

Issue 117

# Teletimes

## International

The only tri-regional magazine focused towards the ICT, Telecom & Satellite Sectors of the Middle East, Asia and Africa



**“We can see sustained growth in video distribution and DTH services”**

William Wade, CEO - Asiasat  
talks to Teletimes ahead of IBC 2015

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# Teletimes

## International

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## Letter to Readers



**Khalid Athar**  
Chief Editor

Dear Reader,

Welcome to the latest edition of Teletimes International. The telecommunications industry is evolving day by day, shifting from voice to data, from 3G to 4G and now we are at the verge of an industry shift that is to come in the form of 5G telecommunications. With all the efforts being made in research commissioned by the European Union and by equipment manufacturers such as Huawei, we have the Etisalat Group at the forefront of this quest for 5G as Etisalat plans to become the first operator to bring 5G to the Middle East. Recommended for a read, we have inside an editorial piece from the Etisalat Group inside on the subject titled "Stepping into a world of 5G". My second recommendation from this edition is an exclusive interview with Mr. William Wade, the CEO of Asiasat who talks about Asiasat's future plans and foreseen growth in DTH & Video Distribution Services. The interview is featured ahead of

IBC Amsterdam scheduled to take place during the 10th to 15th September, 2015. Asiasat will be participating in the event and showcasing some of its latest solutions. Teletimes International is also a media supporter of the event for Print and Digital Media and we plan to see many of you at the event.

In other major news, Google has rebranded itself as Alphabet, an umbrella organization looking over Google and other ventures of former Google such as Calico. You will find inside this edition a report on the subject citing the blog post announcement by Larry Page and some comments from Ovum.

As per routine, you will find the latest news regarding all major industry players.

For any queries regarding meetings at IBC, you can personally contact me on [khalidathar@teletimesinternational.com](mailto:khalidathar@teletimesinternational.com). Please enjoy reading this edition of Teletimes International!



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We provide highly-reliable broadcast and broadband solutions in Europe, Africa, Middle East, and Central Asia via Azerspace-1 at 46°E equipped with C-band and Ku-band transponders. Our plans include enhancing the coverage area and spectrum of services by launching the second telecommunications satellite Azerspace-2 at 45°E in 2017 to cover Europe, Central and South Asia, Middle East, and Sub-Saharan Africa.

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# Stepping into the world of 5G

Etisalat is working with a variety of partners to pave the path towards making 5G a reality

At Etisalat Group, innovation remains at the heart of what we do and we are committed to being proactive in delivering for our customers. The accelerated rate of high tech development is at the heart of the pursuit of 5G. The migration of the bulk of media output from traditional mediums to the digital landscape has resulted in significant demands on the ICT sector, and telcos in particular. As video becomes almost entirely digital-driven, there will be an increased need for high-capacity data networks. Data already comprises 35 to 50 percent of the telecom



Etisalat Group Headquarters - UAE

*The Lab follows a series of recent memorandum of understanding signed between Etisalat Group and Huawei to bring technology firsts to the region.*

industry, and mobile data traffic has grown 46 times in the past five years. Media is now more video-driven than ever before, and this trend shows no signs of slowing down. Video consumes massive amounts of bandwidth, and its

increasing data requirements will demand that we telcos deliver. This of course, is again where 5G comes in. Digital identity is another critical factor. A recent survey found that on average we each have 20 separate passwords to access a variety of websites from Gmail to Government services. While every service may be smart, unity and collaboration across these different services is not yet simple. One of the biggest industry challenges is Big Data. The demand for data delivery is

*Etisalat invested USD \$680 million in 2014 to bring 4G to its fullest potential in the UAE, and will do so for 5G.*

enormous and will continue to grow as societies seek to empower smart city initiatives and further establish the Internet of Things (IoT). This technology is essential, but it is not the driver and a lot of other things need to happen for these things to become a reality. This is a challenge

that Etisalat Group is eager to meet. The number one thing is to improve the connectivity or the quality and the speed. That is why Etisalat invested USD 680m in 2014 to bring 4G to its fullest potential in the UAE, and will do so for 5G. The concept of 5G will continue

to evolve, but what we are certain of is that it is the key to establishing the capacity for keeping pace with digitization of society, allowing IoT to truly flourish. It is partly about speed, but it is also

where we must continually provide the required bandwidth in order to maintain this progress. And develop a portfolio of services that is geared towards fostering improvements in education,

develop and implement new technologies effectively, but also results in better monetization of achievements, therefore making our efforts financially sustainable. This is the only way in which we can

develop both technologically and conceptually. Etisalat is working with a variety of partners to pave the path towards making 5G a reality. Together with our strategic partners Huawei, we are constructing a Joint Innovation Lab in the UAE.

The Lab follows a series of recent memorandum of understanding signed between Etisalat Group and Huawei to bring technology firsts to the

***Etisalat Group is working to be the first telco in the Middle East to roll out 5G for commercial use.***



**Ahmad Julfar, CEO - Etisalat Group**

about efficiency, intelligence, effective management, and boundless innovation. When Etisalat talks about 5G, we're talking about more than just a faster network. 5G will be a comprehensive enabler, not only for telecommunications, but in every aspect of life. It will help revolutionize the world in a myriad of ways, far beyond the confines of our industry. The expansion of the Internet of Things further into everyday life, with countless activities and services migrating to the digital landscape, it has created a situation

healthcare, finance and many other essential areas. Etisalat's Group CEO, Mr. Ahmad Julfar, has repeatedly called for the advent of

create a holistic, working relationship that reinvests in itself and spurs further growth and development. It is only with this approach that we

***Etisalat's Group CEO, Mr. Ahmad Julfar, has repeatedly called for the advent of collaborative value addition.***

collaborative value addition. What this means is telcos and other digital players working together, collaborating and cooperating. This not only allows us to more efficiently

will deliver the consistent innovation necessary to enable the digital revolution. It is a technological revolution that requires strong international partnerships to

region. The Lab's mandate will be to explore and deploy super-speed 5G mobile broadband services in the region, as well as create a joint research and development framework to investigate how IoT applications can be adopted in various industries to enhance business efficiency and lead to smarter public services.

This sort of vigorous commitment to research and development is vital to keeping pace with the demands of the digital future. At Etisalat we take 5G very seriously, and we are proud of the work we are already doing with partners like Huawei, and Etisalat Group is working to be the first telco in the Middle East to roll out 5G for commercial use. As an innovator, and in line with our aspirations and goals, it will be a heavy focus in the years to come. ■

# Huawei aided China Mobile with commercial VoLTE services debut in Zhejiang

Huawei has announced that China Mobile has rolled out its VoLTE HD voice services in Zhejiang, the first province in China to enter into the VoLTE era. The announcement is the culmination of more than a year's work by Zhejiang Mobile, with the help of partners including Huawei, to take the lead in China Mobile's VoLTE commercialization process. To continuously offer improved communication

service experiences to customers, China Mobile introduced a next-generation convergent communication strategy at the beginning of 2014.

Key highlights of the strategy include Zhejiang Mobile making the first VoLTE call in China and the first international VoLTE video call in 2013, as well as being the first in China to deploy fixed mobile convergence (FMC) networks, complete

field verification, and roll out trial commercial use of VoLTE services.

The official commercialization of VoLTE services in Zhejiang is a new industry milestone for China Mobile and unveiled the start of VoLTE commercialization in China. Huawei recently won nearly half of China Mobile's nationwide VoLTE procurement project and was selected to be responsible for deployment of commercial

VoLTE networks in developed coastal provinces as well as metropolitan cities, including Beijing, Shanghai, and Shenzhen. Due to its industry-leading end-to-end solutions and powerful integration delivery capabilities, Huawei is increasingly becoming the preferred strategic partner of leading global operators in 4G evolution and VoLTE services. 

Pyramid Research

# Smart cities: Operator success closely linked to network robustness and convergence

Smart cities offer new revenue streams for operators in maturing markets, but a less risky approach is to address various verticals that are attractive in themselves on a nationwide basis which can also form part of a broader smart city project.

A new report by Pyramid Research finds that smart cities are fundamentally attractive propositions for network operators because they drive demand for core connectivity services. However, only in certain circumstances does it make sense for operators to invest in dedicated smart city resources. The development of a standardised value chain across different smart cities is nearly impossible, given the individual requirements of cities in terms of size, priorities and degree of

centralisation. Traffic congestion was a priority in London and Stockholm, for example, while improving the efficiency of cargo transportation was important in Hamburg. Not only does a smart city have a number of different operational layers, its implementation requires that a variety of different services are planned, designed, built and operated as an integrated system that enables centralised control, yet each service must also have its own discrete operational organisation. "By their nature, smart city projects are complex, long term and unique, with many stakeholders and a variety of business models.

The smart city opportunity is therefore unpredictable, competitive and limited to operators with exposure to

the business market," says Ozgur Aytar, research director at Pyramid Research.

Connectivity is a means to an end in itself. The report highlights that in most cases operators have not invested significantly in dedicated smart city resources, but rather offer a range of services that can contribute elements of smart city projects. "Operators will leverage their connectivity assets needed in order to provide smart city services, such as cellular, xDSL, Ethernet, fiber optics and Wi-Fi networks," says Daniel Ramos, senior analyst at Pyramid Research. Higher-capacity and wider-coverage converged networks are an early requirement of many smart city projects and those operators that boast robust fixed and wireless network

assets and a strong position in the business market have a clear advantage.

"More importantly, there is an opportunity for operators to become an indispensable partner in smart city projects by providing IoT/M2M platforms in partnership with technology vendors, for example by providing fleet tracking services tailored to the needs of emergency services," says Ramos. The report notes that China Mobile had over 43 million IoT/M2M SIMs at the end of 2014, making it the largest IoT/M2M player globally. The operator is involved in hundreds of smart city projects, both with horizontal capabilities and standardised services such as construction site noise monitoring, real-time transport information and surveillance/security. 



Gulraiz Khalid Khan

# Google rebrands itself as Alphabet

Alphabet becomes the umbrella organization for a slightly slimmed version of Google now a wholly owned subsidiary of Alphabet alongside other ventures into technology such as X Lab and Calico



**Larry Page, CEO - Alphabet**



**Sergey Brin, President - Alphabet**



**Sundar Pichai, new CEO - Google**

Google has rebranded itself as Alphabet, a new umbrella company which will oversee eight firms, including the search engine Google. Larry Page and Sergey Brin announced the surprise move in a blog post. It means the firm will be able to lend more focus on risky ventures at its 'moonshot factory' Google X developing robots, self-driving cars and studying life sciences - while keeping investors happy.

In the shake-up, Page will become the chief executive of Alphabet, while his fellow founder of the \$367.6 billion company, Sergey Brin, will become the holding company's president.

Senior Vice President Sundar Pichai, a rising star in Silicon Valley, will receive a long-awaited promotion to become CEO of Google, which will now solely be a search engine.

## **Larry Page sums it up in his blog announcement**

"As Sergey and I wrote in the original founders letter 11 years ago, "Google is not a conventional company. We do not intend to become one." As part of that, we also said that you could expect us to make "smaller bets in areas that might seem very speculative or even strange when compared to our current businesses." From the start, we've always strived to do

more, and to do important and meaningful things with the resources we have."

"We did a lot of things that seemed crazy at the time. Many of those crazy things now have over a billion users, like Google Maps, YouTube, Chrome, and Android. And we haven't stopped there. We are still trying to do things other people think are crazy but we are super excited about."

"We've long believed that over time companies tend to get comfortable doing the same thing, just making incremental changes. But in the technology industry, where revolutionary ideas drive the next big growth areas, you need to be a bit uncomfortable to stay relevant."

"Our company is operating well today, but we think we can make it cleaner and more accountable. So we are creating a new company, called Alphabet. I am really excited to be running Alphabet as CEO with help from my capable partner, Sergey, as President."

## **Francesco Radicati, Senior Analyst from Ovum comments on the move**

While the move is primarily intended to make the company's operations more transparent, it has implications for each of the core businesses. First is the core Google brand, which will retain control of Android, YouTube, search, and maps,

among other businesses. Removing the moonshots and connected home activities from Google's portfolio should enable it to focus on increasing its penetration in key markets such as India and China – the latter is a large market for so-called "forked" versions of Android, which don't connect to the wider universe of Google services, effectively putting the company in competition with itself.

What's less clear is the implication for Google's IoT-related businesses. Projects such as Thread and Nest weren't mentioned in CEO Larry Page's letter announcing the restructuring. However, these businesses, like Google X, will benefit from the tighter focus on their respective areas of interest by being separated from the search and YouTube businesses.

Another benefit is that less successful products won't necessarily tarnish the main brand as severely – examples include the Google+ social network, which was recently decoupled from YouTube and other Google products, and Google Glass, which has been placed under the responsibility of Tony Fadell at Nest. Unsuccessful ventures won't be associated with the Google name, while successful ones will be more easily tied into the overall brand once they're established. **T**



**“We can see sustained growth in video distribution and DTH services”**

**William Wade, CEO, AsiaSat**

Teletimes Exclusive Interview by Khalid Athar

*William Wade was appointed as the President and Chief Executive Officer on 1 August 2010 after serving as the company's Deputy Chief Executive Officer for 16 years.*

*Mr. Wade has over 29 years of experience in the satellite and cable television industry. Prior to joining AsiaSat in April 1994, he was with Hutchison Whampoa Limited as Director of Business Development for Pan Asian Systems and was in charge of all sales and regional operations. Mr. Wade also served as Executive Director for Echosphere International (Echostar), where he established Echosphere's permanent Asian operations in Singapore while managing the company's activities in Asia and the Middle East.*

*Mr. Wade speaks Mandarin and holds both a Bachelor of Arts (Honours) degree in Communications from the University of Utah and a Master of International Management degree from Thunderbird (the Global School of International Management). Mr. William Wade has recently given Teletimes International an exclusive Interview, the excerpts of which are given in the following.*

**TT:** First of all, we would like to begin with the new organizational structure at AsiaSat. What is the ideology behind this new structure? Is it part of a new strategy at AsiaSat?

**WW:** We have launched our rebrand campaign earlier this year with an aim to re-energize our brand presence and our team. We are also hoping to move closer to our customers and partners. The introduction of a renewed organizational structure is part of our rebrand initiatives. We believe with the restructuring, we are able to utilize our resources more efficiently. And by focusing our efforts more deeply in our markets, we can provide services that best meet our customers' needs.

**TT:** Please also share with us the idea behind your new brand identity launched earlier in March 2015?

**WW:** AsiaSat has been taking the lead in the Asian satellite marketplace for over 25 years. Last year, AsiaSat underwent a few major transitional changes. These included the launch of two new satellites AsiaSat 6 and AsiaSat 8, the more powerful AsiaSat 7 in service to replace AsiaSat 3S, and with a new shareholder on board. These developments have strengthened our capability to expand our coverage and services to our clients. We thought this was the right time to make a change to our brand and the philosophy of our company culture, so as to find an ever better way to serve our clients and fulfill their needs.

**TT:** How do you see the current growth in the market demand for Broadcast services? What are the drivers behind this demand and how will it grow in the near future?

**WW:** As the Asian broadcast sector is moving to upgrade from SDTV to HDTV, there is



*"In the coming years, we expect demand for UHD content delivery will predominantly be for broadcasting international sports events, such as the 2016 Rio Olympic Games and the 2018 FIFA World Cup."*

a significant capacity requirement to support this shift over the next few years. The drivers behind this shift are the increased competition among Asian pay TV platforms and growing consumer demand for better picture quality and viewing experience. Also the continued trend towards localized content has increased broadcasters' requirements for satellite capacity. These ongoing developments are expected to boost our businesses in the near and intermediate term.

**TT:** Please talk in detail about the impact of high resolution broadcasting services such as UHD. How is AsiaSat catering to such demand?

**WW:** Without doubt, UHD has gained more and more attention over the past year. However, its development is still limited by a lack of UHD video content. In addition, the cost of delivery of UHD content will remain high unless we see a significant breakthrough in the current compression and transmission technologies. In the coming years, we expect

*"In the area of telecommunications, higher-bandwidth applications are emerging in the Asia and Middle East regions. In the more developed markets, the trend is to move towards applications that demand higher throughput and faster speeds"*

demand for UHD content delivery will predominantly be for broadcasting international sports events, such as the 2016 Rio Olympic Games and the 2018 FIFA World Cup. AsiaSat satellites offer high-powered capacity over key television markets in Asia. With the launch of our new UHD platform in the coming months, we are able to play a more active role in promoting this new technology in Asia.

**TT:** AsiaSat has recently announced the plan to deploy Asia's first dedicated Ultra HD (UHD) broadcast platform in the next few months. Please give us some details regarding this plan?

**WW:** Last year we established UHD research laboratory at our Tai Po Earth Station in Hong Kong. Over the past months, we are working closely with our content and technology partners to evaluate this new broadcast technology. In early June, we announced our plan to launch a Free-to-Air (FTA) UHD platform based on Digital Video Broadcast-Satellite-Second Generation (DVB-S2) and High Efficiency Video Coding (HEVC) solutions on an AsiaSat satellite in the coming



months. Our objective is to promote and incubate the reception of UHD content in Asia, and allow broadcasters to evaluate the economic feasibility of satellite delivered UHD broadcasting in our part of the world.

**TT:** What, in your opinion, are the new market trends that are shaping the satellite industry, especially in the Asian and Middle East region today?

**WW:** Looking into the TV market, continued advances in satellite broadcasting technology are the biggest driver. Advanced techniques for channel coding, modulation and error correction, along with the latest video compression technology, DVB-S2 have enabled the widespread commercial launch of HDTV service. Using this new technology, broadcasters enjoy greater bandwidth efficiency, thus cost savings when they introduce new and localized services into new markets.

In the area of telecommunications, higher-bandwidth applications are emerging in the Asia and Middle East regions. In the more developed markets, the trend is to move towards applications that demand higher throughput and faster speeds, for example, rapid upload of video to web pages, connection of television to the Internet. In addition to continued demand for improved communications infrastructure in some under-developed countries, we also see bandwidth demand growing for mobility services such as maritime, aviation and high speed railway.

**TT:** In terms of coverage, how vast is AsiaSat's cumulative footprint? Do you have commercial operations throughout this coverage?

**WW:** AsiaSat's enormous footprints cover the entire Asia-Pacific region, spanning from Russia to New Zealand

*"AsiaSat's enormous footprints cover the entire Asia-Pacific region, spanning from Russia to New Zealand and from Japan to the Middle East and parts of Africa. We serve over two-thirds of the world's population."*

and from Japan to the Middle East and parts of Africa. We serve over two-thirds of the world's population. For the China market, we have a representative office in Beijing. For the rest of the global mar-

ket, we operate through our agents and strategic partners around the world, and effectively through our sales and global account teams based in Hong Kong.

**TT:** What is the current key focus of AsiaSat in terms of services?

*"I believe Asia and the Middle East will continue to provide plenty of opportunities for satellite despite increased competition and capacity oversupply in some markets within these regions."*

**WW:** Video will continue to contribute a major portion of our growth. There are two areas where we can see sustained growth – video distribution and DTH services, driven by increased competi-

tion among content providers and pay platform operators to expand market share, and government initiatives to introduce competition to the media sector. With the additional C-band and Ku-

**TT:** Please tell us about your future plan for growth? Will there be any new satellite

launches in the near future? Will you be entering any new markets in terms of services or geographical regions?

**WW:** Our satellites operate at some of Asia's very best coordinated orbital locations.

We are looking at launching new satellites that will add capacity to these slots. Our next satellite is AsiaSat 9, which now remains on track for completion by late 2016 or early 2017. It will replace AsiaSat 4 at 122 degrees East, where it will increase significantly our Ku-band capacity at that orbital slot. The additional Ku-band transponders on this satellite will enable us to meet capacity demand in China, Australia, Mongolia, Indonesia and Myanmar. Longer term, we are also looking to put a new satellite to one of our existing orbital slots where our spectrum resources can be more fully utilized.

**TT:** In your opinion, how will the satellite markets of the Middle East and Asia evolve over the coming years? How do you see AsiaSat's position in these markets for the coming years?

**WW:** I believe Asia and the Middle East will continue to provide plenty of opportunities for satellite despite increased competition and capacity oversupply in some markets within these regions. In the near term, we hope to see reviving economies and government support for broadcasting and telecommunications projects in these markets. With our expanding satellite fleet including our new AsiaSat 8 satellite that provides the capacity and services tailored to meet the demand for DTH television and data broadcasting in these regions, and a re-energized team, we endeavor to serve our clients with high quality and reliable satellite services.

**TT:** Would you like to comment on Teletimes International?

**WW:** Teletimes provides many interesting articles to keep us abreast of developments in the markets we operate in. **T**

Fidan Behbudova

## Tomorrow's connectivity today with Azercosmos

Azercosmos, completely owned by the government of Azerbaijan, was established on May 3rd 2010 and has achieved a reputation for being a trusted, dependable, and reliable regional satellite operator and. Customers from commercial to government and military markets depend on Azercosmos to consistently deliver high quality, customized, secure, and end-to-end satellite communication solutions. Having launched the Azerspace-1, the first-ever satellite of Azer-

baijan, on February 8th 2013, the company provides highly reliable, satellite-based communication services to enterprise and government customers for DTH, voice, data and mobility applications. Azerspace-1 at 460 E is equipped with C-band and K-band transponders. With the Ku-band and C-band we cover the markets in Europe, Central Asia, Africa, the Middle East, the European part of Russia and Caucasus. Over 130 TV channels are being broadcast over the satellite and 90% of

the channels are foreign. Currently, in 2014, Azercosmos entered into the commercial business of Earth observation services, including geo-information services. Azercosmos signed a strategic cooperation agreement with Airbus Defence and Space to take over the rights to operate and commercialize the Spot 7 high resolution (1,5m imagery products) optical Earth observation satellite under the name Azersky. Azercosmos plans also include

enhancing the coverage area, supporting the growing demands in the region for DTH, government and network services by launching a second telecommunications satellite, Azerspace-2 at 45 degrees East orbital location in 2017. With the launch of Azerspace-2, Azercosmos will meet the growing demand in Europe, countries of Central and South Asia, the Middle East as well as the Sub-Saharan Africa.

Cemre Uludere

## The network must protect the IoT with innovation & security - CeBIT Bilisim Eurasia to promote dialogue

The business world and every area of the society are undergoing a major transformation under the influence of the wave of digitalization as it spreads rapidly. This transformation which determines the future of almost every industry from finance to health, is pushing companies to seek proper solutions. Focusing 100% on the business world with a concept that was renewed last year, CeBIT Bilisim Eurasia is preparing to present a comprehensive response to this need. Concentrating on the digitalization process around the "Innovation and Future Technologies" main theme, special sections have been planned for the industries in which the most up-to-date information and communication technologies are used. This year the event is addressing to digitalization of vertical and horizontal sectors with different thematic areas such as R&D and Innovation; Data Center, Health Technolo-

gies; Education Technologies; Satellite Broadcasting, Cable and TV Industry; and ERP Special Section.

Hannover Fairs Turkey General Manager Alexander Kühnel says, "CeBIT Bilisim Eurasia is gearing up this year. Together with Global Conferences, the renewed exhibition is focusing on digital solutions, challenges and opportunities for companies, industries and the public sector. Having hosted the newest technological products for years, the event brings together the technologies of the future under one roof and once more undertakes an important mission in Turkey's transition to the digital. This year, among the issues which will be highlighted in the exhibitions and conferences, there will be Mobile Economy, Education, Health, Communication, Satellite Communication, Innovation, Network, IT Security, BIG Data, E-Government Solutions and Metropolitan Solutions."

### R&D and Innovation Special Section

CeBIT Bilisim Eurasia 2015 will bring together the information technology companies who conduct R&D and develop innovative products in Turkey with foreign and domestic companies in the R&D and Innovation thematic area. In the specially designed area, R&D Centers, Technoparks, Technopark companies, Technology Transfer Offices, Public Sector, Angel Investment Networks, Entrepreneurs, Academicians and International Buyer Delegations will come together. Major business opportunities will be offered to the exhibitors with bilateral negotiations, conferences and activities at the fairground.

### Data Center Special Section

Major developments have been observed in Turkey in the data center area in recent years. The increase in the number of internet users, the intensive competition in the Telecommunication

area and introduction of the requirement to build data centers belonging to banks in Turkey has brought about 60% growth in the data center area and put Turkey in the first position in the world growth list. This year the manufacturers of the industry are coming together in the CeBIT Bilisim Eurasia Data Center special section.

### Satellite, Broadcasting, Cable & TV Industry Special Section

The Satellite, broadcasting and Informatics industry in Turkey is one of the major markets in the Eurasia thanks to its success and continuous development. In addition to the growth of local satellite industry year by year, high quality manufacturing capacity also provides competitive advantage in Turkey. While the TV and broadcasting techniques direct the industry into internet and associated smart product markets, 2015 will be the year of transition from satellite and cable into mobile and IPTV.

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# Development and design of 5G is industry focus and on display at PT/EXPO China 2015

5G will be the future of the wireless communication industry. The latest industry upgrade to 5G will bring fast transmission speeds, reaching 10Gb/s (10x faster than 4G).

Many countries have started the R&D necessary for 5G. China, which boasts a large wireless communication base, is expected to lead the way. Many of the technological developments will be on display at the PT/EXPO China 2015, from September 22-25.

## How will 5G revolutionize the industry?

With its tremendous data capacity, a lot of telecom uses can be realized with 5G, such as big data analysis and real-time alarm, with which, the traditional manufacturing industry could put into practice its innovative automatic ideas and upgrade to a new efficiency level.

With high stability and almost-zero-latency, it will provide more possibilities for unmanned driving. The mature 5G technology will upgrade people-to-people communication to the smart connection of thing-to-thing and people-to-thing, thereby extending mobile communication technologies to a broader application field. In 2020, when 5G is designed to be fully implemented, and future, mobile healthcare, smart transport, smart homes, industrial controls, environment monitoring and other fields will develop with a great leap forward with 5G.

Moreover, it's likely that real cloud processing and cloud access may come into reality thanks to the excellent data transmission capability of 5G. By reducing the energy consuming and space for pro-

cessors and storage modules, this will be a dream for the consumer electronics industry. 5G will affect various aspects of an ordinary person's life.

For this reason, the PT/EXPO China 2015, which is the largest ICT event in Asia with 24-year history and the greatest influences, will set up 2 special areas to display "5G individual world" and "5G life circle" to exhibitors and visitors, respectively reflecting the two characteristics of "high bandwidth and big data" and "wide connection and extensive application." The two areas will also specifically exhibit the application situations and expectations including mobile Internet surfing in 5G era and networking experience with wearable devices from head to toe. They will demonstrate, in terms of the basic necessities of food, clothing, housing and transportation, how 5G will substantially improve people's every day quality of life. It will also provide individuals an opportunity to experience a new lifestyle that is more efficient. Intelligent manufacturing, remote maintenance, drone express delivery and other high-end applications depict the penetration of 5G technology in social production as well.

There is an expectation and imagination of the "Internet of Everything," although there's still no clear definition on 5G technology, global mainstream enterprises and countries have been eager to usher in the 5G era. The three 5G technology-theme exhibition areas "Individual World," "Life Circle," and "Work Circle," specially set at the PT/EXPO China 2015. They will not only provide good exhibition stages for telecom

giants from home and abroad, but offer an opportunity for audiences to peek at and experience the 5G era in advance.

## Developing 5G technology

Telecommunications has largely been regulated by governments. It is an incredibly difficult industry to break into. Developing 5G technology is a priority among priorities as no one would like to miss such rare opportunity. South Korea and Japan have established some industrial organizations like 5G Forum and 5GMF successively, aiming to develop 5G technology in a short period with government support. The European Union has set up several 5G technology-related research projects in EU Framework Program 7, and launched a "5G PPP" based on the public-private cooperation mechanism, which plans to invest 700 million euros to 5G researches before 2020 so as to maintain Europe's competitiveness in advanced wireless technology sector with financial support. America is actively exploring the commercial using fields of 5G. There's no doubt that a 5G exploration fever is sweeping the world, and China has the opportunity to take a lead. In March 2015, the 5G White Paper draft was completed at the NGMN forum led by global operators. In June 2015, the 5G vision and key performance indicators were determined by the ITU. In April, 5GPPP defined its first 5G subjects. The 3GPP, an international standardization organization that made 3G and 4G standards, will launch its demand research on 5G in September 2015, start 5G standards research based on the R14 version in 2016, finish its 5G technical plan by the end of 2017, and complete the

5G technical standards by the end of 2018. The 5G commercial application schedules have been published by many countries. South Korea plans to make a small-scale 5G demonstration at the 2018 Winter Olympic venues and start the commercial use in 2020; Japan plans to provide 5G commercial services during the 2020 Olympics; Europe is building 5G research and innovation platforms and a 5G technology innovation platform has been established in UK's universities while the 5GPPP will conduct 5G technical tests in 2018. The Chinese company Huawei has established its 5G testing fields in Chengdu and other places to conduct tests on key 5G technologies and systems.

## China a willing pioneer

The crisis consciousness developed by Chinese telecom enterprises during years of competition enable them to exert earlier efforts on 5G technology research. Both Huawei and ZTE have made some contribution to 5G technical standards. But it's still uncertain what the specific 5G technical standards will be in future. For this reason, great support and cooperation are needed from the government, operators and terminal manufacturers. Experience from former communication reforms shows that, the state and government play important roles in the early stage. As is known to all, the East Asian countries and governments always exert energy to guide industrial development. The governments of China, Japan and South Korea provided necessary guidance and support towards the development of technical standards in the deployment

*Contd on P-19*

# CITIC Telecom announces the launch of the world's first international mobile data trading platform - "datamall"

CITIC Telecom has announced the launch of the self-developed "DataMall Global Data Traffic Trading Platform" starting 1st October 2015, providing an innovative and revolutionary business model for global data roaming services, to capture the enormous potential of global mobile data consumption and combat the challenge of high service costs. The DataMall platform is a key component of the Group's transformation, business and innovative strategy. DataMall is the first international mobile data traffic trading platform in the world. Through this platform, operators may provide local data services to mobile phone users visiting from overseas, these users can do it without changing their SIM card, mobile phone numbers or using any external devices, and they can subscribe, pay for and use the service through the devices and mobile apps of the platform's business partners. Thus, it is one of the most convenient international mobile data traffic solutions available on the market. DataMall is an open platform aims for win-win cooperation that supports mobile operators, vir-

tual mobile operators, handset manufacturers, OTT internet companies, financial and tourism related companies, etc. These partners can use the innovative DataMall platform to provide a greater range of services to customers, providing dynamic local mobile data services to customers and lowering the costs of international mobile data. Data traffic has become an irreplaceable service for smart-phone users, but the rocketing charges of international data roaming has been a hot global topic. Market data shows that more than 47% users of data roaming service are "Silent Roamers", they are concerned about the charges that they choose to disable the data roaming function, and there are as many as 70% users that do not have data roaming, which in turn suppresses the demand for related services. Thus, many companies cannot secure data roaming customers and for this reason lose business opportunities. DataMall has been created under such operating environment. Dr. Lin Zhenhui, Chief Executive Officer of CITIC Telecom said, "DataMall is a major break-

through in the conventional overseas roaming business and technological model in the internet era. It marks a departure from the 'mutual agency model' of conventional roaming service. DataMall delivers a 'direct transaction' between local operators and consumers, giving consumers the choice of choosing a specific overseas data network and turning data traffic into a tradable commodity around the world. Therefore, wider acceptance of the DataMall model will bring greater convenience to end-users and lower their spending, as well as creating new business opportunities for the platform's partners." Mr. Sutton Cheung, Chief Technology Officer of CITIC Telecom explained, "DataMall leverages CITIC Telecom's technical capabilities and business understanding, it has achieved innovations in network construction, operations and services, allowing platform partners to provide non-roaming, local mobile data service through smart phone apps (iOS or Android), mobile phones of specific brands, internal website interfaces of other applications, platforms

of operators and social media platforms (such as WeChat and Weibo), etc. Users can easily access overseas networks by combining the technologies of smart phone apps and 'Cloud SIM Cards' as a local user, as they can purchase local data service packages anytime and anywhere they want." Mobile operators and major handset manufacturers in the Greater China region will become the first batch of cooperative partners to join the DataMall platform. Mobile operators from Hong Kong, Macau, Taiwan and Singapore will also join DataMall as merchants, providing online transaction service for mobile data traffic products. It is expected that the coverage of the DataMall platform will further expand to countries and regions including the United States, Japan, Korea, Malaysia, Indonesia, Thailand and Europe by the end of 2015. Looking ahead, mobile operators, virtual mobile operators, OTT internet companies, financial and tourism enterprises from around the world will also become potential cooperative partners of the DataMall platform. **T**

## Development and design of 5G

### **Contd from P-18**

of previous generations of communication networks, effectively facilitating various industries' development. In the future 5G era, policy support will continue to support the growth and development. The Minister of MIIT of China noted that, while we're continuously strengthening the development of 4G networks, we will speed up the R&D and standardization of the fifth

generation mobile communication technologies (5G) and actively carry out commercial pilots. This is a positive signal for domestic organizations and enterprises, encouraging them to be bold. As for the network operators, the three major Chinese operators all proactively participate in the R&D of 5G network technologies, and are clear about their roles. For enterprises, they still focus on technol-

ogy R&D. Currently, the 5G technical development mainly includes two aspects: new field exploration and the re-evolution of 4G. Both Huawei and ZTE have done some trials in these respects. For example, ZTE introduced a "Pre-5G" plan, which can be perceived as a technology between 4G and 5G, to enable users experience some 5G-like communication services in advance. Huawei has achieved some practical

results in such fields as 5G networking architecture, spectrum usage, air interface technology, and base station realization. Alcatel-Lucent and its subordinate Shanghai Bell Lab have done specific researches on 5G wireless air interface design, large-scale antenna array MIMO design, MMW technology, NFV and the planned design for deploying SDN technology into mobile communication networks. **T**

# “Ericsson literally many years ahead of the cloud crowd” According to 451 Research

Ericsson demonstrated key technologies from its cloud infrastructure portfolio at the Intel Developer Forum 2015 (IDF15), an industry and media event held August 18-20 in San Francisco, US.

The event showcased Ericsson's cloud technology leadership to a broad industry and media audience, and will highlight the strength of the company's open developer ecosystem including our strategic partners Apcera, Guardtime, Cleversafe and Intel. Anders Lindblad, Head of Business



Anders Lindblad

Unit Cloud & IP, says: “Cloud technology is rapidly disrupting the ICT industry, and we see IDF15 as a unique opportunity to engage with decision-makers and developers in this

critical area.”

“We look forward to showing Ericsson's industry-leading cloud portfolio. Combining our Networked Society vision and long experience of designing, deploying and running the world's most advanced communication systems, makes us a highly relevant ICT change-maker as the transformation of the industry accelerates,” says Anders Lindblad.

At the event, Ericsson also announced a close cooperation with South Korean operator SK Telecom. The partnership will

establish software-defined data centers built on Ericsson's HDS 8000 datacenter system and Intel® Rack Scale Architecture, leading to the creation of automated and TCO efficient hyperscale cloud infrastructure. “RSA is the key technology to make the cloud extremely scalable, flexible and TCO efficient. SK Telecom believes this partnership will accelerate SK Telecom's software-defined data center vision to be realized,” says Alex Jinsung Choi, Chief Technology Officer at SK Telecom. **T**

## Ericsson leads European Union 5G standardization projects

Ericsson continues to spearhead 5G system development as coordinator of the new METIS-II EU project to develop the overall 5G radio system design and roadmap recommendation for 5G standardization.

On a strategic level, METIS-II will provide the 5G collaboration framework within the 5G Infrastructure Public Private Partnership (5G-PPP) for a common evaluation of 5G radio access network concepts and a recommended 5G spectrum roadmap. It will also lead to the preparation of concerted actions toward regulatory and standardization bodies.

The project centers on a strong international consortium, consisting of 23 partners from all regions with strong 5G R&D initiatives (China, the EU, Japan,

South Korea and the US) and involving most of the major international vendors, major operators, and key researchers.

METIS-II will therefore have the unique capability to drive consensus-building globally, to consolidate a full picture of the needs of mobile as well as vertical industries, and to disseminate the results to the relevant bodies, forums, and standardization groups in all regions.

The project is co-funded in the EU H2020 research program and has a budget of EUR 8 million.

As the main driver and coordinator of the METIS-II project together with the global consortium, Ericsson will integrate technologies into a radio access design and provide a platform for concerted actions toward

regulatory and standards bodies. The METIS II project will leverage the success of METIS, the first integrated 5G project also driven and coordinated by Ericsson.

In addition, Ericsson will take the lead as the technical coordinator of the mmMAGIC (Millimetre-Wave Based Mobile Radio Access Network for Fifth-Generation Integrated Communications) project. This project will develop and design new concepts for mobile radio access technology for deployment in the 6-100 GHz range.

Both projects are important in preparing a pre-standardization consensus in the mobile industry. They provide the different consortia with an opportunity to discuss and evaluate various research ideas before

bringing them to the 3GPP (3rd Generation Partnership Project).

Making 5G a global standard is the most critical factor for the digitalization of industries, the Internet of Things, and broadband everywhere. Standardization is necessary to connect people all over the world.

Over several generations of mobile networks, it has been the cornerstone that allows networks all around the world to work seamlessly together, providing users with the same experience.

Ericsson's unparalleled global scale, its respected position in research and development, and its strong relationships with global players in the market puts the company in a unique position to contribute to research in Europe and beyond. **T**



# Top five considerations for successfully deploying data centres in emerging markets

When traveling across sub-Saharan Africa, commodities that are essential for life – such as water and electricity – are often in very short supply. But even in the remotest of villages you will regularly encounter plenty of people using mobile phones, and mobile cell towers are continuing to pop up all over the continent at a staggering rate.

This, of course, is driving a phenomenal growth in mobile data services, which in turn is driving an ever increasing requirement for modern data centres that can deliver high service uptime at low operational costs. So here are my top five considerations for successfully deploying data centres in emerging markets:

## 1. Prefabrication for predictability

Traditional brick and mortar building projects in emerging markets are often impacted by significant cost overruns and long delays in delivery. Further, the specific know-how and experience required to build technical facilities capable of appropriately housing sensitive and expensive equipment is not commonplace in developing countries. So the best way, in most cases, to deliver a data centre that is predictable in terms of cost, time, energy efficiency and overall functionality is to use a highly prefabricated approach where work (and risk) on site is minimised.

## 2. Turn-key site delivery

Many new data centres in emerging markets will be green-field deployments. Just as prefabrication can offer invaluable predictability for the data centre building itself, appointing a single supplier to take on responsibility for full



**Thomas Rahkonen,**  
CTO - Flexenclosure

turnkey delivery of the data centre site will extend that predictability to the entire project. Full turnkey projects will not only include the data centre itself, but also peripheral

project planning, but this is even more important in emerging markets. Required components, tools, and spares will be very hard if not impossible to source locally, so carefully managing the project inventory will be essential in order to avoid potential delays. Taking a prefabricated approach will also help as it allows much of the initial construction to be managed in a controlled factory environment.

And having the right people available is of paramount importance, which is why at Flexenclosure we use a project model where the supervisors that manage the prefabrication work in our factory in Sweden

*Dimensioning a data centre for an emerging market often means combining a relatively small initial sizing with a fairly aggressive future expansion plan.*

equipment (diesel gensets, fuel tanks, energy substation, outside fire fighting, etc.); site civil works (foundations, roads, street lighting, a perimeter wall, etc.); and other elements such as office space, security room, storage facilities, and so on. Having a single supplier customise and manage the overall design of the full site layout also makes it easier to optimise the total design and costs for items like cabling, surface materials and fencing, amongst others.

**3. Careful project planning and experienced site supervisors**  
Deploying a data centre anywhere requires detailed

also lead the construction and final commissioning of our flagship data centre, the eCentre, on site – thus minimising information gaps and maximising efficiency and project continuity. Needless to say, site supervisors need to be experienced, resilient and resourceful in order to successfully undertake projects in locations that are often in harsh climates and have very little if any support infrastructure.

## 4. Go modular for future growth

Dimensioning a data centre for an emerging market often means combining a relatively

small initial sizing with a fairly aggressive future expansion plan. This makes for an ideal environment for a modular data centre, where capital expenditure can be matched with data centre service growth.

## 5. Don't forget about energy efficiency

The primary concern in many emerging markets, given a lack of reliable electrical power infrastructure, is to achieve targets on data centre service uptime. At the same time, the dependency on diesel-generated power also means operational costs for electricity will be three-to-five times higher compared to developed markets. This said, even small improvements in power usage effectiveness will translate to large savings in operational costs, so making the right decisions on insulation and cooling options will be critically important. In the last two years we have successfully deployed six prefabricated eCentre data centres to customers in Chad, Cote d'Ivoire, Mozambique, and Tanzania – countries with 2014 GDP growth rates of between 7.2 and 8.3 per cent and where mobile data service use is shooting through the roof. And when GDP growth in many developed countries is only around 2 per cent, it is clear why the developing world is becoming increasingly interesting for data centre deployments. At first glance, project logistics may appear somewhat daunting for countries like these, but with detailed planning, a prefabricated facility, turnkey project execution and the right experience, modern data centres will be quickly and successfully deployed. ■

# Satellite communications initiative set to transform lives in emerging markets

A project that will revolutionise e-commerce and maternity services in remote communities across Nigeria and Kenya through the delivery of reliable, space-based internet connectivity services has completed its installation stage and is ready to be rolled out. Titled Digital Frontiers, the initiative forms part of the UK Space Agency's £32 million, two-year International Partnership Space Programme, in which Inmarsat, the leading provider of global mobile satellite communication services, is a central partner, working alongside a group of international organisations including Equity Bank Group and Mobile Alliance for Maternal Action (MAMA). Inmarsat was awarded funding for projects in key East and West African growth hubs, where for many, basic digital services such as a resilient data communication infrastructure or local mapping, are not available due to a blend of economic and geographic factors. The initial projects, in Nigeria and Kenya, will see Inmarsat deploy its most advanced L-band commu-



**Rupert Pearce, CEO - Inmarsat**

nications satellite, Alphasat, to deliver data connectivity solutions to these sub-Saharan communities. The rationale is to demonstrate how companies can provide social or economic benefit to areas that do not currently have communication capabilities as well as evolve business models which mean more of these projects can be sustained from a commercial perspective. Working in partnership with the Equity Bank Group, Inmarsat has provided connectivity to enable financial services, welfare and other content access to more than 200 loca-

tions in Kenya. Each site has a BGAN internet connectivity terminal which is pre-loaded with a range of educational materials and apps covering agriculture and business among other topics.

In Nigeria, Inmarsat is partnering with MAMA to deliver maternal and child health services to 50 remote, rural communities.

Called The MAMA Connect Project, the onsite system is preloaded with a MAMA's evidence-based, culturally-sensitive health information.

The satellite network updates the content and provides real-time connectivity for pregnant and new mothers to interact online.

In tandem with the Kenya and Nigeria projects, Inmarsat is also working alongside a range of partners to examine the business model affordability of providing connectivity to remote locations.

The idea is to identify relevant cultural and social dynamics which can help foster and sustain future connectivity programmes. The results will

be funnelled into further pilot projects in Brazil, Ethiopia, Nigeria and the Philippines.

Rupert Pearce, CEO of Inmarsat, said: "Satellite remains the only viable means of providing universal internet access beyond the reach of terrestrial communications in emerging markets, particularly in Africa.

This initiative has the potential to significantly transform areas which have previously been denied resilient internet connectivity due to the cost and logistical difficulties in extending terrestrial networks into remote communities.

We are very pleased to have completed the installation phase with all BGANs now in place; people and communities are set to benefit from transformed communication capabilities.

"We are also looking at the wider benefits for other regions as part of this project. The commercial viability of using satellite connectivity to ensure services can successfully penetrate the most remote areas of emerging markets is important." **T**

## Inmarsat confirms launch of its third Global Xpress satellite

The third satellite in the transformational Global Xpress (GX) has been launched at the Baikonur Cosmodrome in Kazakhstan on Friday 28 August. The satellite will cover the Pacific Ocean Region and will, together with Inmarsat-5 F1 and Inmarsat-5 F2, create the world's first globally available, high-speed mobile broadband service, delivered through a single provider. Inmarsat's 5th generation

satellites have all been built by Boeing Satellite Systems International Inc. ("Boeing") in California. The launch was being undertaken for Inmarsat by International Launch Services ("ILS") using a Proton launch vehicle.

Global Xpress will deliver broadband speeds around 100 times faster than the company's fourth generation (I-4) constellation. It will offer new opportunities for customers, in

both the public and private sectors, to significantly enhance their connectivity and to access bandwidth-hungry applications, even in the remotest and most inaccessible regions of the world.

Rupert Pearce, CEO of Inmarsat, said: "The completion of the Global Xpress constellation is a significant milestone for our organisation and is fundamental to the delivery of a new era in mobile satellite

communications which will change the future for us all. We believe that our GX technology will drive innovation and support value-added services and solutions for our government and enterprise customers on land, at sea and in the air; in opportunities as diverse as the merchant maritime, business and commercial aviation, government, energy & resources and enterprise VSAT segments." **T**

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# Better than ever, the IBC2015 Conference examines 'The Future of Media in an Age of Disruption'

The IBC Conference is an unrivalled global destination for networking, discussion and debate, presenting a mix of visionary keynotes, panel discussions and master classes with the most influential thought-leaders and innovators in their fields. With the rapid convergence of broadcast, IT and telecoms, this year's conference theme 'The Future of Media in an Age of Disruption' provides the forum to explore new strategies, gain insight into business disruptors, chart future technological progress and examine how the industry can seize the new opportunities being created by the explosive growth in the consumption of TV and video content on smartphones, tablets and laptops.

Each day of the conference will address the myriad issues facing the industry, prefaced by a keynote address that will set the stage. Attracting top-level executives, technical experts and visionaries from over 170 countries, with business interests spanning the full spectrum of content creation, management and delivery, as well as emerging markets and key industry disruptors, the conference ensures valuable access to insights and contacts. The opening IBC Forum session, 'Broadcasting in an Age of Challenge', will reveal how four top media power houses are solving the challenges they face. Fran Unsworth, the first woman to run the BBC World Service, will explain how she plans to use technology to expand despite squeezed budgets and well-funded opponents such as Russia Today and China Central Television. David Butorac, who runs 146 pay TV channels in the Middle



**'The Future of Media in an Age of Disruption' provides the forum to explore new strategies, gain insight into business disruptors, chart future technological progress and examine how the industry can seize the new opportunities being created by the explosive growth in the consumption of TV and video content on smartphones, tablets and laptops.**

East and North Africa will show how quality content always wins in the end. Philip Luff, Managing Director UK and EMEA for Scripps Networks Interactive will explain how the Knoxville, Tennessee Company is expanding around Europe – the latest deal winning control of Poland's TVN. The big online players such as Google and Amazon are increasingly expanding into internet television with Amazon's deal with Jeremy Clarkson of Top Gear fame simply the latest. In the shock

of the new the three "traditional" broadcasters in the opening conference session will be joined by Thomas Riedl to explain Google's latest forays into TV. Riedl is head of Android TV Global Partnerships at Google in California. In Thursday afternoon's keynote 'Is TV facing up to the Internet Era?' Andrew Neil will be posing the big questions to industry leaders most affected by the connected era. How will the TV industry transform itself to ensure it delivers on this

internet era of television? Will new entrants with no legacy but an internet background take over? How fickle is the TV consumer and just what are the positions of leverage to combat the players with nothing to lose and everything to gain? With the future of all video delivery shifting towards IP, is the internet a distribution system capable of delivering to everyone, in high quality, the TV experiences they demand? And who ultimately pays for that infrastructure, given the recent moves in the Net Neutrality debate. In the meantime, how well are broadcasters, platforms and content owners embracing the big issues of content rights as the EU looks towards a Digital Single Market?

As media companies face an increasingly fragmented viewing environment, the keynote 'Programming with Global Ambition' promises to offer valuable insights into how one of the biggest players, Discovery Communications, is tackling the future and redefining its business models. Discovery's extensive digital portfolio includes leveraging its global channels and content to live broadcast and stream to consumers on all manner of platforms. The international business run by JB Perrette, President of Discovery Networks International, is key to the company's future. Today, Discovery reaches 3bn subscribers around the globe with an average of 10 channels in each of its 220 countries and while it operates predominantly pay TV channels it has branched out into advertiser-funded channels both through the acquisition of the SBS channels in the Nordic

**Contd on P- 25**

## SGO presents inspiring sessions at IBC2015

SGO is doing something a little bit different this IBC. To engage and indulge the creative senses, the SGO team is hosting informative, thought-provoking and compelling sessions on their booth (6.A11). Relevant for all professionals, such as colourists, compositors and editors creating content for broadcast, commercials and feature films, SGO has it covered with a session to suit everyone. Pertinent topics range from how to succeed in a competitive post market; focussing on opportunities for small and medium-sized commercial facilities; to the challenges of delivering high production-value long-form drama and documentaries; as well as delving into the cutting-edge workflows used in some of the world's biggest blockbusters. The future of post is the salient theme threaded across a number of subjects including

emerging technologies such as HFR, HDR and VR. In addition, the very latest evolutions of Mistika and Mamba FX are being showcased on SGO's booth. Mistika is a complete post production platform, seamlessly integrating colour finishing, compositing and delivery. Mamba FX is low cost, high power, node-based compositing software for Mac, Windows and Linux. Both are resolution, colour-space and frame-rate independent. Mistika features real-time performance, even at 4K 60P and above. Also new this IBC - SGO is partnering with Canon to display its pioneering advancements in HDR technology with a state-of-the-art Mistika system on Canon's stand E50, Hall 11. Mistika will drive an end-to-end HDR-4K "Glass-to-Glass" colour-process workflow demonstration. "The Canon HDR-Mistika

presentation is cutting-edge and a great exhibit for technology that supports this game-changing technology of HDR, it is an exceptional space to demonstrate a new colour-finishing process." SGO's Marketing Strategies Manager Sofia Pensado confirms. Mistika empowers its users to possess a competitive edge by providing freedom from the limitations of incumbent mass-produced post systems. Its advanced toolset is agile enough to deal with new industry requirements as they happen. Latest developments on show include leading colour grading features to make the most out of HDR images, linked to the stylish Mistika Precision finishing control surface. An entirely new media management sub-system will be launched too, along with new features that allow transparent migration between colour spac-

es. SGO continues to develop Mistika and Mamba FX with the guidance and feedback of its much valued customers who are experts in their field and work on some of the world's most demanding market-leading productions. SGO also offers a unique one-to-one bespoke support service on an ever-evolving, business-building basis. SGO's Director of Global Sales & Operations Geoff Mills states, "Mistika is the only true differentiator that enables its users to stand out from the crowd by allowing them access to incredible opportunities created by innovation and stunning performance. What we are doing at IBC this year, gives industry professionals a chance to see how investing in SGO's future-proof technology brings immense value, by providing a huge competitive advantage." 

## Better than ever, the IBC2015

### **Contd from P-24**

region and FTA launches of some of its pay brands in markets like Italy and Spain. In 2014 it purchased sports channel Eurosport, with a reach across both Europe and Asia and in a deal with John Malone's Liberty Global, purchased TV production company All3Media. Sling TV's CEO Roger Lynch will speak in Saturday's keynote 'Over the Top Comes of Age' to discuss how Sling TV (part of DISH) is pioneering the next-generation TV service. Consumers' appetite for online-delivered video is growing and some iconoclastic broadcasters, pay TV platforms and content providers like HBO, the UK's Sky TV and DISH in the US are following (and trying to better) the Netflix model by

creating streaming services to satisfy the demand for multiple-device TV. Sunday will see BT TV Managing Director Delia Bushell discussing how BT sees the future, how the broadcasting model is changing and how communications technology will evolve in the session 'Telcos Tune Into Broadcasting'. BT Sport and BT TV products are shaking up the competitive landscape for TV and communications services in Europe. Having agreed to pay £7.6m for each of the 12 Premier League games it will air exclusively from 2016, BT is taking its TV business seriously and through integrated broadband, TV and phone packages it's trail blazing how a 21st Century Telco looks. The £12.5bn agreement to purchase mobile operator EE in February

this year adds another platform to BT's ambition to offer content and services across devices. IBC's key streams are structured to allow delegates to navigate the conference with ease and maximise time at the show. The key themes discussed each day are seen through the lens of the different streams, each providing a unique angle and focus - be it technical, strategic or operational. Streams for 2015 include: Advances in Technology, Business Operations, Content Innovation, New Disruptors, Strategic Insights as well as the free to attend streams: Industry Insights and the IBC Big Screen Experience. The IBC Rising Stars Programme offers a new generation of students and young professionals who want to join the content and media industry

the chance to experience the realities of these sectors. A free-to-attend event, students, graduates and new entrants to the industry will have tailored and exclusive conference sessions tackling topics that really matter to young professionals. Delegates will get to see the latest technology and learn about how the industry is developing. They will meet established, successful and highly influential industry figures, as well as some of the brightest and most ambitious young entrepreneurs working in the industry today. They will have exclusive opportunities to interact with a huge and varied number of people: all experienced, knowledgeable and keen to communicate with a new generation. 

Sarah Nicholson


## TV Cultura enhances Digital Terrestrial Television distribution in Brazil and looks to international expansion with Intelsat 11

Intelsat has announced that TV Cultura, a part of The Padre Anchieta Foundation, has signed a new contract to leverage Intelsat's satellite solutions to enhance its Digital Terrestrial Television (DTT) offering in Brazil and strongly position the company to distribute its programming internationally. Under the agreement, TV Cultura, a leading Brazilian TV broadcaster that produces and distributes educational television programming, will leverage C-band capacity on Intelsat 11 at 317°E to distribute content to its approximately 300 terrestrial towers for DTT services and also to the Pay-TV Operators nationwide. Intelsat 11 is a premier Latin America cable distribution neighborhood and with 178 channels, 31 of which are High Definition (HD). It will not only enable TV Cultura to provide DTT services and distribution to Pay-TV operators to all of Brazil, but expand its content distribution to other parts of South America, North America and Europe as well.



“Ensuring reliable, high quality and secure content distribution on a global basis is often a complex, exercise,” said Gilvani Moletta, Technical Director, TV Cultura. “However, Intelsat’s satellite network provides us with a seamless, cost-efficient solution that maintains the integrity and reliability of our programming. Most importantly, the strength of its video neighborhood at Intelsat 11 will enable us to expand our customer base and increase our product offering outside of Brazil, allowing us to capture new audiences in Latin America, the Americas and Europe.” Intelsat currently provides proven DTT solutions

in Latin America, supported by advanced technologies that facilitate efficient use of bandwidth and improved reception quality, enabling Latin American audiences to enjoy the benefits of digital television. Intelsat offers the premier pan-regional cable distribution neighborhoods in Latin America, with three high performance, fully penetrated satellites carrying the biggest programming names from Latin America, the United States and Asia, making it an ideal platform for programmers that want to expand their content distribution. “TV Cultura is a wonderful addition to our premier Intelsat 11 video

neighborhood,” said Carmen Gonzalez-Sanfelieu, Intelsat’s Regional Vice President, Latin America and Caribbean Sales. “Not only will their presence strengthen our video neighborhood, but Intelsat 11 will also provide TV Cultura with unparalleled reception quality, reliability and reach, enabling them to expand their DTT service offerings and penetrate the international cable and PayTV operators in regions outside of Brazil. Intelsat has a strong track record of supporting DTT and DTH deployments globally and we look forward to working with TV Cultura as they expand their DTT services in Brazil and abroad.” 

## Intelsat launches Latin America satellite

Intelsat has launched its latest craft, a C- and Ku-band satellite to be placed into service at the 304.5°E orbital location, from French Guiana aboard an Ariane 5 vehicle. Intelsat 34 will replace Intelsat 805 and Galaxy 11 as the third in Intelsat’s Latin America, pan-regional video distribution neighbourhood (which includes Intelsat 11 and Intelsat 21). Intelsat 34 includes a C-band payload that will deliver media

distribution services for blue chip media powerhouses including Fox Sports and HBOLA. The satellite also hosts a direct-to-home platform in Ku-band as well as a specialised Ku-band payload serving the North Atlantic that will support broadband services for the fast growing aeronautical and maritime mobility sector. “Intelsat 34 is a great example of the breadth of services that



Stephen Spengler

Intelsat’s satellites are able to provide to communities around the world,” said Stephen Spengler, CEO at Intelsat.

“With services spanning from DTH and cable programming distribution, to broadband for vessels and planes traversing the North Atlantic, Intelsat 34 demonstrates our role in delivering broadband infrastructure and media distribution with superior reliability.” Intelsat also has two launches scheduled for the first quarter of 2016, including the first of its Intelsat EpicNG satellites, Intelsat 29e. 



# Flexible and scalable IPTV platform proves precious to Chinova Resources

Working in the mining industry in Australia is one of the toughest and most extreme careers in the world, the work is tough, temperatures high and staff are often isolated from the outside world for long periods of time. Ensuring they are properly looked after is something that Chinova Resources has gone to great lengths for; both during working hours and rest. Their operation mines a variety of minerals and precious metal including copper, gold, molybdenum, rhenium, uranium, lead, zinc and silver in remote Queensland. With the nearest major city almost 3 and a half hours away by airplane, staff often spend their personal time on site and so providing them with some home from home comforts, including a good TV service, was something Chinova felt was necessary. "We have a very remote camp at one of our mines and needed a solution that was very 'hands-off' and required limited support as, should something go wrong, it would be very difficult to get

somebody physically on site in a timely manner," comments Jon O'Brien, IT Manager at Chinova Resources.

Jon researched the IPTV industry and came across Tripleplay, a solution already deployed in a number of mines and the stand out solution that Chinova considered.

He added; "We needed a seamless IPTV solution that allowed us to deliver entertainment to all of our sites that was scalable and high quality; as the camp grew then the solution needed to grow too. When we saw Tripleplay we knew this was the right solution for us."

Chinova selected TripleTV IPTV delivered via the TripleChoice Interactive TV Portal, giving them the opportunity to brand the television service with their own logos and photography and provide information services to staff through special pages in the TV system.

The Tripleplay solution delivers fourteen channels to staff including ABC1, Channel 9, Fox Sports 1, 2 and 3, Premiere Blockbuster, Action and Sky

News, and provides each member of staff with the ability to record and store TV shows; meaning they never need to miss their favourite shows even when working unsociable shifts. STARTING SMALL AND GROW IN TIME Initially the system would have to provide an IPTV services to just twelve staff at the camp, scaling to over 300 end points over the next eighteen months as the construction of the mine commenced and completed. Prior to engaging with Tripleplay and, Tripleplay Authorised Partner, Streamvision, Chinova had been using an out-dated analogue TV infrastructure which was proving very cumbersome following broadcast's move to digital distribution. "We were having to patch a digital solution onto a very out-dated analogue system which was hugely time consuming, painful and was not easy to add new channels to our line-up. Using Tripleplay it is now much easier for us to manage our room costs as we can decrease or increase our

user count as needed," added Jon. UNCONVENTIONAL BUT PAINLESS INSTALLATION The Tripleplay IPTV platform was installed into a shipping container and delivered to site before being connected to the existing Chinova IP network and managed remotely by an IT team located 40km away at another mining operation. Implementation was simple and effective, scalability is in-line with the business's plans for the future and the quality has been highly appreciated by the staff in the mine camps. Jon added; "Our staff on site are rapt with the solution. The channels for both free-to-air and pay-TV are crystal clear and staff can record TV shows to watch back at another time. We're delighted that it is giving our staff a greater home from home experience while they are with us." Chinova Resources feel they have made the right choice in implementing the Tripleplay solution and working with a knowledgeable partner, Streamvision, the project has been well executed. **T**

Akim Benamara

## BBV is first to sign on to ABOX42-powered IPTV service

Only weeks after DNMG confirmed cooperation with ABOX42 and Zattoo. German broadband provider BBV has signed to become the service's first adopter. BBV's new multiscreen offering will go live this autumn. DNMG's new IPTV white label solution is a collaboration between set-top box experts ABOX42 and IPTV white label solution provider Zattoo. ABOX42's M20-Series SmartSTB set

top boxes provide the first screen experience for the new platform, with Zattoo enabling first and second screen functionality. The new white label IPTV multiscreen platform is a full-service solution for members of DNMG wanting to quickly and easily deploy an IPTV-enabled cable TV offering. Oliver Soellner, ABOX42's VP Business Development & Sales, described why the service is unique in the industry: "When

most operators move into IPTV, there are normally a couple different stakeholders involved – providers for the middleware, the headend system, transcoding, DRM, playout to set top boxes.

It ends up being a complex project with 12 months development time or ore, and a lot of cost and frustration." The customer can roll out a customized IPTV service within one quarter because it's an

already existing platform with the essential ingredients fully operated by ABOX42 and Zattoo.

There's no hardware investment for the IPTV solution itself, no maintenance and no major development required from operator side. The only thing the customer needs to do is roll out the set top boxes and do the marketing for the service and the billing. **T**

## SpeedCast selected by Gulf Marine Services for satellite communications services

SpeedCast has announced that it has been awarded a multi-year communications contract from Gulf Marine Services (GMS). The new dual-beam Ku-band satellite service will provide high-performance broadband connectivity for client office applications and voice services across nine GMS barges.

GMS is one of the largest providers of self-propelled, self-elevating accommodation jack-up barges in the world. The vessels work in offshore oilfields, often in harsh weather conditions, and therefore require a reliable and high-quality connection between the vessels and the land-based operations. "We have a modern fleet that enables us to serve our clients' needs, which require sophisticated communications systems," said Simon Cook, COO of Gulf Marine Services. "Not only does SpeedCast



**Pierre Jean Beylier**  
CEO - SpeedCast

achieve this, but they are also able to deliver an advanced, globally accessible communications solution that is reliable and has a proven operational deployment record." SpeedCast's solution will initially deliver MBR 2048/512 CIR 512/256 links for each vessel, with scope to upgrade as necessary depending on client requirements. With SpeedCast's strong global network and support



**Piers Cunningham, VP Maritime Services - SpeedCast**

capabilities the vessels will benefit from enhanced communications and VoIP services for operations and crew welfare. SpeedCast will deliver principle support for GMS from its Dubai, U.A.E. sales and support centre, backed by its global support network. "We are delighted that we can support the modern, innovative and sustainable solutions that GMS provides its partners in the offshore

oil sector," said Pierre-Jean Beylier, CEO of SpeedCast. "Our Ku-band service is unrivaled, providing seamless connectivity and a powerful business solution to enable GMS to maintain its focus on providing its clients with efficient and cost-effective solutions."

"The Middle East is a critically important market for the offshore oil sector," said Piers Cunningham, Vice President of Maritime Services, SpeedCast. "SpeedCast has continued to invest in its network and infrastructure to service the demanding requirements of its offshore customers. Likewise, SpeedCast has continued to invest in products and services, for both FSS and MSS, that allow us to serve as a one-stop-shop for our maritime and energy customers' critical communications." **T**

## Speedcast selected by Vroon for high-performance broadband connectivity

SpeedCast has been awarded a multi-year communications contract by international shipping company, Vroon. The new Ku-band satellite service will facilitate high-performance broadband connectivity with multi-megabit speeds, providing "hotel experience" Internet facilities for Vroon clients aboard specific categories of vessels. These include subsea-support vessels (10-25 passengers), walk-to-work vessels (with up to 60 passengers) and wind turbine installation/maintenance

vessels (up to 110 passengers). Vroon operates and manages a diverse fleet of approximately 170 vessels, with more than 400 shore-based staff and around 4,000 marine personnel worldwide. Vroon's modern vessels are active in livestock transportation, offshore support, offshore wind turbine installation and maintenance, dry cargo, container and other segments, including product/chemical tankers, asphalt/bitumen tankers and car carriers. Vroon conducted a competitive

tender process to find a new VSAT supplier for client Internet access on board the "hotel experience" vessels. SpeedCast was selected for its ability to meet a stringent set of requirements, which will enable Vroon to deliver future-proof, high-capacity and scalable VSAT Internet services to accommodate clients' demanding Internet requirements. "With an ever-increasing demand for Internet services from our clients, we selected SpeedCast to deliver these

services in order to fulfil our clients' current and future needs," said Rob Frenks, Vroon Group ICT Manager. SpeedCast's solution will provide seamless connectivity, enabling high-speed Internet access and voice services for the "hotel experience" vessels. The always-on 24x7 broadband communications platform will support a wide range of services, including Internet, voice and video streaming, with real-time connectivity at sea. **T**

# NOAA signs first U.S. Government deal with SES for O3b High Throughput solution

Global satellite solutions provider SES Government Solutions (SES GS) has agreed to a one year contract with the National Oceanic and Atmospheric Agency (NOAA) to provide O3b Networks' services and ground equipment to the National Weather Service Office (WSO) in Pago Pago, American Samoa. NOAA's WSO supports the National Weather Service (NWS) mission to provide weather, water, and climate data, forecasts and warnings

for the protection of life and property. The WSO also provides critically important tropical cyclone warning information to portions of the Pacific. The contract allows NOAA to expand their broadband connectivity outside the continental U.S. to facilitate the wider dissemination of weather and data forecasting. The O3b ground equipment and services at WSO Pago Pago will be key elements of NOAA's communications link to meet these mission

requirements. This particular implementation will enhance NOAA's existing terrestrial connectivity with the use of O3b's high throughput and low latency bandwidth. An uninterrupted high-speed data connection between the NOAA station at Pago Pago and the primary Pacific NWS center on Ford Island in Honolulu, HI is essential for NOAA to update forecast models and issue safety warnings in near real-time. Many Big Data files are transferred between the two

stations, including weather maps and seismic sensor data. By connecting over the O3b constellation, NOAA can accelerate their analysis while reducing reaction times to weather or seismic events. The addition of O3b's 'fiber in the sky' solution to NOAA's current ground network is a prime example of how O3b's capabilities can enhance the U.S. Government's current data dissemination networks. **T**

## The Forecast is Cloudy

Cloud based services have been the hot topic for several years. A recent report from IDC says that cloud spending now accounts for a third of all IT infrastructure spending. There are a lot of good reasons for moving traditional IT functions to the cloud. Massive cloud service providers can leverage economies of scale in their data centers to provide the same services to enterprises at lower costs, while at the same time eliminating the CAPEX spend necessary to deploy new infrastructure. Cloud services can be deployed faster and are more scalable than traditional approaches, allowing business to innovate by trying out new applications quickly and at low cost. "Not only does cloud change how IT is delivered, it also changes the way that the business performs" – Dr. Richard Sykes, chairman of the Cloud

Industry Forum. Moving servers into the cloud puts more demands on the connectivity needed to reach those services. Transactions that remained within the LAN (Local Area Network) now need to go over the internet connection. This drives up the bandwidth requirements which must be weighed against the infrastructure savings. Performance is a bigger concern to enterprises. LANs provide rapid response times and moving these services to a slow connection will kill productivity and negate any gains from infrastructure savings. The move to cloud is only viable if the connectivity can support it. A number of our customers have been enjoying O3b's high speed, low latency services for more than a year. We've taken the opportunity to go back and see what kind of impact the connectivity

is making on end users and markets. One of the changes has been the adoption of cloud based services. In the Cook Islands one of the local banks has moved their servers into the cloud. This provides them with the economic and scalability benefits that I described earlier. Cloud services are even more important in a remote location like the Cook Islands where it can take a long time to get physical shipped and installed. Cloud based services are much faster to deploy and upgrade than traditional servers. There is also a shortage of IT skills needed to operate and maintain equipment on-site. Moving to the cloud provides them with CAPEX and OPEX savings which are widely available in well-connected markets. While cloud services have



**David Burr**

been available for several years these end users have found that the previous GEO satellite services did not support cloud-based services. The high latency and low throughput degraded the performance to the point where it wasn't viable. Moving to O3b's low latency connectivity has allowed them for the first time to properly take advantage of all of benefits that The Cloud has to offer and to experience the internet as it was truly meant to be. **T**



Thitipa Laxanaphisuth

# Thaicom ranked 8th in Global Rankings; Standout results continue in 1H 2015

Thaicom was ranked 8th among Top Fixed Satellite Service Operators in the 2014 world rankings by SpaceNews, a space industry publication. In another recent success, Thaicom's telecommunications subsidiary in Lao PDR was granted a 25-year extension of its concession, strengthening potential for international business growth. The Company reported its operating results for the first half of 2015, posting a consolidated net profit of Baht 1,112 million, up by 24.0% compared to the same period of 2014.

Suphaje Suthumpun, Chief Executive Officer of Thaicom PLC, said: "In the first half of 2015, Thaicom advanced to 8th in the world among satellite operators in the 2014 rankings (up from 10th in 2013) by SpaceNews.

The ranking reflects Thaicom's strong progress and leadership potentials as a world-renowned Asian satellite operator."

In the first half of 2015, consolidated revenue from sale of goods and rendering of services totaled Baht 6,013 million, increased by Baht 201 million or 3.5% from Baht 5,812 million Baht in the first half of 2014. Increased year-over-year revenue from satellite services, combined with significant growth in profit from investment in joint ventures, lead to consolidated net profit of Baht 1,112 million, up by 24.0% compared to the same period of 2014. There was also sizeable revenue growth generated from broadcasting services, with the number of television channels boarded on Thaicom's conventional satellite platform reaching 766 channels, in addition to growth in revenue realized



Suphaje Suthumpun, CEO - Thaicom

***"Our objective is to promote and incubate the reception of UHD content in Asia, and allow broadcasters to evaluate the economic feasibility of satellite delivered UHD broadcasting in our part of the world."***

through increased use of THAICOM 7 since the end of 2014. "Even amidst slowing economic growth and instability in exchange rates between currencies, Thaicom has maintained stable earnings through appropriate financial management policies and efficient management of risks associated with exchange rates, as well as capable management demonstrated by creating added value through end-to-end services and controlling administrative costs.

All of these factors, coupled with the enduring necessity of satellite use as the infrastructure for telecommunications,

converge to sustain and propel Thaicom's satellite business," Mrs. Suthumpun stated. Beyond success in satellite business, Thaicom also succeeded in obtaining an early extended concession for its subsidiary, Lao Telecommunications Company Limited (LTC), to operate mobile network services in Lao PDR for an additional 25 years, beginning in 2022 and ending in 2046. Thaicom is confident that this particular investment in the telecommunications sector will generate revenue and strengthen potential for international business growth. "All along, LTC has had good performance results. The number of subscribers

has increased continually and LTC still maintains the top slot in the Laotian market, with 49.52% of the market share and over 1.8 million subscribers. Use of Internet services, particularly HSPA mobile broadband, has increased and there has been consistent growth in the number of CDMA Fixed Wireless Phone users. Based on the clear direction of the market in Lao PDR, and the large unmet demand of the target group, Thaicom decided to increase investment in telecommunications in Lao PDR by providing a loan through its subsidiary that would allow LTC to extend its concession to conduct telecommunications business in Lao PDR. As an opportunity to expand LTC's business and also a possibility to be a part of the Lao Securities Exchange in the future, Thaicom is confident that this investment in LTC will generate longterm gains for Thaicom," Mrs. Suthumpun added. Thaicom's Internet and media services subsidiary, CS LoxInfo Public Company Limited (CSL), saw continued growth in its ICT business, with the number of subscribers to corporate leased line and Internet data center services increasing by 2% and 5%, respectively, from the previous quarter. DTV Service Public Company Limited (DTV) is focused on business expansion through the DTV Multi Dwelling Unit Project which provides end-to-end solutions for condominiums, apartments, and hotels through a variety of customizable products. DTV also continues to provide platform services, developing new platforms and applications to meet customer needs. ■

## Aircom Pacific leases multiple Transponders across AsiaSat Fleet for delivery of in-flight services

Asia's leading satellite operator Asia Satellite Telecommunications Co. Ltd. (AsiaSat) has reached an agreement with in-flight entertainment and connectivity service provider Aircom Pacific, Inc. (Aircom Pacific) for using AsiaSat's transponder capacity and uplinking services. Under the agreement, Aircom Pacific will use Ka-band and Ku-band capacity on AsiaSat 7 and AsiaSat 8 to deliver its in-flight entertainment and



Philip Balaam

connectivity services for airlines flying routes over Asia. These services include

Wifi broadband Internet, streaming TV and videos, streaming gaming, cellular connectivity, and real-time Duty Free shopping and travel services, enabling passengers to enjoy more comprehensive entertainment options during their flight while staying connected to their work and social networks at all times. "Advanced satellite solutions are playing an increasingly important role in enabling in-flight service providers and airlines to offer the

best possible entertainment and connectivity solution to their passengers. We are excited that AsiaSat's satellite capacity was selected by Aircom Pacific to deliver more sophisticated in-flight communications and entertainment services that meet passengers' growing demand for higher-quality entertainment and connectivity," said Philip Balaam, Vice President, Sales and Business Development of AsiaSat. **T**

## Lockheed Martin makes three times more powerful satellite cooling system

Lockheed Martin scientists are packing three times the power density into a key satellite cooling system whose previous design is already the lightest in its class. This project continues the company's effort to reduce component size, enabling compact, higher-power spacecraft payloads and smaller sensor platforms back on Earth. Highly sophisticated electronics

like satellite sensors and cameras need to be cooled to detect what they're designed to capture, even to temperatures as low as -320 F (-195C). Smaller cryocoolers mean more affordable satellites and launches, and they have applications on Earth, too. With higher power, this microcryocooler enables larger, more sensitive IR sensors, which is especially useful

for very high-resolution images. Despite its increased capability, the component's power efficiency rating is roughly the same as lower-power coolers. The new system cools optics and electronics to as low as -320 F (-195 C). The High Power Microcryocooler is a high-reliability system designed for continuous operation over a lifespan in excess of 10 years.

The High Power Microcryocooler is the industry's highest power density cryocooling system. It delivers more than 150 watts per kilogram, a significant advancement from the 30-60 watts per kilogram rating most space-rated cryocoolers deliver. It also weighs less than a pound, which is less than half the weight of similar cooling systems.

## Hispasat, NEC provide video connectivity to Colombia

Aiming to reduce the digital divide across Colombia as a part of the public project Kioscos Vive Digital, Hispasat and NEC are to provide universal connectivity services via satellite in rural and remote areas of the country. Taking those living in the largest cities into the digital era and opening new opportunities for over-the-top (OTT) services, the project

comes from a joint venture between the two companies, who in December 2013 won the government bid to install, operate and manage 648 digital kiosks in seven provinces. The current project is the second stage of the Kioscos Vive Digital initiative, which aims to ensure 100% of towns with over 100 inhabitants in Colombia have at least one

communal Internet access point. So far, the Amazonas, Boyacá, Caldas, Cundinamarca, Guainía, Risaralda and Vaupés provinces have been given access to the Internet, national and international telephone services, among many other services. Elena Pisonero, Hispasat's president, commented:

"Satellites are a very important infrastructure in countries where the land networks are less extended and there are still regions that do not have access to the information society." Also in Colombia, Hispasat is providing satellite connection for video and voice to the Ruta BBVA organisation, formerly Ruta Quetzal. **T**

# Yahsat one step closer to expanding more satellite broadband across Brazil and Africa

Yahsat has announced a major milestone in the construction of its third satellite; Al Yah 3, due to be delivered by the end of 2016. In partnership with Orbital ATK, Yahsat has now completed the Critical Design Review (CDR) on the Al Yah 3 satellite.

David Murphy, Chief Commercial Officer at Yahsat said, "This is an important



moment for us. Today's achievement demonstrates

that we are on track for our scheduled launch. Our customers have told us they need more services, greater speeds and a wider coverage area and we've listened; Al Yah 3 will provide all three of these things." The Critical Design Review was the last chance to make any changes to the satellite design. Al Yah 3 now moves into the

spacecraft integration phase of construction. Mr. Murphy went on to say, "Al Yah 3 will be all Ka-band, which we've found works extremely well in the African markets we already serve. With this new investment in infrastructure, we are looking to enhancing our services and providing more reliable connectivity even in the most remote areas." **T**

## Livewire Digital helps broadcasters speed the delivery of live footage over satellite and bonded cellular modems

Action-packed news, sport, entertainment and corporate footage is top of the agenda with new versions of Liveire's M-Link Live X and M-Link NewsCaster portable HD and SD news gathering solutions for deployment by a single reporter. Designed to support live video

over IP circuits such as 3G/4G, Inmarsat's BGAN and other portable satellite systems such as Ka-band/VSAT and Thuraya-IP, M-Link Live-X now comes with integrated RazorLink™ technology enabling users to transmit high quality low latency video over bonded links such as mul-

multiple cellular modems. Razor-Link™ technology benefits both live and file based workflows, offering exceptional resilience and outperforming some competitive products by a factor of three or more, offering low latency high quality video and ensuring file delivery is as fast

and reliable as possible. Simultaneously, making its debut on the Livewire stand at IBC 2015 is the 'commercial release' of NetCaster® designed to allow groups of untrained personnel to contribute to a broadcast or streamed shows from an iPhone or iPad. **T**

## Pak, China to collaborate in space technology

Federal Minister for Planning and Development Pakistan, Ahsan Iqbal put forward a space technology alliance between Pakistan and China. The minister proposed the idea during a meeting forum for China-Pakistan Economic Corridor (CPEC) that held in Karamay-Xinjiang last week. The proposal is made a part of the Karamay-Xinjiang after getting approval as the declaration got approved unanimously after the two-day meeting concluded. At the end of the session, the

minister for development said that bilateral association on space technology will earn both countries a new level of bondage. He stressed upon a collaborated launch of space missions consisting of astronauts belonging to both countries. "This is the strength of the CPEC to increase more connectivity between the two friendly countries. It will shape up the future destiny of both the nations through communication linkages," said the minister.

Chinese Ambassador to Pakistan, Sun Weidong, was also present in the CPEC forum. He termed the meetings as successful in boosting understanding among the associated stakeholders for implementing the CPEC. At least 300 officials, businesspersons and public figures had also taken part in the two-day forum. It has also been decided at the forum that such meetings should be made a permanent platform to examine the project and present

collaboration on broader sides. The forum will also be utilised to ensure the projects real goals of promoting Pakistan-China ties. Meanwhile, China is a member of the International Space Station and has a vast network of global satellites serving military and civilian purposes. So, if the written association project achieves a substantial recognition and includes some joint operations, it could let Pakistan to learn a lot from China's experience in the space technology field. **T**



## GSMA disappointed by lack of progress made by Asia-Pacific Telecommunity ahead of WRC-15

John Giusti, Deputy Chief Regulatory Officer, GSMA, commented on the outcome of the final meeting of the Asia-Pacific Telecommunity's Conference Preparatory Group (APG) in Seoul, ahead of the World Radio-communication Conference 2015 (WRC-15): "The GSMA is disappointed with the APG's decision to date to identify only 51MHz of additional spectrum for mobile broadband at WRC-15. This represents an increase of less than five per cent over the total amount of spectrum currently identified for the region. The International Telecommunication Union (ITU) estimates that governments need much more – double the amount of mobile spectrum available today – to meet the growing consumer demand for

data. With 4G rising and 5G on the horizon, and without more spectrum identified, this means that Asia Pacific cannot benefit from economies of scale and affordable connectivity and puts the future of its digital economy at risk. "While we are pleased that the APG has identified a portion of the L-band for mobile broadband, we encourage Asia Pacific countries to follow the lead of governments in Africa, the Americas and Europe in looking to make more of the L-band spectrum (1427-1518MHz) available for mobile broadband during WRC-15. "We are also disappointed that the APG has decided not to make spectrum in the under-utilised 2.7-2.9GHz band available for mobile broadband in dense urban areas. Additional capacity

spectrum in higher frequency bands is vital, particularly in those countries where the 2.7-2.9GHz band is an important alternative to the C-band (3.4-4.2GHz). "It is vital that we find additional spectrum for future use by mobile broadband in the Asia Pacific region to meet the increasing mobile data needs of consumers and businesses in the years ahead. According to GSMA Intelligence, in the first quarter of 2015, Asia Pacific was home to 1.8 billion unique subscribers and nearly 3.8 billion connections, accounting for half of the world's unique subscribers and connections. As the region is also expected to grow at a faster pace than the rest of the world, with 600 million new subscribers anticipated by 2020,

it is critical that governments identify more spectrum for mobile now to meet this future demand. The GSMA will continue to work with governments in the region to ensure that their citizens are not left behind, further exploring options for supporting more sub-700MHz, L-band, 2.7-2.9GHz and C-band spectrum at the WRC-15." The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. **T**

## GSMA report calls for UHF spectrum in Arab States to be co-allocated for Broadcast TV and Mobile

The GSMA has published a new report finding that terrestrial digital television broadcasting in the Arab States does not need an exclusive allocation of the UHF spectrum band (470-694MHz). The report "Terrestrial Broadcasting and Spectrum Use in the Arab States", developed by Plum Consulting, highlights how a significant amount of the UHF band could also be used for mobile broadband, unlocking significant socio-economic benefits throughout the region. The report calls on Arab Spectrum Management Group (ASMG) countries to agree on a co-primary allocation for broadcast and mobile in the UHF spectrum band at the In-

ternational Telecommunication Union's (ITU) World Radiocommunication Conference (WRC-15) in November 2015. "Spectrum is a scarce resource and regulatory authorities in the Arab States are looking to maximise flexibility so that their networks are ready to meet consumers' growing demand for mobile data," said John Giusti, Deputy Chief Regulatory Officer, GSMA. "Adding a mobile allocation would allow countries to make the best and most valuable use of this spectrum to meet the needs of their citizens, especially for underserved communities, while still supporting over-the-air television in the band."

A joint position among the ASMG member states in favour of a co-primary allocation in the UHF spectrum for broadcast and mobile at WRC-15 would foster the option to roll out low-cost mobile broadband services in the future, especially in underserved areas. If action is not taken now, it will make it more difficult for regulators to release additional spectrum from the UHF band for mobile until as late as 2030 or beyond, an unnecessary and avoidable outcome. According to Cisco, the Middle East and Africa will experience the strongest mobile data traffic growth of any region between 2014 and 2019,

but in some Arab States mobile broadband growth is restricted by a lack of available spectrum. The report finds that demand for broadcasting capacity in the region has been overestimated in previous policy decisions. Viewership of terrestrial television in many Arab countries is low, with consumers choosing to watch television over satellite, cable and, increasingly, IPTV. According to the study, all UHF spectrum above 582MHz may potentially be released for other services, including mobile broadband, while still supporting all current and projected terrestrial TV requirements in the region. **T**

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*Iyad Al Zou'bi*

# New Federal Decree permits Foreign Investment in Etisalat

In a historic move, UAE Federal Law 1 of 1991 has been amended by Federal Decree by Law no. 3 of 2015 and new Articles of Association have been issued by the UAE Cabinet of Ministers. The new regime introduces momentous changes, including the possibility of foreign investors owning shares in Etisalat Group and Etisalat's legal name will change to Emirates Telecommunications Group Company PJSC, but continue to be known as Etisalat Group.

The changes permit legal/judicial persons wholly-owned by UAE nationals to hold shares in the company. Also, non-national individuals and entities may own up to 20% of Etisalat Group's shares, subject to the approval of the Etisalat Group Board of Directors. However, restrictions in respect of voting rights shall be applied to the shares owned by non-nationals and such shares shall not hold any voting rights at Etisalat



**Eissa Al Suwaidi**  
**Chairman, Etisalat Group**

Group's general assembly (however, holders of such shares may attend general assembly meetings). Commenting on the changes, Eissa Al Suwaidi, Chairman, Etisalat Group said: "I wholeheartedly welcome the Federal Decree and praise the Government for their leadership and support of the telecommunication sector. The approval to allow institutional and foreign ownership of



**Ahmad Julfar**  
**CEO - Etisalat Group**

Etisalat Group's equity is another significant milestone in the history of Etisalat Group. It will have a positive impact for both Etisalat Group's shareholders and the Stock Exchange. It also sends out a strong signal that the UAE is open for business and will enhance Etisalat brand recognition around the world." In addition to ordinary shares, a "Special Share" will be issued to the Federal Government of the UAE (the "Special Share-

holder"), pursuant to the approval of Etisalat Group's Board of Directors. Etisalat Group will also be entitled to issue different classes of shares. Other than the issuance of the Special Share, Etisalat Group does not intend to issue any additional shares at this time. Ahmad Julfar, Group Chief Executive Officer, Etisalat added: "This is a historical moment for Etisalat which will allow us to build on the years of success the company has enjoyed and provide additional impetus in our pursuit of excellence in all that we do. It will enable Etisalat to continue to invest in the innovative products and services, which our customers demand and are vital in the highly competitive global telecommunications sector. As a result I am confident that Etisalat will go from strength to strength and continue delivering long-term value to our shareholders." 

## Abdulaziz Al Sawaleh's leadership in HR recognised with prestigious international award

Abdulaziz Al Sawaleh Alshehhi, Etisalat Group's Chief Human Resources Officer, received a prestigious international award in recognition of his role in leading Etisalat Group's Human Resources across its footprint. Highly contested by multinational companies, Al Sawaleh won the award for 'Excellence in improving performance through leadership' at the 6th Annual Asian Business Awards. The award was an acknowledgement of Al Sawaleh's commitment to establishing innovative initiatives throughout his career with Etisalat.



He has designed programmes that focus on professional development and employee morale, which have directly contributed to an increase in employee performance and the

enhancement of young leadership talents at Etisalat Group. Al Sawaleh leads Etisalat Group's strategy that delivers excellence in the field of Human Resources through creating a positive work environment and offering advanced training programs, which effectively contribute to strengthening and motivating the staff to innovate in their day to day performance. Commenting on the award Al Sawaleh said: "I am honoured to receive this remarkable recognition that reiterates our success as an organisation in developing our greatest asset:

our people. I would like to extend my special thanks and appreciation to Etisalat Group management and family that I am proud to be part of, for creating an environment that allows us to deliver excellence in leadership and encourages innovation in everything that we do." As Group Chief Human Resources Officer, Abdulaziz Sawaleh leads Etisalat's Human resources function throughout its operations in 19 countries in the Middle East, Africa and Asia, with a customer base of 168 million people. 



Seiichiro Toda

## NEC to build telecommunications and security systems for large-scale Oil refinery in Kuwait

NEC Corporation has announced its receipt of an order from JGC CORPORATION for the delivery of telecommunications and security systems for the Kuwait National Petroleum Company's large-scale Mina Al-Ahmadi Refinery, the construction of which JGC CORPORATION is involved in. The value of this order is approximately Yen1.3 billion, and NEC will commence delivery of the systems from December 2015. The systems that NEC will provide to the Mina Al-Ahmadi Refinery consists of telecommunications systems, including VoIP phone and wired/wireless in-plant LAN systems, and security systems such as video surveillance, access



**Tan Boon Chin,**  
**MD Global Safety - NEC**

management and emergency broadcast systems. The construction of telecommunications and security systems for oil refinery plants requires industry-specific system design and construction know-how, such as the utilization of electronic

devices to which explosion-proofing processes have been applied in order to reduce the risk of fires and explosions, and designs that physically isolate networks that handle highly confidential communications from regular telecommunications networks.

The NEC Group has an extensive track record and experience in constructing plant-oriented communications and security systems, including systems for large-scale oil plants in Saudi Arabia.

NEC considers the receipt of this order to be a result of the high appraisal of its cutting-edge technological capabilities, in addition to its long track record of system building and operations.

Tan Boon Chin, Managing

Director, Global Safety Division, NEC Corporation said, "We are pleased to be able to contribute to JGC's cutting-edge refinery project. NEC possesses some of the world's top-level image recognition and communication technologies, such as facial recognition, crowd behavior analysis, super-resolution technologies and Software Defined Networking (SDN). Moving forward, by working in collaboration with engineering companies, we'd like to propose solutions that integrate these technologies with plant-oriented systems in order to contribute to the even safer and more secure operation of important facilities such as refineries and power plants." **T**

## NEC launches solutions for simplifying the installation of SAP HANA(R)

NEC Corporation has announced the launch of its "SAP HANA Tailored Datacenter Integration Solutions (NEC Storage)," which are designed to simplify the installation of SAP HANA(R) in-memory database software.

This solution is a combination of the NEC's SAP HANA appliance server, the "NEC High-Performance Appliance for SAP HANA," and four models from the NEC M Series of storage products. All of the four models' storage have been certified by SAP for the SAP HANA Enterprise Storage. Operation

verification and evaluation of the connection to the SAP HANA appliance server are also completed prior to delivery. With this solution, customers can eliminate the burdensome work of satisfying all the performance and availability requirements set by SAP in the construction of a SAP HANA environment, thereby drastically shortening the installation time.

"We have seen rapidly increasing demand from enterprise customers for SAP HANA as a big data processing platform," said Hiroyuki Asaga, General Manager, Partners' Platform Division,



NEC Corporation. "The new solution, which combines our SAP HANA appliance server and storage products that have been certified for SAP HANA

Enterprise Storage, will simplify the installation of SAP HANA and enable more customers to benefit from the high speed in-memory processing." **T**

Paramita Chakrabarti

## du successfully trials Network Function Virtualization (NFV) in the UAE

du announced that it has successfully completed customer premises equipment virtualizations trials in the UAE. When commercially rolled-out in future, CPE virtualization is expected to provide an enhanced service whilst optimising OPEX and CAPEX costs for residential and enterprise customer in addition will equip du to offer these services within a much shorter time frame. Virtualized CPE (vCPE) technology offer the ability to service providers to lower the cost of end premises equipment and reduces the complexity of these devices while hosting the complicated services in the du cloud. The



**Jasim AlAwadi, VP Network Infrastructure & Services - du**

vCPE trials reiterate du's position as a market innovator and a provider that wants to have services which disrupt the market in consumer and enterprise data communication

space. This permits du to offer a "plug & play" solution for the anticipated demand for virtualized solutions in future, making service activation achievable in matter of few hours. The service simplifies the provision of Software Defined Networking (SDN) driven service. Jasim AlAwadi, Vice President - Network Infrastructure & Services, du, said: "We are delighted to be the first in the region to successfully complete the trials of this promising new technology. Network Function Virtualization (NFV) - and in particular vCPE is an exciting emerging new growth area in our existing portfolio and

is critical to our future of consumer and enterprise growth plans and potentially introduce du to the OTT market, which will entail that du can provide its services over other service providers infrastructure like Google and Amazon. The introduction will give us the ability to provide multiple services over a virtual network. This takes du a step closer to an application aware of network" vCPE seamlessly extends the benefits of a programmable network and application aware abstraction to branch locations and homes, paving the way for a dynamic and more responsive operational environment. **T**

## du University inculcates service culture within staff to drive customer satisfaction levels

du University, started earlier this year, is set to launch its latest addition to hone the talents of employees and drive customer satisfaction levels higher. The Retail Sales & Service Academy and the Enterprise Sales Academy, launched in August, aim to provide the relevant training and development to du employees that is aligned with evolving customer expectations.

Speaking about the planned training to cater to evolving customer needs, Ibrahim Nassir, Chief Human Capital and Administration Officer, du said: "Our aim is to facilitate a transformation by changing mindsets and creating a ubiquitous culture of service. With the Retail Sales & Service Academy we are providing the

relevant tools and fostering an environment that enables our staff to directly impact customer experience across the various touch points: online, through our call centre, and face-to-face at du retail stores and outlets. As an Emirati business, our aim is to set the benchmark for all other organisations within the UAE when it comes to training and development of staff to consistently improve the customer experience."

du is collaborating with experts from Vodafone, so that it can deliver global best practice customer service training through its Retail Sales & Service Academy.

Always looking to improve its customer service models, du introduced in-store video retail

support last year, allowing walk-in customers to interact with service agents through a video conferencing system. In an ongoing effort to engage customers and meet their changing needs, du will continue to update its retail experience across store locations around the region. These updates will eventually encompass all of du's customer interactions; at its online shop, social media channels, as well as face-to-face. In line with this initiative, du offers staff that engage directly with the customer the opportunity to become more than just sales representatives, and to act as trusted advisors - consulting subscribers about offers, services, promotions and deals best suited to them.

All du Retail store staff in both own and franchisee operated stores will be enrolled in the Academy to ensure a uniform customer experience across all retail touch points.

The du Retail Sales & Service Academy and du's Enterprise Sales Academy, offer training programmes that teach enterprise sales staff to diversify from product based to solution based sales. Staff are being trained also to understand both customer needs and retention in the enterprise segment.

All Enterprise Business staff including Directors and Account Managers will go through the training programs as a part of their role requirements towards building the du way of sales & service. **T**

# Nokia Networks bags \$100 million IMS deployment deal from Reliance Jio

Finnish telecom gear maker Nokia Networks expects a strong performance in India this year, buoyed by a half-year deal tally that is close to surpassing the number of orders the company bagged in the country in 2014. In the first half of 2015, Nokia Networks won 30 deals in India, including one for IP multimedia system deployment needed for calls over 4G, and other rollout and managed services deals. It had won 35 contracts in 2014. The company expects deal momentum to continue in the second half this year, with larger value sizes, as operators increase capital



**Sandeep Girotra,**  
VP & Head - Nokia India

expenditure by nearly a quarter over last year, mostly on building data networks. "In H1, the revenue growth

has been highest since 2008," Nokia Networks' head of India region, Sandeep Girotra, said. "This has been driven by lifting of regulatory uncertainty, availability of liberalised spectrum, data growth and its monetisation for telecom operators," he said. Girotra said the company had landed the world's largest IP multimedia system (IMS) deployment deal for a leading operator which will enable best in class VoLTE in line with the company's aggressive LTE rollout plans. He did not name the operator, but people aware of the deal said the two-year contract, valued at about \$100 million, was with

Reliance Jio. IMS will allow voice calls to be made on IP network, a basic requirement for voice over LTE or VoLTE. It will compete with first mover Bharti Airtel and potential entrants Vodafone India and Idea Cellular. Nokia Networks' worldwide revenue in June quarter rose 6% to \$2.99 billion year-on-year on the back of more sales of mobile broadband and global services. Globally, the company is expecting an 8-11% increase in sales in 2015. The company did not share numbers. Nokia Networks also renewed two key managed services contracts. **T**

## Bharti Airtel commercially launched 4G services

Bharti Airtel has commercially launched its high-speed 4G services in 296 towns across India, following the successful trial of services in select cities and the feedback received from customers.

The launch of Airtel 4G, now available to customers across a range of smart devices including mobile phones, dongles, 4G hotspots and Wi-Fi dongles, comes even as Mukesh Ambani-owned Reliance Jio Infocomm is readying to launch its own 4G services commercially around December. Incumbent rivals Idea Cellular, Vodafone India and Reliance Communications have also announced launch plans for their respective 4G services - either later this year



**Gopal Vittal**

or early next. "With the help of the feedback received from the beta launches, we have now built India's first commercial 4G network that will make high speed mobile broadband a reality. The national roll-out today is another small step in our journey to be the most innovative and customer focused brand," Gopal Vittal,

MD & CEO, Bharti Airtel (India & South Asia) said, in a statement.

"We also believe that an open platform is critical to developing an ecosystem that nurtures innovation and enabling our consumers to access a myriad set of possibilities on their mobile phones. Our 4G network is therefore built on an open partner ecosystem model that brings together the best in the industry and introduces the market to these never before experiences," Vittal added.

Airtel also launched a new carrier agnostic mobile app - 'Wynk Movies' - a first of its kind movie mall that will offer a specially curated library

of thousands of movies and other popular videos. The telco is offering 4G services at 3G data prices with packs starting at Rs 25. In addition, with every 4G SIM swap, Airtel is offering six months of unlimited music streaming and downloads on 'Wynk Music' and five free movies per month for six months on the Eros Now channel of 'Wynk Movies'. In addition, the telco has introduced a new range of 'Infinity Plans' starting Rs 999. These high-end plans offer unlimited voice calls on mobile (first time in India) along with data benefits and access to 'Wynk Movies' and 'Wynk Music', the company said. **T**



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# Ooredoo announced network upgrade in Qatar

Ooredoo's "SuperNet" is one of the first in the world to support three-band carrier aggregation

Ooredoo has announced the launch of Ooredoo SuperNet in one of the most significant network evolution in Qatar's history.

As part of the upgrade, Ooredoo is introducing three-band carrier aggregation, building on its position of being the first and only company to combine 20+10 MHz bands on its 4G+ network, enabling Ooredoo to reach higher maximum top speeds and offer Ooredoo customers faster on-average Internet speeds. Now, the company is expanding to aggregate spectrum across three bands to deliver another evolution in speed and performance for Qatar's mobile Internet. The aim is to provide a theoretical maximum speed of 375 mbps, which will be available to customers as and when high-speed devices come onto the market.

Ooredoo demonstrated the superiority and capacity of its network in December 2014, when Ooredoo Qatar, Nokia Networks and China Mobile achieved a record-breaking



**Sheikh Saud bin Nasser Al Thani, CEO - Ooredoo Qatar**

speed of 4.1 Gbps over TDD-FDD LTE, in an experiment to demonstrate future user demand. At this speed, even the most demanding mobile users who would be able to download a full-length 5 GB high-definition (HD) movie in just 11 seconds and simultaneously upload a 5-minute 30 MB video clip from a concert in less than a second. Sheikh Saud bin Nasser Al Thani, CEO, Ooredoo Qatar said: "Ooredoo's SuperNet has been designed to give our customers the smoothest,

most streamlined Internet experience, and we continue to deliver real technological upgrades that offer direct benefits for our customers. Our fixed and mobile networks have been designed to be fast. We were the first company in Qatar to offer a 4G+ experience delivered through aggregating two bands on the network and now we have made the leap to three, as we offer a continuous upgrade for our customers." To ensure customers have access to next-generation services wherever they are in Qatar, Ooredoo has also launched "Operation Desert", which aims to significantly improve coverage in Qatar's popular desert locations in time for the upcoming camping season. As part of the upgrade Ooredoo will invest in the latest wide band antenna systems, which provide the flexibility to smoothly upgrade capacity as per customer requirement, as well as meet existing and future capacity needs in the country. SuperNet also encompasses

Ooredoo's fixed fibre network, including continued expansion to bring world leading internet speeds to business and residential customers across Qatar.

Successful trials of up to and beyond 1 Gbps were completed earlier this year and the company plans to bring additional speed options to customers in the near future using SuperNet.

Ooredoo press release in this regard further says, on top of the expansion and upgrades, the company plan an all-network optimization to further increase speeds for customers and boost the download speeds across Doha on both its fixed and mobile networks.

The upgrade was designed to provide a better customer experience on the Ooredoo network, as well as contribute to the Qatar National Vision's aim to boost the knowledge-based economy, by enabling a host of new customers access to the financial, educational and social services the Internet can provide. **T**

## Ooredoo invites customers in support of Myanmar flood victims

H.E. Sheikh Abdulla Bin Mohammed Bin Saud Al-Thani, Chairman of Ooredoo has expressed his deep concern on the losses from the severe floods in Myanmar. He announced that Ooredoo is working to help ease their burden during this critical time. Besides providing essential support, we are working diligently to minimize network disruptions to help ensure that we can continue to provide a vital lifeline to affected communities. We hope that the

situation improves soon and flood waters recede so that recovery work can begin as quickly as possible." Ooredoo Myanmar is utilising its nationwide network of employees, dealers, and distributors to assess local conditions and needs. The firm intends to directly distribute food, water, medicine, blankets and assist with the provision of temporary shelter to the communities that it can safely access.

For inaccessible regions, the company will make the same donations to local authorities for their distribution. Ooredoo Myanmar provided support of over 20 million MMK in two affected states earlier this week and is making donations in other flood affected regions of up to US\$170,000. Ooredoo Group has pledged to match this donation with an additional US\$200,000 to contribute to reconstruction efforts after flood waters recede.

Ooredoo actively supports the GSMA's Humanitarian Connectivity Charter, launched at the GSMA Mobile World Congress earlier this year, which demonstrates the commitment of the mobile industry to support customers and first responders before and during humanitarian emergencies. Ooredoo has longstanding commitments to support the communities across its footprint during challenging times. **T**

## Qatar: One of the most advanced telecom markets in the Middle East

Qatar's telecom services market is set to generate US\$2.8 billion in service revenue by 2020, driven by operators' consistent investment in next generation networks capable of delivering new innovative products and services to the market.

Pyramid Research expects the Qatari telecommunications market to generate total service revenue of US\$2.8 billion in 2020, up from a forecast of US\$2.3 billion in 2015.

This translates to an annual compound growth rate of 3.6%. Moreover, the mobile

penetration rate in Qatar is set to increase to 191% by year-end 2020, one of the highest rates in the world. Average per capita spending on telecommunications services now stands at over US\$1,000 per year. This makes Qatar – the fourth largest economy in the GCC – one of the most developed telecom markets in the Middle East.

"Alongside similar markets such as the UAE and Saudi Arabia, Qatar is on its way to becoming a digital society supported by smart city initiatives," says Houda Bostanji, senior analyst at

Pyramid Research. Operators are deploying next-generation high-speed technologies. Operators Ooredoo and Vodafone have invested to ensure that the highest speeds and the best quality of service are offered to mobile subscribers; LTE-A deployments through carrier aggregation, for example, have yielded downlink speeds of 150-225Mbps.

According to the report, Qatar will see deployments of the newest technologies on offer by vendors.

"Many Qataris will adopt the latest compatible devices, supporting the positive

outlook for growth," says Bostanji.

Room for improvement with new cloud solutions. According to the research, operators still have room to improve their efficiency through upgrading OSS and BSS with new cloud solutions offered by major vendors including Huawei, Alcatel-Lucent and Ericsson.

The improved service quality of fixed high-speed broadband will help enterprises explore new IT solutions such as cloud computing, hosting solutions, M2M and big data analytics.

Emily Shotter

## Ooredoo reveals new fibre home broadband packages in line with the nationwide fibre rollout plan

Launching a new phase of its nationwide fibre rollout plan, Ooredoo has introduced its new Superfast Fibre as part of its suite of Home Broadband services.

Featuring unlimited data with download speeds reaching as high as 100Mbps, up to 25 times faster than the company's current Home Broadband packages, these are the fastest and most powerful residential broadband packages currently available in the market.

Ooredoo is introducing four Superfast Fibre Home Broadband packages, each with unique benefits and unlimited data.

The first value-added subscription comprises speeds of 15Mbps, with an



**Greg Young**  
Chief Executive Officer - Ooredoo

additional 250 minutes of voice calls between fixed Ooredoo lines each month; the second, 25Mbps with the same 250 minute allowance on calls; the third raises the bar to 50Mbps with unlimited Ooredoo to Ooredoo fixed line voice calls per month; and the fourth, the ultimate

100Mbps, which handles downloads and online gaming like never before.

"This life-changing technology is the most powerful domestic connection that the Sultanate has ever seen, and by introducing Superfast Fibre Home Broadband services, as an addition to our popular wireless Home Broadband services, we are delivering a whole new online experience for local communities," said Greg Young, Chief Executive Officer at Ooredoo. "With unparalleled connection strength and speed, this is what home broadband is supposed to be.

Where previously customers may have downloaded movies or streamed data that used the majority of their bandwidth, it will now be a

breeze with plenty to spare; if families want to download a HD movie, it can now be on their screens in less than 10 minutes."

Phase 1 of the rollout has been completed which means that 11,000 homes in Mabella are able to subscribe to our Superfast Fibre service and feel the power of Ooredoo's industry-leading broadband technology.

The next phase of the rollout will see an additional 20,000 homes in Al Khoudh able to use our Superfast Fibre Service at the beginning of September, thereafter the service is expected to expand gradually to cover the majority of the Muscat Governorate, Salalah, Sohar and Duqm areas and beyond.



## Vodafone takes network experience to newer heights with 3 band carrier aggregation

Vodafone has announced that it is the first telecom operator in Qatar and one of the first in the world to have the top speed of up to 375 Mbps live on its network. This was completed after it tested and rolled out 3 band LTE Carrier Aggregation across its sites in Doha Corniche and the Qatar Science & Technology Park (QSTP) with other additional sites across Doha to be progressively ready by November 2015. The step re-asserts Vodafone's position as a leader in technology and innovation. Ramy Bactor, Chief Technology Officer of Vodafone Qatar, said: "This is another signifi-



**Ramy Bactor, Chief Technology Officer - Vodafone Qatar**

cant milestone in our plans to continue to offer our customers enhanced network experience. The ultra-speed of up to 375 Mbps is achieved by aggregating 50MHz of Spectrum across

3 bands. What this means is that when we launched 4G+, our network provided more than double the speeds our customers had earlier from Vodafone 4G. Today with 3 band LTE, our network provides more than four times the original 4G speeds." The 3 Carrier Aggregation roll out, which will cover additional sites over the next few months in key locations such as West Bay, Katara, The-Pearl and others, is another hallmark in the company's steadfast commitment to provide its customers with state-of-the-art infrastructure that takes their data and calling

experience to an entirely new level. "With the roll out of 3 Band Carrier Aggregation, we are getting ready for the launch of the newer smartphones which will enable such technology levels and this is expected to happen towards end of August 2015 when some mobile phone manufacturers will start offering these handsets in the market. Having said that, all Vodafone 4G+ customers can now see improvements in speed bringing the maximum speed up to 300 Mbps, a significant increase over the existing, but also substantial, 225 Mbps." Bactor added. **T**

## Vodafone presses ahead with network enhancement in Al-Wakrah and Al-Wukair

Vodafone has announced that it has completed the upgrade of its network cell sites in the areas of Al-Wakrah and Al-Wukair achieving thus a faster and stronger network experience for customers living and working there.

The initiative is part of the company's network upgrade initiative, which Vodafone embarked

on in January 2015, and which aims at offering customers superfast voice and data services, wherever they are.

The upgrade covered 30 sites in Al-Wakrah and Al-Wukair uplifting their 3G capacity by around three times and their 4G capacity by around four times. Vodafone also added 13 new 4G LTE sites to Al-Wakrah, covering

43% more of that area, and providing better LTE, and thus data coverage there.

Furthermore, the company also expanded 15 sites with HSDPA Dual Carrier uplifting existing 3G speeds up to a significant 43.2 Mbps. Lastly, the company announced that all 4G sites in Al-Wakrah and Al-Wukair have been uplifted to 4G+ capacity.

Following the launch of its 4G+ network in May 2015 and a nation-wide network enhancement initiative with an investment of over QAR 500 Million, Vodafone achieved increased 3G and 4G coverage and capacity which produced a significantly better customer experience in both voice and data services. **T**

## Vodafone says payments bank licence will help in offering comprehensive financial services

Vodafone India has said the payments bank licence will enable it offer a comprehensive portfolio of banking and financial products and services, accelerating India's journey into a cashless economy.

"We are grateful to the RBI for giving us the licence for setting up a payment bank. The

licence will enable it to build on this further and offer a more comprehensive portfolio of banking and financial products and services, accelerating India's journey into a cashless economy," Vodafone India MD and CEO Sunil Sood said in a statement.

The company said with over

90,000 'M-Pesa' agents, it is already providing people in remote areas a convenient way to transfer money and make payments.

Vodafone said the company has partnered with several government bodies to run pilots for enabling direct transfer of wages/subsidies and the payment

bank licence will enable it to build on this further.

"We remain committed to actualise the government's vision of financial inclusion by leveraging the reach of mobile technology to service the unbanked and underserved sections of the society," the statement added. **T**

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# Huawei redefines innovative ICT to enable smart energy at its Global Energy Industry Summit 2015

With energy as a driving force for global economic development, energy companies around the world are encountering a multitude of challenges as they move towards digital transformation. Against this backdrop, Huawei hosted its Global Energy Industry Summit 2015 with the theme of “Innovative ICT Enables Smart Energy” in Almaty, Kazakhstan, from August 19 to 20, 2015. The summit gathered over two hundred attendees to discuss the application of innovative ICT technologies and solutions in the energy industry to enhance production efficiency, enable scientific management and ensure secure operations. Attendees included representatives from Huawei’s customers from the energy sector in China, Egypt, Turkmenistan, Uzbekistan, Kyrgyzstan, Tajikistan and Kazakhstan; global partners such as CNPC Richfit, China Petroleum Pipeline Engineering Corporation (CPPE), Honeywell, ABB, and SAP; senior analysts from the Forrester Research consulting company; as well as experts and media from the global oil and gas industry.

“In the future, ICT technologies will substantially change the entire oil and gas industry, and will redefine business strategies and efficient production methods in the process,” said Bobby Cameron, Vice President of Forrester. “Today, the industry’s ecosystem faces many difficulties. Specifically, these challenges include constant pipeline security issues, the inability to perform quick analyses and sharing of real-time data exploration, low operational efficiency, and low produc-



**Huawei launches Joint Digital Pipeline Solution with Partners**

tion maturity. These are key considerations that negatively impact the profitability of oil and gas companies.”

Zhang Zhilin, Ex-CTO & Vice President, Information Department, Sinopec Group, said the biggest cause of these challenges can be attributed to international oil price fluctuations, adding that, “It is only through constant innovation, cost reduction, and efficiency improvement that oil and gas companies can remain competitive. The informatization of the energy industry will focus on areas including Internet of Things (IoT), big data, cloud computing, mobile and coordination, and intelligence, facilitating the evolution from digital energy to smart energy.”

Phil Millette, a Senior Consultant from Honeywell, highlighted that oil and gas companies need to focus on security and efficiency, and said, “The key of production process optimization is to ensure the safety of employees and to protect the environment while improving collaborative operations. Real-time video surveillance and remote

collaboration technologies can be leveraged to ensure safe operations.”

Also at the summit, Jerry Ji, President of the Energy Industry, Huawei Enterprise Business Group, delivered a keynote speech titled “Innovative ICT Empowers Smart Energy”, in which he said, “Innovative ICT will drive growth in the energy industry, and we expect the world to have 100 billion data connections across industries by 2025. The oil and gas industry will witness the ever-increasing application of smart devices, which generate large volumes of data. This data will need to be analyzed and stored. As such, traditional OT devices will gradually develop new IT features to keep pace with industry trends. Huawei, in efforts to address this emerging trend, launched its innovative ‘cloud-pipe-device’ architecture to apply innovative ICT technologies and solutions. This includes cloud data center and big data, agile networks and LTE, Internet of Things (IoT) gateway and open-source IoT operating system ‘LiteOS’. These tech-

nologies can be applied to the entire oil and gas production process to drive the transformation of the oil and gas industry.”

“In our world today, eighty-five percent of crude oil and seventy percent of natural gas are transported by pipelines that stretch thousands of miles around the world. As a result, it is important for oil and gas companies to ensure safe, reliable and efficient operations across these long-distance pipelines. At the summit, Huawei is joined by CNPC Richfit, CPPE, ABB, and Honeywell, to launch an end-to-end digital pipeline solution to provide integrated services covering consultation and design, ICT infrastructure, production automation, applications, and services,” Jerry Ji added.

At the summit, Huawei also showcased a series of smart energy solutions, including digital pipeline, digital production, cloud data center, and mobile office. These solutions cover all the operations processes in the oil and gas industry, from discovery to production, transportation, and information management. As part of the discussions around the development of digital pipelines and related trends, attendees at the summit also had the opportunity to visit the Huawei and Asia Gas Pipeline (AGP) Almaty Control Center (ACC) prototype located in the central Almaty, an overall control center for the AGP-AB line and the future AGP-C line. The center is capable of monitoring natural gas pipelines across Kazakhstan. During the visit, Huawei showcased the center’s site-based Supervisory Control



and Data Acquisition (SCADA) system, satellite images of pipelines and video images of the sites. "Central Asia is the world's third largest oilfield and plays an important role in the global oil and gas industry. Since we established our business in Central Asia in 1997, Huawei has been committed to providing competitive end-to-

end ICT solutions and services to telecom carriers, enterprises, and consumers by bringing cutting-edge communications technologies and products into the region," said Mike Han, President of Huawei's Central Asia & Caucasasia Enterprise Business. In Central Asia, Huawei has provided products and services to a number of oil and gas

companies, including Kazakhstan AGP, Kazakhstan's Beineu Bozoi Shymkent Gas Pipeline (BSGP), PetroKazakhstan, KazMunaiGas (KMG), Uzbekistan Asia Trans Gas, Turkmenistan Amu Darya, CIK, and Sinopec Kazakhstan. Huawei's Digital Pipeline Solution has been applied to a total of 4,623 kilometers of gas pipelines in Central Asia, including the

Kazakhstan-China natural gas pipeline AB line (AGP AB line), which is the world's first and longest digital natural gas pipelines. In the future, Huawei will continue to leverage its ICT expertise to help customers in Central Asia improve efficiency, reduce energy consumption, enhance operational safety and eventually enable digital transformation. **T**

## Huawei's super growing business revenue for 2015

### Full year sales forecast 20 billion \$

The tremendous growth of Huawei in the first half of the year 2015, has brought the company to another level and the Consumer Business Group has forecasted that the full year sales of Huawei will surely increase to 20 billion \$ this year. The reports that have been released by the company have shown the incredible sales growth that Huawei has achieved in the H1 of 2015,

with a 69% increase the sales recorded are 9.09 billion \$. It has also been announced that the contribution of consumer business revenue has also grown to 32%, which was 24 % year last year. Huawei Pakistan, Director Marketing Devices, Mr. Fanhong Bruce has said, "Because of the rapid growth scored in the year 2015, the Consumer Business sales forecast for 2015 is 20 billion

\$ in comparison to 16 billion \$ last year." The remarkable growth strategy adopted by Huawei is inciting business growth in both China and the international market as the Revenue has spurred to 124% y-o-y in China whereas in some other regions more than 40% growth has been recorded. The regions such as North-East Europe, Western Europe, North Africa, Mid-

dle-East and South Pacific have recorded respective, 54%, 45%, 164%, 48% and 41% year on year growth. The shipments of Huawei's high-end smart phones has grown 70%, according to the report and it states that the total smart phone shipment ratio has grown to 31%, the growth of revenue is 388%, total consumer revenue 42.9% and the contributed share profit has increased to 44%. **T**

## Huawei welcomes era of Gigaband at 2nd Ultra-Broadband Forum in Spain

Huawei has announced that the 2nd Ultra-Broadband Forum (UBBF) will run from September 8-9 in Madrid, Spain. Jointly organized with the UN Broadband Commission and Telefonica, this year's UBBF is themed UBB 2020: Towards a Gigaband World, and will bring together industry experts and futurists to discuss the evolution of the ultra-broadband industry, the future landscape of broadband, as well as share their experiences and success stories. Currently, over 100 global operators have announced that they will increase their investment in fixed broadband and networks. As the broad-

band industry develops rapidly, regulatory organizations have improved, or plan to improve broadband. The global fixed broadband industry has entered an important evolutionary phase, defined by Huawei as the Gigaband era. At UBBF, Huawei will explain and demonstrate the results of its UBB 2020 Strategy, which aims to utilize Gigaband and fixed mobile convergence 2.0 (FMC2.0) to build a better connected world that enables industry players to embrace new applications, business models, and an industry ecosystem brought about by ultra-broadband. Huawei's key network

concept for developing its products and solutions to support UBB 2020 is ultra-broad, simple, and agile. Also at the event, futurists from Singularity University, a California Benefit Corporation part university, part think-tank, part business-incubator located in Silicon Valley, will discuss how future technologies such as the ultra-broadband era will change people's lives with input from top industry experts. What's more, experts from the world's top operators, over-the-top content players, together with industry chain Chief Experience Officers (CXOs), will give their views on the opportunities

and challenges delivered by video services and the Smart Home field. Other hot topics on the agenda include how business models and service innovation optimize the industry structure, and how to implement network reconstruction. The UBBF not only provides a communication platform for industry players, but also builds a bridge for industry development and future innovation. Huawei believes that it is this openness and cooperation that will lead to an all-win situation for industry players in the Gigaband era, taking it another step closer to realizing a better connected world. **T**

## UAE joins high-level Broadband Commission for Digital Development

The General Authority for Regulating the Telecommunications Sector (TRA) has received a formal invitation from His Excellency Paul Kagame, President of the Republic of Rwanda, delivered on behalf of His Excellency Houlin Zhao, International Telecommunications Union (ITU) Secretary-General and Her Excellency Irina Bokova, Director-General of UNESCO, to join the high-level Broadband Commission for Digital Development. The commission is one of the joint-international committees between the ITU and UNESCO that aims to boost the importance of broadband on the international policy agenda and expand broadband access globally to accelerate progress towards the Millennium Development Goals. The invitation



**Hamad Obaid Al Mansouri,  
Director General - TRA**

also includes a participation in the commission's next gathering to be held on 26 September 2015 in the U.S.A New York city. "This choice demonstrates the international telecommunication and information technology community's trust in the UAE's pioneering and central

role in this field. This trust is built upon the strong and varied initiatives that were proposed by the country represented by the TRA which aim to develop the ITU's efforts and strengthen its position as the international organization responsible for telecommunication and information technology globally. This trust was also reinforced through the UAE's hosting of several ITU conferences which resulted in the implementation of several laws and regulations that serve to spread digital literacy across the global community," said H.E. Hamad Obaid Al Mansouri, TRA Director General. "Through the membership in this important commission, I will do my utmost with the other commission members in the transfer of expertise and

knowledge gained in the UAE in this regard. We will work with all the esteemed members of the commission towards our desired goals that act in the best interest of the international community," added Al Mansouri. The Broadband Commission for Digital Development established in 2010 is known for its unlimited support for everything related to broadband networks in the world, including applications and services. This stems from the absolute faith and full confidence in the role that communication networks are playing in advancing the development efforts aimed at meeting the Millennium Development Goals set forth in UN resolutions as well as the global sustainable development goals. **T**

## UAE ICT Fund announces 100 new scholarships to enhance the sector

The ICT Fund, a subsidiary of the General Authority for Regulating the Telecommunications sector (TRA), has announced that it will be offering around 100 new scholarships to a number of leading universities in the country. The new scholarships target both high school graduate students and those who have already graduated from university and wish to pursue higher education within the Information & Communications Technology (ICT) field. Omar Mahmoud, Acting CEO, ICT Fund said "The ICT sector is a key economic pillar, growth driver and source of national income, which is one of the main drivers for launching the Beta scholarships program back in 2013. Today, Beta contributes



**Omar Mahmoud  
Acting CEO, ICT Fund**

to achieving the 2021 vision that aims to secure first-rate education for the new generations to lead and play an active and positive role in society. It also represents a fantastic opportunity for any Emirati stu-

dent who wishes to study a subject relating to the ICT field in the UAE. Mahmoud added: "The ICT sector is experiencing an unprecedented growth in the UAE and has witnessed remarkable change as the rate of technological developments has continued to evolve in the country. That being said, we feel that it is our job to invest in our country's young talent and put a strategy for continuous growth. With the country being a regional leader in terms of easy access and use of internet and providing a number of quality universities, our goal is to create a positive impact through our scholarships. Further to the goals put forward by His Highness Shaikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime

Minister of UAE and Ruler of Dubai to develop the ICT sector, we feel it is imperative to help spread this message and convey the importance of investing in both our people and the ICT sector as the two key pillars of growth for UAE. We will continue to promote our scholarship program in the upcoming years to ensure we leave a good imprint on the overall success of the country decades from today, which is our ultimate aim," he added. The Beta Program is an initiative of The ICT Fund created to enhance the stature and role of the ICT sector for the aim of promoting the general authority the sector, given it is the organizing body to promote this sector on the national level. **T**

# Infor to Acquire GT Nexus

## GT Nexus and Infor to Redefine Modern Manufacturing with a Global Commerce Cloud

Infor has announced that it has entered into an agreement to acquire GT Nexus, the world's largest cloud-based global commerce platform, for \$675 million. The deal is expected to close within 45 days, pending regulatory approval.

Approximately 25,000 businesses rely on GT Nexus, including six of the top ten logistics service providers and 30 global financial institutions, all managing more than \$100bn in goods each year using its cloud-based business network. GT Nexus customers include adidas Group, Caterpillar, Columbia Sportswear, DHL, Home Depot, Levi Strauss & Co., Maersk, Pfizer, Procter & Gamble, and UPS.

Infor is one of the world's leading suppliers of ERP software, which helps manufacturing companies orchestrate production inside the walls of the enterprise. The continued shift to contract manufacturing moves the shop floor outside of the brand owner's ERP system to the ERP of their suppliers – many of which are existing Infor customers. It is now common for a single product to be designed, manufactured, and shipped by different companies, requiring a common cloud for coordination.

GT Nexus provides a global order management system that coordinates commerce across partners. Retail, fashion, and manufacturing companies can collaborate with suppliers to manage and optimize shipments to customers, distribution centers, and retail outlets to meet demand. The cloud



**Charles Phillips, CEO of Infor.**

was designed to enable this collaboration.

"Together, Infor and GT Nexus will provide customers with unprecedented visibility into their supply chains to manage production and monitor goods in transit and at rest," said Charles Phillips, CEO of Infor.

"In a complex, high velocity supply chain, all partners need to know what was ordered, when it was built, where it is in transit, if the order has changed, and has it cleared customs. Specialization and speed are moving the future of manufacturing into the commerce cloud."

The GT Nexus network integrates directly into the order management system of the buyers and suppliers. Buyers transmit order information through GT Nexus to their suppliers, financial institutions, freight carriers, and logistics providers. GT Nexus becomes the order management system for the entire network by managing the master record of the order across multiple partners. GT Nexus also facilitates more than \$20 billion in payments between buyers and their suppliers in 90 countries and in 8

currencies. Buyers and financial institutions offer pre and post export financing and payment protection through the GT Nexus cloud.

"Infor is a great home for GT Nexus, and we're excited to join forces with a company with a strong manufacturing, retail, and supply chain pedigree," said Sean Feeney, CEO of GT Nexus.

Infor CloudSuite™ industry suites, including Infor CloudSuite Fashion, are multitenant applications tailored by industry delivered on Amazon Web Services.

Infor has more than 3,200 fashion and retail customers, many of which use GT Nexus.

The addition of Infor CloudSuite technology to the GT Nexus network will enable businesses to go further by integrating merchandising, marketing, and demand data instead of extrapolated forecasts for improved sales, operations, and production planning.

Infor also provides status about work-in-process for orders still in production. Additionally, collaborative design will be facilitated on the network as will capabilities such as transmission of changes in the bill of materials from Infor's Product Lifecycle Management (PLM) solution.

Infor will also enable the social collaboration for unstructured processes within the supply chain on GT Nexus through Infor Ming.le™, one of the leading social platforms for collaborative business processes. Retailers and manufacturers

will also be able to leverage Infor Rhythm, Infor's omnichannel e-commerce platform for engagement and direct order flow into the commerce cloud.

The combination of Infor CloudSuite applications and GT Nexus will represent the future of multi-enterprise manufacturing and commerce. Increasing specialization creates more complex supply chains that require a unifying cloud service that are replacing monolithic ERP systems.

### **True Cloud Architecture**

GT Nexus and Infor CloudSuite have similar architectures; both have a single canonical map for orders, are event driven, and make use of open source components.

Unlike other B2B information exchanges, GT Nexus is a network cloud service with one code base for all customers providing a single view of the order across the value chain. The canonical map allows suppliers to join the network once and talk to all buyers, as opposed to implementing custom maps and portals for each buyer, which is required in legacy networks.

### **Direct vs Indirect**

GT Nexus is a direct procurement network which ties directly to the goods being sold to the enterprise's end customers. This is a much larger market than indirect procurement which primarily targets the administrative goods and services for internal consumption. The GT Nexus direct procurement network optimizes critical orders that generate revenue for the buyer/brand owner. **T**



# Information and Communications Technologies will help accelerate digital transformation in the UAE

The UAE is advancing in the World Economic Forum's Network Readiness Index in the Global Information Technology Report 2015 (GITR). The country must take full advantage of the potential offered by information and communications technologies (ICTs) to drive social and economic transformation. Out of 143 countries, the UAE ranked 23rd, moving up one place and leading the Arab World. In response, senior Cisco executives are commending the country, and highlighting the considerable challenge facing the UAE as it seeks to develop the infrastructure, institutions, and skills needed to reap the full benefits of ICTs. Only 39 percent of the global



**Rabih Dabboussi**  
**General Manager, Cisco UAE**

population enjoys access to the Internet despite the fact that more than half now owns a mobile phone, according to the World Economic Forum. In the UAE, despite having one of the highest mobile phone subscription rates (171.9 percent), the lack of access to the

Internet is depriving many UAE citizens of the opportunity to take full advantage of e-learning as well as online financial, data, and health services. Crucial to achieving societal and economic transformation is the ability to embrace the Internet of Everything (IoE), the connections between people, process, data and things to create unprecedented opportunities for the UAE's citizens, and public and private sectors. In order to embrace the IoE, the UAE's government and businesses must be fully digitised, supported by a highly robust and secure network. Becoming digital requires an agile IT model, and the ability to rethink core processes for the

digital era. Embracing new security, cloud, mobile, social and analytics technologies required to fully digitize takes imagination, investment and expertise. This is why Networked Readiness is such a crucial indicator of a country's ability to implement and take full advantage of ICTs. The GITR report suggests that investing in infrastructure and education; supporting the development of local content; and creating an enabling environment by promoting competition through sound regulation will correct the imbalance in the UAE. Cisco executives stressed that government can shape policies that will spur development of broadband access. **T**

## Report states "Teradata Intelligent Memory delivers a credible power pack for analytics"

Teradata has announced that Forrester Research, Inc., an independent analyst firm, named Teradata a leader in The Forrester Wave™: In-Memory Database Platforms, Q3 2015 evaluation. Teradata uses a hybrid approach to in-memory that intelligently puts the right data in memory to deliver high-speed in-memory performance at a fraction of the cost of putting all data in memory. In the In-Memory Database Platforms Wave, Forrester recognized that, "Teradata's strength lies in delivering high performance and scale for analytical workloads, appliance integration, and strong high availability and disaster recovery, as well as

broad integration with tools and programming languages. Teradata's road map includes enhancements to in-memory processing and optimizations to Intelligent Memory." The Forrester evaluation was published August 3 and was written by principal analyst Noel Yuhanna, with Leslie Owens, Elizabeth Cullen, and Diane Lynch. The findings were based on scoring for the Teradata Database 15.10 in current offering, strategy and market presence. Forrester's scores included categories such as Analytics Support, Data Movement, Performance and Scale, and Scale-out Architecture, where Teradata scored 5.0 – the highest score possible – for each of

these dimensions. Teradata also scored 5.0 for partners in the Market Presence category. Forrester also stated in the report: "Teradata Intelligent Memory delivers a credible power pack for analytics." "Business demands more data and analytics and at the same time, expects better system performance as a core requirement," said Teradata Co-President Hermann Wimmer. "We believe the Forrester evaluation recognizes Teradata Intelligent Memory delivers on both of those expectations." Teradata was among 11 select companies that Forrester invited to take part in the evaluation against 19 criteria for the

current offering, strategy and market presence. "We believe Forrester's recognition of Teradata as a leader in in-memory is a testament of our innovations. With Teradata Database 15.10 we are again raising the bar with advanced in-memory techniques such as pipelining, vectorization, bulk qualification and columnar storage, delivering in-memory performance through an integrated automated solution," said Oliver Ratzesberger, president of Teradata Labs. On August 11 Teradata hosted a live one-hour free webinar with guest Forrester analyst Noel Yuhanna on "In-Memory Processing for High-Performance Analytics." **T**

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# Red Hat Satellite 6.1 upgrades systems management to allow users to embrace container-based deployment strategies

Red Hat, Inc. has announced the general availability of Red Hat Satellite 6.1, Red Hat's systems management solution for managing Red Hat infrastructure. Since the launch of Red Hat Satellite 6.0 in September 2014, new additions to the systems management software bring upgraded security enhancements, enhanced discovery and container management capabilities across physical, virtual and cloud environments. Red Hat Satellite 6.1 brings users significant upgrades in three key areas:

**Container Management**  
As cloud infrastructures continue to shift toward container-based deployments, customers increasingly need an agile management solution for new container setups housing sensitive applications and data. The core capabilities of Satellite 6.1 now extend to container deployments - making them more scalable, manageable and consistent - and allow Docker users to tap into its modern design as they seek more control around versioning, authentication and integration with existing platforms. A scalable on-premise registry based with Role-Based Access Controls, auditing and a robust API are now available for developers seeking to manage systems in a container-based environment.

**Security**  
Satellite 6.1 brings upgrades to errata management, allowing users to quickly and easily address security, bugfix and enhancement errata. Improved reporting now enables organizations to more quickly identify and respond to hosts affected by a security vulnerability,



**Red Hat Satellite helps to simplify the provisioning process through new discovery processes, allowing automatic bare metal discovery of unknown nodes on the provisioning network.**

minimizing downtime and sensitive data exposure in vulnerability scenarios such as those presented by Shellshock, Heartbleed and GHOST. Additionally, OpenSCAP, a standardized approach to maintaining enterprise system security, is now available in tech preview. OpenSCAP automatically verifies the presence of patches, checks system security configuration settings and examines systems for signs of compromise in daily/weekly/monthly cadences that can be customized by end users to best fit their own internal security protocols.

**Provisioning**  
Red Hat Satellite helps to simplify the provisioning process through new discovery processes, allowing automatic bare metal discovery of unknown nodes on the provisioning network. New

nodes can self-register to Red Hat Satellite and upload their hardware facts, and this discovery allows the software to best determine the type of system to provision.

Other new capabilities introduced in Red Hat Satellite 6.1 include:

- Multiple Network Support for provisioning systems with complex networking requirements, including VLANs, Bonds and Aliased interfaces. Satellite 6.1 includes newer provisioning templates and workflows that enable the setup of complex interfaces as systems are initially provisioned.
- Isolated Capsule Server, a key component of large Red Hat Satellite installations, now features a number of communication improvements. Communications between the managed host, Capsule Server and Satellite Server are now

better isolated and streamlined for a more secure environment, allowing system administrators to more easily deploy Red Hat Satellite Capsule in their environments.

- Tech preview of Red Hat Access Insights is a new automated, opt-in service announced at the 2015 Red Hat Summit.

Red Hat Satellite users can identify key risks to stability, performance and security through Red Hat Access Insights, which offers recommendations of how to address discovered issues. Joe Fitzgerald, vice president, Management Business Unit, Red Hat Said, "Red Hat Satellite 6.1 continues to evolve to meet ever-changing market demands, especially the growing movement we are seeing toward container-based cloud deployments.

Building on the release of Red Hat Satellite 6, this newest release allows developers to more easily integrate Satellite into a hybrid cloud or container environment and utilize better reporting around their hosts during the transition."

Mary Johnston Turner, Research Vice President, Enterprise System Management Software, IDC

"The shift in enterprise infrastructure towards distributed and container-based systems means that a holistic approach is needed when it comes to managing these disparate systems.

Red Hat Satellite 6.1 continues to move towards providing just such a solution, based on community innovation, to help give enterprises a level of standardization and control over these emerging technologies." **T**



# Infoblox DNS threat index hits record high in second quarter due to surge in phishing attacks

Future of Asia's digital economy at risk

## DNS Threats up 58 Percent

The Infoblox DNS Threat Index, powered by IID, reached a record high of 133 in the second quarter of 2015, up 58 percent from 84 in the second quarter of 2014.

### Overview

The Infoblox DNS Threat Index is an indicator of malicious activity worldwide that exploits the Domain Name System (DNS). Cybercriminals create new domains as a foundation for unleashing a variety of threats ranging from simple malware to **exploit kits**, **phishing**, distributed denial of service (DDoS) attacks, and data exfiltration. The index tracks creation of malicious domains related to 67 separate threat categories globally, using data from a range of sources including government agencies, Internet service providers, enterprise network operators, and open sources. For details on how the index is calculated, see the Methodology section at the end of this report.

### Q2 2015 Findings

While the first quarter of 2015 saw a surge of malicious domain creation driven by the Angler, Neutrino, and Nuclear malware families, the second quarter's record number was driven by a significant increase in phishing activity. Exploit kit activity was down from the previous quarter, but was still a significant threat and was higher than four of the previous five quarters.

These types of malware often use DNS as a communication path for command and control as well as exfiltrating sensitive data. Knowing the threat level of DNS-based malware can



**Rod Rasmussen**  
Chief technology officer - IID

help an organization to prepare by prioritizing investments between perimeter protection and other technologies that provide visibility into infections, protection, and post-breach response.

"DNS is critical infrastructure for the Internet that can't be turned off. Through our analysis, it's apparent that cybercriminals recognize this and see DNS as a vector for penetrating government, corporate, and personal networks," said Rod Rasmussen, chief technology officer at IID. "The Infoblox DNS Threat Index, powered by IID, is intended to give insight into the extent to which bad actors are leveraging DNS for illicit activities."

"DNS sits at the center of the Internet, connecting people, applications, and devices—making DNS a powerful tool for protecting networks as well as penetrating them," said Craig Sanderson, senior director of security products at Infoblox. "Organizations can enhance their security by acquiring and understanding DNS threat intelligence data, then using



**Craig Sanderson, SD**  
Security products - Infoblox

that data to block access to malicious domains."

Phishing attacks are launched through emails containing domain names that are deliberately crafted to look like those of well-known sites. The goal is to lure unsuspecting users into clicking on the misleading links, sending them to web sites that in some cases are indistinguishable from the real ones. When users enter their authentication credentials, credit card numbers, or account information, the details are captured and used later to steal either money or proprietary data. Phishing has been around for a long time, and the most recent index numbers show attackers are using it enthusiastically. Criminals stick with phishing because it works, and because it's often easier to trick humans into giving up sensitive information than to overcome increasingly sophisticated cybersecurity systems. Teaching internal users to be diligent and aware of the links they are clicking on is one level of protection. But with such important

information at risk once exploited, organizations should also deploy technology that leverages current threat data to block traffic to and from these malicious sites.

Exploit kits are collections of malicious software that take advantage of security holes in operating systems and popular applications such as web browsers. When a user unintentionally visits a malicious or compromised website, the exploit kit is delivered and a malicious payload is subsequently downloaded and executed on the victim's computer. Infrastructure for exploit kits accounted for 41 percent of malicious domain creation in the second quarter of 2015. Exploit kits have ranged from less than 20 percent to more than 70 percent of the index, and this quarter's volume was roughly the average across the previous 11 quarters. Although far from being the only set of threats within the index, changes in the number of observed new exploit-related domains is highly correlated with a change in the overall index.

### The Endless Cycle of Planting and Harvesting

Attackers and malicious agents are waging a constant cat-and-mouse game with threat researchers. Malicious actors rapidly create infrastructure and set up domains as a base for launching attacks. During this "planting" phase, there is a significant rise in the number of malicious domains associated with malware and exploit kits, leading to a larger Infoblox DNS Threat Index number.

**Cont'd on P-52**

## UAE among Top 5 'At risk' regions for mobile security, Aruba Networks, an HP Company finds

A report published by Aruba Networks, an HP company, has found that the 'West is Best' for mobile security and pinpointed the most at-risk nations based on a survey of the mobile security habits of 11,500 workers in 23 countries. It finds established Western markets display by far the world's safest employee behaviours when it comes to using mobile devices at work, and conversely, emerging Eastern regions rank the lowest for mobile security practices.

- Greater data loss in Middle-East: Nearly half of UAE workers (48%) admit to having lost personal or company data through the misuse of a mobile, this was just a quarter in the US (24%)
- Risk-adversity in UK: In the



Saadi Kawkji

UK, only one in ten (12%) do not password protect their work smartphone. In Malaysia, that figure is nearly three in ten (29%)

- Higher device sharing in China: The Chinese will give their work mobile device away on average 19 times per month, whereas the Swedes just seven
- Overall the report establishes a clear East/West divide with

regard to mobile security. Sweden, the USA, Canada, the UK and Norway are found to have the safest employee habits while Malaysia, Thailand, South Korea, China and the UAE came bottom of the list. The findings, included in Aruba Networks' Running The Risk report, names the '#Gen-Mobile' demographic as a major driver for more pro-risk behaviours, with the younger, mobile-savvy workers often prioritising productivity over traditional security concerns. Quote: Saadi Kawkji, Regional Technical Manager, Gulf and Pakistan at Aruba Networks "It appears that emerging markets are seeing more self-empowered workers who are embracing new technologies and new ways of driving growth, but are also intro-

ducing added risks into the business. The results suggest that while risk can be bad, it can also be good for business – something that more conservative westernised markets should take note of.

"If the workforce thinks nothing of sharing passwords or devices in order to get things done, this presents an interesting productivity vs security challenge for IT managers the world over."

Aruba Network's 'Running The Risk' report highlights the potential pitfalls businesses should expect given their employees' computer security habits. Aruba's online self-assessment tool help companies assess their risk levels and compare it against other countries' industries in the study. **T**

### Contd from P-51

Once this phase ends, the attackers begin to "harvest" the extensive infrastructure they have built to launch attacks, steal data, and generally cause harm to their victims. In this phase, the threat index number may be lower. However, that doesn't mean that malicious activity has subsided. The Infoblox DNS Threat Index shows this endless cycle of planting and harvesting, when looking across the twelve quarters to date. If the index is lower in a given quarter, this may correspond with a period in which the malicious agents are harvesting the infrastructure they have already created and are not setting up new bad domains at the same pace. If the index is higher in a quarter, this could indicate that the attackers are in a planting phase, establishing domains and other infrastructure to execute

### Infoblox DNS threat index hits record

their plans.

#### Summary

The Infoblox DNS Threat Index has risen consistently for the last three quarters. This could indicate cybercriminals are expanding the infrastructure to leverage in targeted attacks for spreading malware and/or exfiltrating data. DNS is critical network infrastructure that can be used as a detection and enforcement point to disrupt communications to these malicious domains. Infoblox and IID will continue to monitor new malicious domain creation activity to help their customers better prepare to handle these threats. **Index Methodology** The Infoblox DNS Threat Index, powered by IID, is intended to reflect the level of new malicious domain creation within the quarter. The baseline for the index is 100, which

represents the average for threat activity during the eight quarters of 2013 and 2014. To create the index, IID examines domains worldwide associated with malicious activities, based on the proprietary methods and capabilities IID utilizes on a daily basis. Malicious domain indicators observed by a broad network of partner organizations, Internet infrastructure players, and law enforcement agencies are added. This is not a comprehensive list of bad domains, but rather a representative sampling. Domains that have been observed as malicious for the first time during that quarter are factored into the index. Domains that are still active, but were first observed in previous quarters, are

factored out. Next, the data is categorized by threat type. The 67 most active threat types are factored into calculations for the index. As new threat classifications emerge and become more active, and as some become less active or disappear, the categories are adjusted to reflect the mix of actual threats in use. These threats include distribution and command and control for a wide variety of malware, phishing, pharmaceutical scams, and malvertising. Because the index can be artificially inflated or distorted by the activities of domain generating algorithms (DGAs) and sub-domain resellers, these are removed from the calculations. There is also a check for any variation due to harvesting anomalies. If certain sources report a sudden spike or dip in the number of threat indicators, the cause is investigated. **T**

## COMSATS Internet Services demonstrates commitment to a secure Internet by implementing DNSSEC

COMSATS Internet Services (CIS) has announced the successful implementation of Domain Name System Security Extensions (DNSSEC) in Pakistan.

This initiative, along with the recent deployment of L-Root servers in Islamabad and Lahore, and the launch of a RIPE Atlas Anchor (sponsored by APNIC), is the result of CIS' research and development activities to help improve the experience of Internet users regionally and globally. The Domain Name System is the backbone of the modern Internet and DNSSEC is a valued tool that supports the integrity of the DNS. The adoption of DNSSEC around the world is increasing rapidly because it has become fundamental to the development of a safe and reliable Internet. "DNSSEC will bring new prospects and opportunities to Internet users," said CIS Chief Executive Officer Amir



**Amir Malik, CEO - CIS**

Malik. "CIS is very keen to work with the Internet community to ensure the success of DNSSEC broadly. By implementing DNSSEC, we hope to strengthen users' trust by helping to protect their websites from cyber attacks. New service offerings, such as zone signing, can be generated and it will help us initiate secure data transactions. We expect these additional features to be attractive to security and reputation focused users."



**Baher Esmat, VP ICANN - ME**

The Domain Name System holds a pivotal position in the Internet's infrastructure and it has been the target of a variety of cyber attacks since its inception, including having been embedded with malicious software and redirecting users to fraudulent websites. Protecting this infrastructure became mandatory to ensuring it functions properly. DNSSEC technology benefits security aware servers, as it ensures them that information

obtained from another server is secure and authentic. Essentially, DNSSEC protects data by utilizing a digital signature. To guarantee the authenticity of DNS records, DNSSEC uses public key cryptography signatures. In addition to that, it also affirms "non-existence of records."

"ICANN applauds CIS' implementation of DNSSEC in Pakistan," said Baher Esmat, ICANN's Vice President, Stakeholder Engagement – Middle East, "Internet Service Providers and Enterprises who have not yet implemented DNSSEC are encouraged to follow suit and play a role in strengthening the security and reliability of the Internet." DNSSEC must be deployed at each step in the lookup from root zone to final domain name (e.g., [www.yourwebsite.example](http://www.yourwebsite.example)) in order to eliminate vulnerability from the Internet. **T**

## CTO Zong visits PTCL Network Operations Center

A four member delegation from Zong, led by the Chief Technical Officer (CTO), Miao Qiao and senior technical experts visited the state-of-the-art Network operations control center of PTCL in Islamabad.

PTCL NOC team presented a brief overview of PTCL's network management system and technical capabilities, followed by a visit to the network operations center facilities, where real time operations management was exhibited by the PTCL NOC team. Zong's delega-



tion showed keen interest in developing stronger bilateral ties with PTCL and were enthusiastic about exploring futuristic technology collaborations with PTCL. During the visit, GM NOC, PTCL elaborated the various aspects of the network man-

agement system and how it facilitates carrier customers in enhancing their business across the country, from a single point of contact (POC). Technical competence of PTCL's NOC team and network strength around the country was also shared with the

visitors.

PTCL NOC is Pakistan's most advanced network management system, fully capable of proactive identification and resolution of faults through real-time network monitoring. The state-of-the-art system is designed to enhance and optimize Network Management through a transparent and centralized platform and provides a highly available, adaptable and fault resilient network that is designed to meet the market demands and exceed customer expectations. **T**





## Leading Consultants and Training Provider

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# Global ICT & Telecom events 2015

September		
Cloud Barazil Forum	1 - 2 Sep	Sao Paulo, Brazil
Customers Experience Asia	2 - 3 Sep	Singapore
Capacity Africa 2015	8 - 9 Sep	Dar es Salaam
Telco Big Data Summit	9 Sep	Las Vegas
IBC	11 - 15 Sep	Amsterdam
Middle East Com Telco Summit	14 - 15 Sep	Dubai, UAE
Capacity Russia & CIS 2015	14 - 15 Sep	Moscow
Telecom World Middle East	14 - 15 Sep	Dubai, UAE
HetNet World	15 - 16 Sep	Barcelona, Spain
Myanmar Connect 2015	15 - 16 Sep	Nay Pyi Taw
Packet Optical Convergence	15 - 17 Sep	Madrid, Spain
Big Data Telecom	15 - 17 Sep	Sweden
Network virtualization Forum	15 - 17 Sep	Madrid
ITCN Asia Pakistan	15 - 17 Sep	Karachi, Pakistan
VSAT 2015	16 - 18 Sep	London, UK
Nigeria Com	22 - 23 Sep	Lagos, Nigeria
MiliSatcom Latin America	22 - 23 Sep	Maceio, Brazil
APSCC Satellite Conference & Exhibition	22 - 24 Sep	Seoul, Korea
Customer Experience Management in Telecoms	22 - 24 Sep	Vienna, Austria
LTE Voice Summit	29 - 30 Sep	London, UK
Eurasia	29 - 30 Sep	Istanbul, Turkey
IPX Summit 2015	30 Sep – 1 Oct	London, UK
October		
Critical CommunicAsia Middle East	5 - 7 Oct	Dubai, UAE
LTE Asia	6 - 8 Oct	Singapore
Iraq Telecom 2015	6 - 7 Oct	Istanbul, Turkey
Cloud South East Asia	7 - 8 Oct	KI, Malaysia
ITU Telecom World	12 - 15 Oct	Budapest, Hungary
MVNOS Industry Summit	13 - 14	Thailand
Turn Data & Analytic in to Competitive Advantage	15 - 16 Oct	London, UK
CMO Summit (Samena Council)	17 - Oct	Dubai, UAE
GITEX Technology Week 2015	18 - 22 Oct	Dubai, UAE
CIO Asia Summit	19 - 20 Oct	Kuala Lumpur, Malaysia
Mission Critical Big Data & Professional LTE	19 - 21 Oct	Neitherland
Broadband World Forum	20 - 22 Oct	London, UK
Customer Experience Management	20 - 22 Oct	Georgia
Broadband world Forum Award	21 Oct	London, UK

## Global ICT & Telecom events 2015

Casbaa Convention	26 - 28	Hong Kong
15th Annual Broadband world Forum	27 - 29 Oct	London, UK
Data Center World	28 - 29 Oct	Singapore
VSAT Mobility 2015	28 - 29 Oct	Hong Kong
November		
TV Connect	2 - 3 Nov	Dubai, UAE
LTE Roaming IPX	3 - 4 Nov	Munich, Germany
Global Milisatcom 2015	3 - 5 Nov	London, UK
Telecom Insights	11 Nov	Nederland
Africa Com	17 - 19 Nov	Cape Town, South Africa
LTE Africa	17 - 19 Nov	Cape Town, South Africa
Africa Cast	17 - 19 Nov	Cape Town, South Africa
TV Connect Africa	17 - 19 Nov	Cape Town, South Africa
Communicast Myanmar 2015	17 - 19 Nov	Yangon
VSAT Africa 2015	18 - 19 Nov	Cape Town South Africa
IOT World Forum	18 - 19 Nov	London, UK
Telecom CEM	18 - 19 Nov	USA
MVNO's Industry Summit USA 2015	19 - 20 Nov	Dallas, USA
Cloud Asia Forum	24 - 25 Nov	Hong Kong
CTO Telecom Summit	29 Nov - 1 Dec	London, UK
December		
TMT Finance & Investment World	1 Dec	London, UK
Digital TV World Summit 2015	1 - 2 Dec	London, UK
Carrier Network Virtualization	1 - 2 Dec	California, US
Bakutel 2015	2 - 5 Dec	Baku, Azerbaijan
Convergence (Samena Council)	9 - 10 Dec	Istanbul, Turkey
CeBIT Global Conferences	17 - 19 Dec	Istanbul, Turkey

## Global ICT & Telecom events 2016

ICT Bahrain (Bitex)	4 - 6 Jan	Manama - Bahrain
Convergence India	20 - 22 Jan	New Delhi India
Customer experience Management in Telecom	25 - 27 Jan	London UK
GSMA Mobile World Congress	22 - 25 Feb	Barcelona Spain
CABSAT	8 - 10 Mar	Dubai UAE
Comex	26 - 28 April	Muscat Oman
GISEC	2 - 4 May	Dubai UAE
Critical Communications	31 May - 02 June	Amsterdam, Netherlands
Communicasia	31 May - 03 June	Singapore





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