much is at stake. For many of us, simply following best practices for passwords and security updates (and bearing in mind that if it smells fishy, or looks too good to be true, then it almost certainly is) should help keep us safe from cybercriminals, much of the time. But people are increasingly asking questions about the way that institutions and companies store, analyze and monetize the vast amounts of data that we hand over more or less voluntarily.

But does the ISO/IEC 27000 family provide answers to these sorts of unknowns? “Recently, subcommittee SC 27 has embarked on a new development – ISO/IEC 27552 – which further extends ISO/IEC 27001 to

address specific needs of privacy.” Currently at the draft stage, the document specifies requirements and provides guidance for establishing, implementing, maintaining and continually improving privacy management within the context of the organization.

When privacy, finances, individual or corporate reputation are threatened, it undermines confidence and impacts our behavior, both online and in real life. The role of the ISO/IEC 27000 family in allowing us to continue to advance is paramount. With many reasons to feel anxious as almost every aspect of our lives becomes digitized, it’s reassuring to know that there’s a family of standards to count on for information security management systems, and a global group of experts like Prof. Humphreys working to keep us one step ahead.

Will 5G Be the Platform for Tomorrow’s Smart Cities?

BY ENDRITA MUHAXHERI & JULIAN KUÇI, PECB

Connectivity is one of the main pillars that are defining life in the 21st Century. The level of depth that connectivity defines our routines in this Century is truly astonishing.

With a particular boost after the first decade of the century, we have developed not only habits, but entirely new jobs, industries, lifestyles and daily tasks which either revolve around the internet fast connection, or are born precisely because of these developments in connectivity. Having a small device in your hands (which, is still unsuitably called a “phone”) with exponentially more processing power than the entire Apollo 11 mission, which provides you the world’s knowledge in the palm of your hands, and with instant and either free or very cheap video calls at your fingertips (or even cooler, with your voice commands), was pure sci-fi not that long ago! If you are reading this article and still remember chat rooms, or MSN as one of the first instant messaging platforms, you know exactly what we mean.



The name “5G”, following its predecessors, stands for “5th generation of mobile telecommunications technology,” and it has been a long way since what one can imagine was once “1G”. For those of you who can remember, 1G was the analog connection used by those big bumpy cellular phones – the first of their kind that could be carried and used without a cord. Fast forward to 2G (because there were several technologies that replaced the 1G radio waves before 2G) which enabled us to send text messages, and the real revolution started not that long ago with 3G, which made possible for a cellular phone to connect to the web faster.

Even though it marked a huge step in the development of connectivity as we know it today, 3G was still not the best with a speed of 8Mbit/s to a maximum of 42Mbit/s with the DC-HSPA+ technology, but the common user rarely got to this speed. This meant that we were slightly limited in what we could watch and not every streaming was flawless. Until the upgrade to the 4G! With a maximum of around 100 Mbps (in normal conditions), and at a lowest of around 5 Mbps, users can watch all the videos, movies and shows they want.

However, numbers show that the leap from 3G to 4G is a far cry from the difference between 4G and 5G. This technology promises a 20 Gbps top speed connection! That’s right – at its best, it’s 100 times faster than the 4G connection we use today. Just to give you an idea, that means that we will be able to

download a 90 minutes movie in 1-2 seconds. This promises uninterrupted streaming of 4k movies, and the complete eradication of latencies.

The main difference between 4G and the upcoming 5G, in technical terms, is the wavelength that 5G utilizes. They are previously inaccessible highfrequency millimeter radio waves between 30 and 300 GHz. Known as “mmWaves”, they have not been used in the past due to high costs, a lack of practicality and strict government regulation. Millimeter waves are grouped tighter, at a significantly more compact capacity than the standard sub-5 GHz radio waves used currently. However, the downside of using these new network waves, which allow for great speed, is that their higher frequencies have more difficulty to penetrate objects. 2.4 GHz WiFi is best for a home environment, while 5 GHz is best to operate in high speeds in an optimal network environment.

Will 5G be the key to building smart cities?

Many believe that 5G will be the key to smart cities, because for the idea of the smart city to reach its true potential, the crucial element is 5G. With an ability to support up to 1 million devices per square kilometer, it will provide considerable improvements in speed, production capability, traffic capacity, latency and spectrum efficiency required by the smart city ecosystem.



As 4G technology enabled the explosion of smartphones, mobile apps, and m-commerce, the advancement to 5G will support fast-growing, different services for both human and machine communications. In the future, the movement for smart cities may be the most transformative step in the history of urbanization. According to the Global Commission on Economy & Climate, smart cities may save the world as much as \$22 trillion by 2050.

According to a report from the International Data Corporation (IDC), smart city technology spending reached \$80 billion in 2016, and investments are expected to rise to \$135 billion by 2021. According to the Ernst & Young report about the megatrends, based on current rates of urbanization, it is forecasted that more than 66% of the world’s population will reside in cities by 2050. Over the next 40 years, urban centers will see a surprising 1 million new residents arriving each week. As the urban population increases, cities must find means to decrease resource consumption and diminish carbon emissions.

Smart city technology among other benefits can help cities function more efficiently, while enhancing services to businesses and citizens, sustainability and economic development. It will benefit city governance, education, transportation, healthcare, building management and more.

As Artificial Intelligence and machine learning abilities become common, possibly data analytics will substantially impact the 5G/smart city development. However, one of the biggest challenges can be considered security. The great increase in connected devices will intensify security threats and widen the attack surface. However, apart from the security challenge 5G technology delivers multiple benefits for the cities such as:

- Broadband everywhere – 5G offers better coverage and performance both indoors and outdoors
- High speed – The 20Gbps top 5G speed will allow consumers to download an HD movie in seconds; TV reporters can stream real-time broadcasts etc.
- Energy efficient – IoT devices battery life will reach up to 10 years lifecycles. This will diminish the replacement costs of the battery and will reduce maintenance

- Enhanced experience – 5G culminates into greater reliability, enhancing the overall experience for the individual or the machine
- Reduced environmental footprint – Smart cities are fighting the negative effects caused by humans on the environment by using renewable energy sources, energy-efficient buildings, air quality controllers, and so on

How does a Smart City look like?

A smart city gathers and analyzes data from IoT sensors and video cameras. This information then is used by the city operator to decide how and when to take action (even though some actions can be performed automatically). An example is the public waste bin, which can contact the city for service when it is near capacity instead of waiting for a scheduled pickup. Another example is the smart automobiles communication with other cars to anticipate traffic conditions.

The smartphones of pedestrians, as well as cars would also be able to communicate with the street lighting in the area they're driving or walking, so the lights will be turned only on those roads where there is active traffic. These activities will result in money and city power savings while keeping drivers safe.

Are ISO Standards the starting point?

ISO standards provide an overall framework of the things that a city should address to become a smart city through environmental management, responsible use of resources, energy efficiency etc. There are multiple standards that play a key role in helping urban areas become more connected and sustainable, improve the citizens' quality of life, and cope with a growing population.

Some of the standards include ISO 26000 for Social Responsibility, which contributes to sustainable development, ISO 50001 for Energy Management, considering the importance of meeting energy needs in a sustainable manner of the growing populations. Another important standard is ISO 39001, Road Traffic Safety (RTS) Management Systems, which supports efficient road transport and the safe movement of people while reducing pollution.

Additionally, as our global connectivity increases, so does the risk of security breaches and their associated threats. As such, standards like ISO/IEC 27001 and ISO/IEC 27002 for Information Security Management Systems support organizations in addressing security and privacy issues, while ISO/IEC 38500 on the governance of information technology provides a framework for the efficient and effective use of IT within organizations.

Also one of the goals of the agenda of the United Nations Sustainable Development Goals is improved "health and well-being." For that, ISO has more than 1300 standards and standard-type documents dedicated to all aspects of health and well-being. One of them is ISO 45001, Occupational Health and Safety Management Systems, which helps bring safety in the workplace.

The 5G evolution, which will create the advanced infrastructure needed for smart cities, has reached a very promising stage. In the not-too-distant future, our cities will be smarter, cleaner, and safer places to live. Many cities are now becoming smarter and implementing strategies to address and explore the efforts to improve mobility, healthcare, public safety, and productivity. It's no surprise that the move to 5G is accelerating, but certainly, 5G can't exist alone, so other technologies introduced both before and after 5G, will make the smart cities possible. Cities and towns which are first to embrace this development will see the ultimate benefit, while slow adopters will be less competitive.



For more information

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