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3<sup>rd</sup> Asia-Pacific Regional Forum

# on Smart Cities and e-Government

21-22 September 2017, Bangkok, Thailand  
at Seminar Room 3, IMPACT Exhibition and Convention Center

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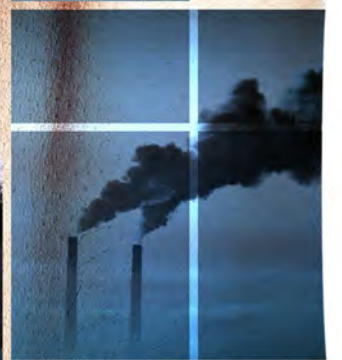


# ดีแทค ชวนคิดใหญ่ ร่วมลงมือ พลิกไทยให้ดีขึ้น



ถ้าคุณมีไอเดียดีๆ ที่จะช่วย  
พลิกชุมชนรอบตัวให้ดีขึ้น  
ส่งไอเดียของคุณเข้ามา  
ดีแทคพร้อมสนับสนุน  
ให้ไอเดียของคุณเป็นจริง  
ข้อมูลเพิ่มเติมที่

[dtac.co.th/PlikThai](https://dtac.co.th/PlikThai)

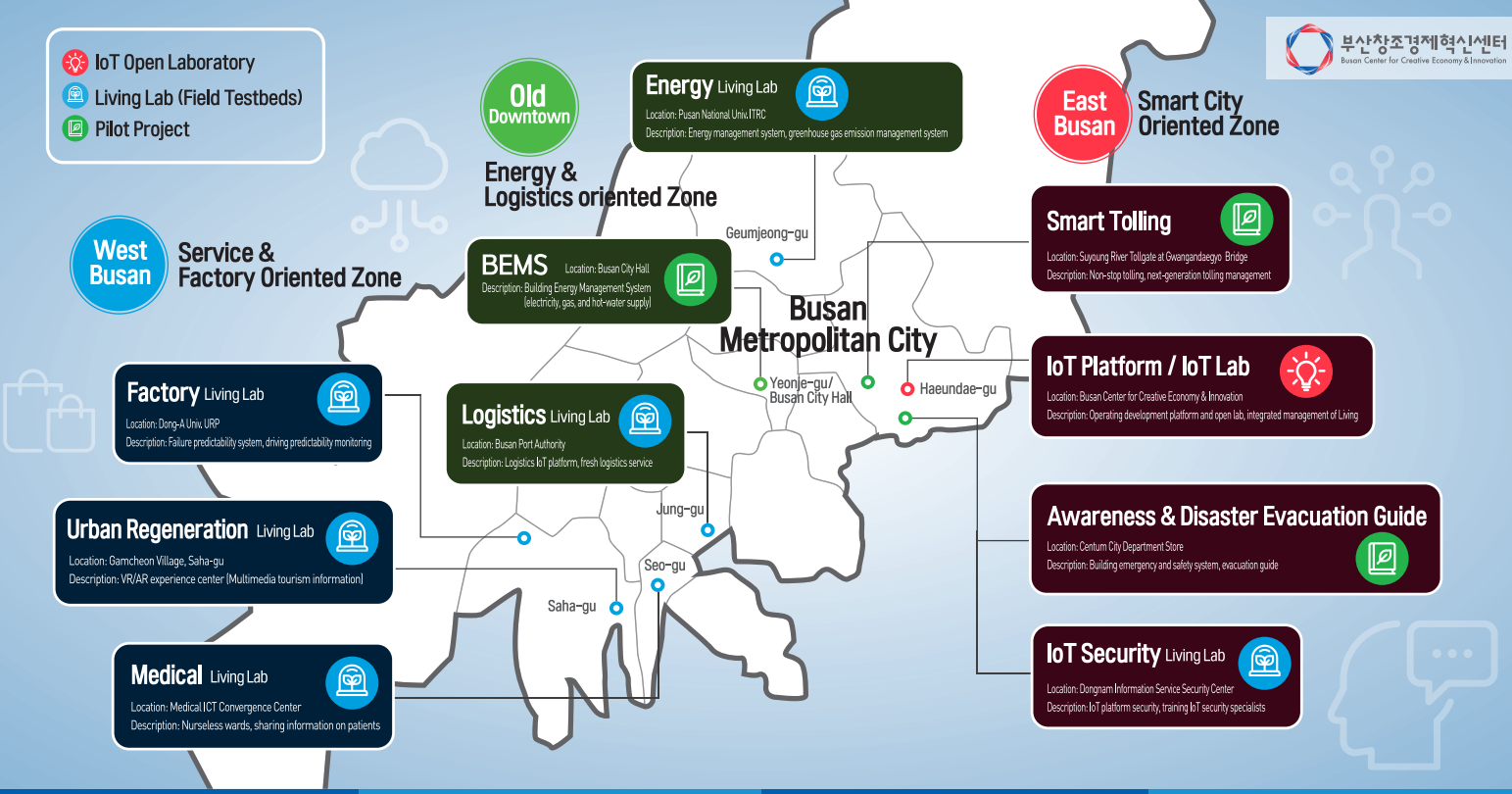


# Overview of Busan Smart City Services

## Overview of Key Projects Prospective City Services



## IoT Living Lab to Build Startup Ecosystem in Busan





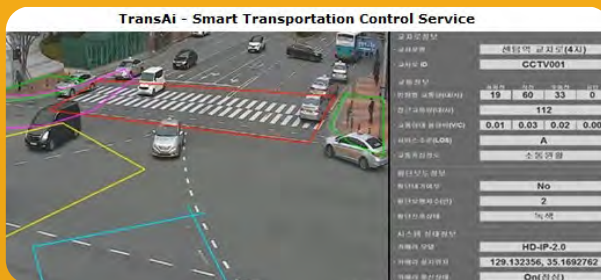
# 3<sup>rd</sup> Asia-Pacific Regional Forum on Smart Cities and e-Government

21-22 September 2017, Bangkok, Thailand  
at Seminar Room 3, IMPACT Exhibition and Convention Center  
<https://itu.int/go/sceg2017>

## Tentative Programme 21 September **2017** Thursday

**Venue:** Seminar Room 3

12:00 – 13:00	<b>Registration</b>
13:00 – 13:45	<p><b>Welcome + Opening Remarks</b></p> <ul style="list-style-type: none"> <li>• <i>H.E. Dr Pichet Durongkaveroj</i>, Minister of Digital Economy and Society of Thailand</li> <li>• <i>Mr Malcolm Johnson</i>, Deputy Secretary General, ITU</li> <li>• <i>Dr Young-sook Nam</i>, Secretary General, WeGO</li> </ul>
13:45 – 14:00	<b>Photo session</b>
14:00 – 16:00	<p><b>High-level Discussion on Digital Governments</b></p> <p><b>Moderator:</b> <i>Hannes Astok</i>, Deputy Director, e-Governance Academy, Estonia</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• <i>H.E. Dr Pansak Siriruchatapong</i>, Vice Minister of Digital Economy and Society of Thailand</li> <li>• <i>Hon. Mark Brown</i>, Minister for Telecommunications, Cook Islands</li> <li>• <i>H.E. Mohammad Hadi Hedayati</i>, Deputy Minister of Communications &amp; IT, Afghanistan</li> <li>• <i>H.E. Bounsaleumsay Khennavong</i>, Vice Minister of Post and Telecommunications, Laos PDR</li> <li>• <i>H.E. Dr Kan Channmeta</i>, Secretary of State, Ministry of Posts and Telecommunications, Cambodia</li> <li>• <i>Mr. RS Sharma</i>, Chairman, Telecom Regulatory Authority of India (TRAI)</li> <li>• <i>Dr Byung-jo Suh</i>, President, National Information Society Agency (NIA), Republic of Korea</li> <li>• <i>Dr Chae Gun Chung</i>, Head, United Nations Office on Governance</li> </ul>
16:00 – 16:15	<b>Coffee break</b>
16:15 – 17:45	<p><b>High-level Discussion on Smart Sustainable Cities</b></p> <p><b>Moderator:</b> <i>Jaume Salvat</i>, ITU consultant</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• <i>Mr. Pakkaratorn Teainchai</i>, Governor of Chonburi Province, Thailand</li> <li>• Governor of Rayong Province, Thailand</li> <li>• <i>Mrs. Wanvilai Promlakano</i>, Deputy Governor, Bangkok Metropolitan City, Thailand</li> <li>• <i>Mr. Bima Arya Sugiarto</i>, Mayor, Bogor City, Indonesia</li> <li>• <i>Mr. Syed Qasim Ali Shah</i>, Deputy Mayor, Peshawar, Pakistan</li> <li>• <i>Dr. Young-sook Nam</i>, Secretary General, WeGO</li> </ul>



## Introduction

DELI-i has a concept of Global business in line with 4th industrial revolution of Artificial intelligent image analysis platform service, And the first succession cases of Smart city in Korea.

2014 'Application to object/text recognition & discrimination including human, vehicle and characters and platform-based 'TransAi' applicable to various sectors including Smart City developed (Smart City, Smart Crosswalk, Smart Tourism, Smart Park, Pedestrian Safety, Traffic and Factory etc.)

## Service features

- \* Artificially intelligence + Pattern-based technology
- \* Pattern optimized to environment + learning-based analysis
- \* Detection of moving object at learned condition  
(Ex. open condition of weather, shadow, camera swaying)
- \* Reducing budget up to 30% by using existing CCTV
- \* With own core technology, we are able to apply any type of services.

## Projects

- Busan Smart City ..... 2015 ~ 2017
- Daegu Smart Park ..... 2017
- Sunnam ITS level-2 construction ..... 2015
- Wonju Traffic signal control improvement ..... 2014
- Suncheon Advanced Traffic Management System level2 construction ..... 2012

### DELI-i Co., Ltd

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- **Fax** : +82 70 4325 1088
- **Email** : jjongmoz@nate.com (CEO Mr.Jeong Jongmo)  
cocoispuppy@gmail.com (Cecilia Kim)
- **Web site** : www.deliikorea.com
- **Address** : No.808, 250 Hagui-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Rep of Korea, 14056

22 September **2017**

Friday

Venue: Seminar Room 3

08:00 – 09:00

Registration

09:00 – 10:45

**Session 1: Digital Government and Digital Public Services****Keynote I: “Presentation”** by *Dr Sak Sekhonthod*, President & CEO of Electronic Government Agency of Thailand (EGA)**Keynote II: “Estonian E-government Ecosystem: Key Digital and Analog Elements”** by *Hannes Astok*, Deputy Director, e-Governance Academy, Estonia**Moderator: Hon. Mark Brown**, Minister for Telecommunications, Cook Islands**Panel Speakers:**

- *Hidayatul Haq Hidayat*, Chief Information Officer, e-Government Directorate of ICT Ministry, Afghanistan
- *Badamsuren Byambaakhuu*, Deputy Director, Policy and Coordination Department for IT, Communications & Information Technology Authority of Mongolia
- *Sonam Tobgay*, Senior ICT Officer, Ministry of Information and Communications, Bhutan
- *Lesieli Siasini Petelo*, Principal Assistant Secretary, Ministry of Communications, Tonga
- *Kesone Soulivong*, Deputy Director of E-Government Center, Lao PDR
- Q&A

10:45 – 11:00

Coffee break

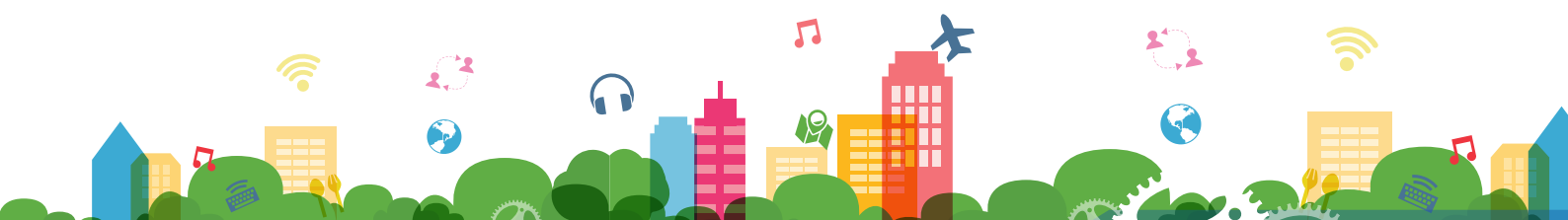
11:00 – 12:45

**Session 2: Digital Transformation****Keynote: “Digital Transformation and Industry 4.0”** by *Dr Suh, Byung-jo*, President, National Information Society Agency (NIA), Republic of Korea**Keynote II: “Gigaband City Enhances Digital Transformation”** by *Woragarn Likhitdechakadi*, Director, Network Marketing & Solution, Huawei Thailand**Moderator: Ioane Koroivuki**, ITU Regional Director for Asia and the Pacific**Panel Speakers:**

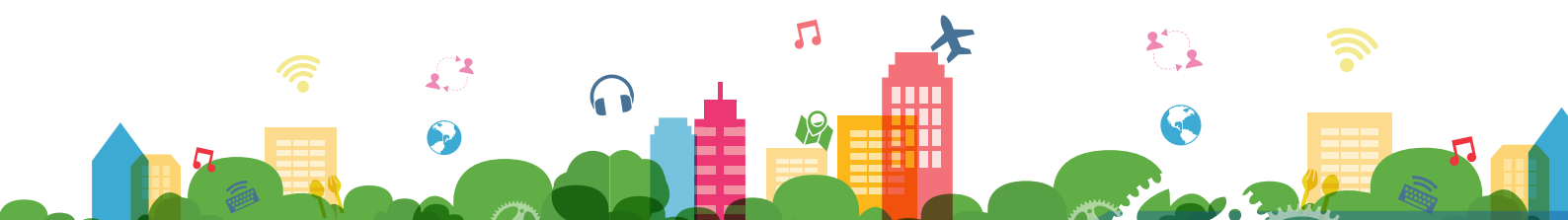
- *Alan Silor*, Assistant Secretary, Department of Information and Communications Technology, Philippines
- *Uttam Chand Meena*, Assistant Director General, Department of Telecommunication, India
- *Lap Hien Do*, Head of Information System Management Division, e- Government Center, Ministry of Information and Communications, Vietnam
- *Yu Yu Naing*, Assistant Director, Posts and Telecommunications Department, Ministry of Transport and Communications
- *Muhammad Ali Iqbal*, Manager of Ignite, Ministry of IT & Telecom, Pakistan
- Q&A

12:45 – 14:00

Lunch break



14:00 – 15:45	<p><b>Session 3: Smart Sustainable Cities</b></p> <p><b>Moderator:</b> <i>Jaume Salvat</i>, ITU consultant</p> <p><b>Panel Speakers:</b></p> <ul style="list-style-type: none"> <li>• “Participatory Governance for Good Smart City: Focusing on Implications from Gentrification for Achieving the SDGs” by <i>Dr Chung, Chae Gun</i>, Head, United Nations Project Office on Governance (UNPOG)</li> <li>• “Thailand Smart Cities” by <i>Dr Supakorn Siddhichai</i>, Head of Smart City Division, Digital Economy Promotion Agency (DEPA), Thailand</li> <li>• “Industry Collaboration Enables Smart City” by <i>Su Peng</i>, Director, Network Marketing &amp; Solution, Huawei Southern-East Asia</li> <li>• “Enabling the human possibilities of smart, safe and sustainable cities” by <i>Guillaume Mascot</i>, Head of Government Relations Asia-Pacific and Japan &amp; India, Nokia</li> <li>• “Presentation” by <i>Barbara Pareglio</i>, Technology Director, Internet of Things Programme, GSMA</li> <li>• Q&amp;A</li> </ul>
15:45 – 16:00	Coffee break
16:00 – 17:45	<p><b>Session 4: Digital Societies and Innovations</b></p> <p><b>Moderator:</b> <i>Wisit Atipayakoon</i>, ITU Regional Office for Asia and the Pacific</p> <p><b>Panel Speakers:</b></p> <ul style="list-style-type: none"> <li>• “FinTech for Unbanked” by <i>Roar Bjaerum</i>, Head of Financial Service, Telenor</li> <li>• “Mobile Payment Usage in China” by <i>Grace Yin</i>, Director, WeChat Pay, Tencent</li> <li>• “Digital Cities and Innovation Cities for a Smarter City” by <i>Setiaji</i>, Head of Jakarta Smart City</li> <li>• “Smart Contract – The Next Frontier” by <i>Sathapon Patanakua</i>, Board Member of Thai FinTech Association, MD &amp; Founder of SmartContract Thailand and Block M.D.</li> <li>• “Blockchain Technology &amp; Digital Currencies” by <i>Poramin Insom</i>, Lead Developer and Founder of Zcoin</li> <li>• Q&amp;A</li> </ul>
17:45 – 18:00	Closing



# แค่คุณลิ้น เราก็ชื่นใจ

“ลองมาลิ้นกับดีแทค super 4G ดูซิคะ”





**23 September 2017**

08.30am-09.00am **Breakfast, Networking and Registration**

09.00am-09.30am **Welcome Ceremony**

(30 mins)

*Malcolm Johnson*, Deputy Secretary-General, ITU

*Areewan Haorangsi*, Secretary General, APT

*Col. Dr Settapong Malisuwan*, Vice-Chairman, NBTC (tbc)

09.30am-09.50am **Opening Thinking Point – Delivering a Co-ordinated IoT strategy for the Asia Pacific Region**

(20 mins)

*Natasha Beschorner*, Senior Information and Communications

Technology Policy Specialist , Global ICT Department, World Bank

### **09:50am – 11.00am Session 1:**

#### **Fuelling the Internet of Things - Meeting the short and long-term connectivity requirements**

There are many connectivity solutions to help power and connect the billions of connected devices that make up the IoT. Each one is unique and has advantages, and for the connectivity requirements of the hyper-connected IoT world to be fully met, a mix of different solutions and technology will be required. This session will look at some of the different options that are going to be central to this mix. It will look at the potential of 5G to deliver the required technologies, and the progress that is being made in this area within the Asia region. And with wide-scale 5G roll-out still some time away, it will also look at solutions that are being put forward in the meantime to meet today's immediate demand for low-power, wide-area IoT.

- What makes 5G particularly appealing for IoT and how can IoT stakeholders across Asia prepare for the 5G world? To what extent will 5G meet the promise that many are suggesting of being the true 'enabling technology' for IoT?
- What options are available to meet today's immediate demand for low-power, wide area IoT connectivity?
- What are the respective advantages and disadvantages of proprietary network technologies operating in unlicensed spectrum bands (such as LoRa and Sigfox); and those technologies and standards operating in licensed bands, such as NB-IoT and LTE-M?
- What role with other technologies such as WiFi and satellite play and what will be the right technology mix to deliver the required quality of service and connectivity for IoT?

**Moderator:** *Monsinee Keeratirainon*, TH Partner & Country Director, Detecon Asia-Pacific Ltd

#### **Speakers:**

*Muhammad Imam Nashiruddin*, Commissioner, The Indonesian Telecommunication Regulatory Authority

*Jesada Sivaraks*, Secretary to the Vice Chairman, National Broadcasting and Telecommunications Commission (NBTC)

*Barbara Pareglio*, Technology Director of IoT Programme, GSMA

*Ronald van Kleunen*, CEO Glocobron Pte Ltd

*Arvind Mathur*, ITU consultant

Representative, Satellite (tbc)

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11.00am – 11.20am **Networking Break**

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## **11.20am – 12.25am Session 2:**

### **Security Standards and Privacy Frameworks – Paving the way for Trust and Confidence in IoT**

IoT is becoming accepted and embraced in all areas of society, as both consumers and vertical industry sectors recognise the potential that it offers, and confidence in technologies and systems grows. IoT offers huge challenges as well as opportunities however, especially in the areas of data protection and security, and any widespread data breaches or a perceived lack of either a sufficient data protection framework or a secure end-to-end ecosystem could prove a huge dent in trust and confidence, and result a barrier to continued investment and growth. This session will look at the work that is being done to address these issues, as well as at the security and privacy frameworks that are in place to protect IoT devices, systems and users. Ultimately it will focus on the collective responsibility of all stakeholders to ensure a coherent approach across the region to ensure trust and confidence in IoT devices and systems continues to grow.

- How can policymakers and industry players work together to create trust amongst both consumers and businesses that IoT technologies and systems are secure, and that their privacy rights are protected?
- Are the privacy principles seen in Asian countries fit for purpose when it comes to IoT devices, and will they ensure consumers feel more confident? How must policymakers ensure that innovation is not hampered by heavy procedures?
- What are the unique security implications and challenges created by IoT applications, and how can stakeholders work together to ensure these are being addressed?
- What is the importance of ensuring a co-ordinated and harmonised approach to both security and privacy, and what work is being done in this area across Asia and globally?
- How can it be ensured that consumer and industry confidence in IoT continues to grow both in the short and long-term?

**Moderator:** *Jongbong Park*, Director, Project Development, APT

#### **Speakers:**

*Stephen Kai-yi Wong*, Privacy Commissioner for Personal Data, Hong Kong

*Chris Perera*, Senior Director, International External & Regulatory Affairs group, AT&T

*Mohammad Hadi Hedayati*, Deputy Minister, Ministry of Communication and IT, Government of Afghanistan

*Chaichana Mitrpant*, Deputy Executive Director, ETDA

*Anthony Bargar*, Managing Director, Cyber Security Consulting Group (CSCG) & Former Senior Cyber Policy Advisor, Office of the Secretary of Defense, USA (tbc)

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12.25pm-13.20pm **Networking Lunch**

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## Session 3: Delivering an Inclusive Internet of Things - Maximising the benefits of IoT for all

From the most technically advanced cities, to the most remote rural areas, and across multiple different industries, IoT has the potential to change lives and deliver economic benefits everywhere. This afternoon's sessions will look at the specific role that IoT is playing in two key areas – the automotive and manufacturing sectors; and then also focus on the challenges and opportunities that IoT presents in less developed rural areas. Ultimately the aim will be to explore what needs to be done going forward to ensure that IoT truly is a technology for all people across Asia, and not just the digital "haves"

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13.20am - 13.40am **Introductory Presentation – Delivering an Inclusive Internet of Things**  
*Marc Vancoppenolle*, Global Head of Nokia Government Relations, Nokia

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13.40am - 14.50pm **Session 3i: The Connected Cars debate - Disruptive business models and future trends of the connected and autonomous car industry**

Increased connectivity in cars provides a range of new commercial opportunities for all industry stakeholders as well as huge potential benefits for consumers. Throughout Asia, OEMs, mobile operators and a host of other industry stakeholders are making moves in this exciting new space and new trends are emerging as a result. There are however, a number of important issues that need to be addressed, both at industry and policy level, in order to ensure that new business models can emerge and the full potential in this key sector is realised.

- How are policymakers helping to create an environment where innovation is able to flourish?
- How will regulation impact the roll out of connected and autonomous cars in Asian countries and in different regions around the world?
- What opportunities are created by car connectivity and what impact is this having on the automotive industry?
- What new business models are emerging as a direct result of this innovation?
- As we move closer to a world full of fully autonomous vehicles, how can car manufacturers, mobile operators and other stakeholders work together to drive new business opportunities?

**Moderator:** *C.K Vishakarma*, Founder, CEO- AllThingsConnected and IoTSG

**Speakers :**

*Dr.Passakorn Prathombutr*, Former President of ITS-TH Association, Senior Executive Vice President, DEPA

*Manuel Simas*, Vice-President of Sales, Veniam

*Anil Chet Karamsingh*, Head of Enterprise IoT Unit, Axiata

*Thanawat Koomsin*, President of The Thai Automotive Industry Association

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14.50pm - 15.10pm **Afternoon Refreshments**

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15.10pm - 16.20pm **Session 3ii: The Rise of IIoT (Industrial internet of things) – maximising the potential of smart and connected manufacturing in Asia**

Big investment in smart and connected factory systems is starting to be seen in countries across Asia Pacific - the region has the largest concentration of new IIoT connections with more than five million additional expected in 2017. As forward-looking businesses and



# Now is the right time to implement LTE for Public Safety

Nokia helps with smooth migration from narrowband technologies to mission-critical mobile broadband

*Above: LTE is driving the development of new applications and services*

The public safety industry is today at an interesting turning point that will define the evolution of the mission-critical broadband space. There is a lot of talk in the industry about the connected police officer or first responder of the future and the impressive set of devices and gadgets they will have at their disposal. But to build the foundation for the augmented reality of tomorrow, we need to do more than showcase gadgets. Making the right technology choice to enable innovative development is a pressing matter today, and it means investing in the latest generation of technology.

What does it require? A clear plan for the transition together with a trusted partner that understands the technology evolution. And a definition of future services for unlocking the full potential of mobile broadband.

Early implementations of LTE-based public safety

networks have taken place in several countries.

Transitioning from narrowband systems to LTE is safe, as you can switch on new services one by one.

The 3GPP standardisation for public safety specific features in Release 13 has been completed. Mission-critical push to talk, extended proximity services, and other enhancements to the LTE network require only a software upgrade, not major investments in infrastructure. Further public safety LTE network implementations are ongoing in Asia, Europe, the Middle East, and the US, showing that LTE technology maturity is on the right level today for mass deployments. End-to-end standardized public safety networks are expected to be available in early 2017.

Now is the right time to invest in next generation mission-critical LTE networks that create a credible foundation for the future.

## LTE is an enabler for building safer and smarter cities

Urbanisation and globalisation are changing the way city infrastructure is managed. Citizens and governmental agencies need smarter, better integrated, secure services – like e-government, emergency services support, transportation and remote healthcare. Robust broadband access, sensor networks, cloud capabilities, security, and Internet of Things (IoT) platforms are key components of any smart city implementation.

For mission-critical users, the key requirements for smart city network, platforms and services are the same as those of today – security, reliability, availability and prioritisation capabilities. The global LTE ecosystem is driving the development of new applications and services that benefit from high throughput and low latency, such as automatic licence plate readers and live video streaming with analytics right at the network edge. In the future, we will see further innovations in this space.

When looking at the mission-critical technology choices of today, it's clear that implementing mobile broadband with standardised LTE provides a future-proof foundation for smart cities.

Future 5G networks are an evolution of LTE, bringing more capacity and ultra-low latency that enable new use cases with even higher bandwidth requirements.

To meet the future needs of mission-critical networks in smart cities and beyond, Nokia helps bridge together the various connected devices, sensors and applications as well as different agencies and enterprises operating in smart cities.

An excellent example of Nokia's end-to-end expertise and technology portfolio is the recent contract with the Dubai government. The comprehensive solution we provide enables high-bandwidth voice, video and other data applications for mission-critical services and IoT applications.

It is also a great example of how making the decision to adopt LTE ties closely together with Dubai's ambition to become a safe and smart city for its residents and visitors. Mobile broadband brings greater efficiency with shared network resources for providing seamless services to citizens and first responders.

This project shows how Nokia supports customers as a trusted long-term partner, as we have been working with public safety communication networks in Dubai since 2001.

Read more in this press release:  
<http://nokia.ly/1U92cUe>



## Nokia helps with smooth evolution from narrowband systems to comprehensive broadband networks

Nokia has a history of more than 60 years of experience with governmental customers. Combined with our background in TETRA technology, it makes Nokia a strong and trusted brand in the mission-critical communications space.

We also have long experience in supporting telecom operators with their migration from legacy networks to



the latest mobile broadband technologies. Similarly, we are helping the public safety industry with a smooth migration to LTE.

Today, Nokia has all the building blocks in place to help mission-critical network operators and agencies quickly adopt mobile broadband. We have a comprehensive end-to-end technology and service portfolio:

- Robust LTE radio and core network that provides the needed coverage, capacity, load balancing, geo-redundancy, prioritisation and quality of service.
- Compact LTE solutions for emergency and disaster recovery situations and to establish coverage in remote areas.
- Resilient, secure, quality of service capable transport solutions: IP/MPLS-based backhaul with integrated packet microwave and optical transport to provide shared services network infrastructure and meet future bandwidth growth.
- End-to-end security for all network layers, applications and devices.
- Professional services to meet the specific needs of public safety customers from network design, implementation and integration, to optimisation and network management.
- Industry-specific devices, applications, and interworking functions for narrowband systems such as TETRA and P25.

Nokia supports all the different deployment options for mission-critical networks: dedicated networks with dedicated spectrum, hybrid solutions for network and spectrum sharing as well as public safety services running on commercial operator networks.

Nokia offers solutions to help Public Safety agencies operate efficiently in densely inhabited as well as in rural or remote areas, in emergency and disaster recovery situations, in large-scale emergencies such as forest fires and floods, as well as during major events for securing everyone's safety – both in indoor and outdoor locations.

Read more on our webpage:  
<http://networks.nokia.com/public-safety>



countries embrace these new technologies and the potential that they offer, others are left with a choice – innovate or be left behind. This session will look at the potential offered by the IIoT, and the different building blocks that need to be in place and the challenges that need to be overcome in order for these benefits to be fully realised in Asia.

- What is the current state of play with regards to the development of smart machines and factories, and how far we have come to date?
- Which countries and businesses are most advanced in their implementation of IIoT technologies, and are reaping the rewards?
- What impact will IIoT have on the workforce within Asia's industrial sector, and what role does education and training need to play?
- What barriers remain for those companies who have not yet adopted smart technologies in their manufacturing processes, and how can these be overcome?
- What role do policymakers need to play in creating an environment for IIoT to thrive, and ensure the region becomes a world leader in this key area?

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15:10pm – 15:25pm **Introduction by Moderator:** *C.K Vishakarma*, Founder, CEO- AllThingsConnected and IoTSG

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15:25pm – 15:40pm **Presentation:** *Tomoaki Kubo*, Secretary General, Robot Revolution Initiative

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15:40pm – 15:55pm **Presentation:** *Sanjay Bakshi*, Head of Digital Strategy and Implementation, Shell

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15:55pm – 16:10pm **Presentation:** *Panita Pongpaibool*, Senior Researcher, NECTEC

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16:10pm – 16:25pm **Room-wide discussion**

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16.25pm - 17.30pm **Session 3iii: Case Study Session - Using IoT to bridge the digital divide**

As we have seen earlier, there is a vast amount of evidence demonstrating IoT adoption across cities throughout Asia, and also in specific sectors like automotive and manufacturing. However rural areas are not being left behind either. This session will showcase some of the projects that are starting to use IoT to make a positive impact on quality of life in rural communities, and help with closing the digital divide. It will then look more generally at the work that needs to be done to roll-out similar projects on a wider basis and ensure that IoT truly is a technology for all.

**Moderator:** *Dr Adisak Srinakarin*, Executive Vice President, Electronic Government Agency (Thailand)

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16:25pm – 16:40pm **Case Study 1: The use of IoT to deliver health, education and financial services to remote areas in India**  
*R.S. Sharma*, Chairman, TRAI India

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16:40pm – 16:55pm **Case Study 2: The use of IoT technologies to improve farming / agriculture**  
*Mr.Thiraphant Sirisoonthornphibul*, Vice President & Head of B2B Product Department ,Dtac

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16:55pm – 17:10pm **Case Study 3: The use of IoT technologies to improve education**  
*Dr Jonghwi Park*, Programme Specialist, ICT in Education, UNESCO

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17:10pm – 17:30pm **Room Wide Discussion: Using IoT to help boost economies and increase living standards in those areas that need it most – Challenges and Opportunities**

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17:30pm **End of Summit**

# Public Safety with Hybrid Cloud

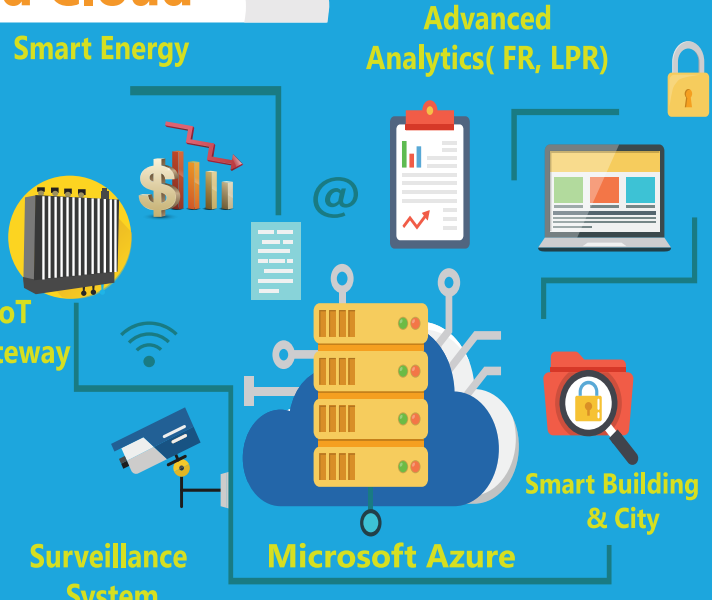
**Innodep** เป็นบริษัทจากประเทศเกาหลีใต้ ที่ประสบความสำเร็จและได้รับรางวัลเกียรติยศมากมายจากรัฐบาลและสถาบันต่างๆ

โดยเฉพาะงานระบบ **Smart City** มีเทคโนโลยีการจัดการกล้องวงจรปิดอัจฉริยะประสิทธิภาพสูง ออกแบบมาให้รองรับงานที่เป็นระบบ video management system (VMS) ชื่อว่า VURIX IoT-Matrix สามารถติดตั้งใน data center หรือรองรับการใช้งานบนระบบ Cloud และทำงานร่วมกันเป็นหนึ่งเดียวได้แบบไร้รอยต่อ (Hybrid Cloud)

นอกจากจัดการกล้องวงจรปิดแล้ว VURIX ยังรองรับการทำงานกับเซ็นเซอร์หรืออุปกรณ์มาตรฐาน Internet of Things (IoT) เช่นการตรวจจับการเคลื่อนไหว ความร้อน ความชื้น แสงสว่าง ความดันบรรยากาศ หรืออื่นๆที่ส่งสัญญาณมายัง IoT Gateway ผ่านระบบเครือข่ายที่เชื่อมกับ VURIX ให้ประมวลผลหรือรับการแจ้งเตือน เพื่อสั่งการขั้นต่อไปเป็นแบบอัตโนมัติ

**VURIX** สามารถเชื่อมต่อกับระบบวิเคราะห์ เหตุการณ์ลักษณะต่างๆที่เกิดขึ้นอย่างทันทีทันใด เมื่อตรวจพบสิ่งผิดปกติที่กำหนดให้เฝ้าระวังไม่ว่าจะเป็นคนในฝูงชน หรือรถยนต์พาหนะ โดยสามารถตรวจพฤติกรรมมนุษย์ที่มีการเคลื่อนไหวผิดปกติจากการดำเนินชีวิตปกติสุขของชุมชนนั้นๆ นอกจากนี้ยังสามารถรู้จักใบหน้าบุคคลและแจ้งเตือนเมื่อตรวจพบ แล้วย้อนภาพกลับไปยังเหตุการณ์ต่างๆที่เกิดขึ้น เพื่อเก็บพยานหลักฐานหรือใช้ติดตามผู้ต้องสงสัย

**Innodep** มีพันธมิตรทางเทคโนโลยีหลักคือ **Dell EMC** และ **Microsoft** รวมถึงรองรับการทำงานกับกล้องวงจรปิดจากผู้ผลิตกว่า 90 ยี่ห้อ จนได้รับการยอมรับและนำไปใช้งานเชื่อมต่อกับกล้องระดับพื้นที่ศูนย์ควบคุม มีสัดส่วนการใช้กว่า 60% หรือมีกล้องวงจรปิดที่เชื่อมเข้ามาในระบบของ VURIX มากกว่า 100,000 กล้องจากทั้งหมด 170,000 ที่ติดตั้งทั่วประเทศเกาหลีใต้



# VUR!+ City



# THAICOM 8

THAICOM 8 was launched in May 2016 on a mission to strengthen our video channel platform at 78.5 degrees East and enlarge our footprint over high growth South Asia, Southeast Asia, and Africa markets. Carrying a 24 Ku-band transponder payload, THAICOM 8 enables a full range of data, media, and telecom services tailored to the communication needs of the broadcast and media industry.

**For more information, contact [sales@thaicom.net](mailto:sales@thaicom.net).**

[www.thaicom.net](http://www.thaicom.net)