

Equatorial Hotel | Penang, Malaysia | June 3 - June 5, 2014

# FTTH Council Asia-Pacific Conference 2014 Program

### **Confirmed Speakers:**

Honourable Lim Guan Eng, Chief Minister, Penang State

Honourable Jeff Ooi, Chairman, Parliament Member, PDC Telecommunication

Dr Farid Sani, Chief Strategy Officer, Telecom Malaysia

Rob Shaddock, CTO, TE Connectivity

Hock Yun Khoong, Assistant CEO, Infrastructure and Services Group, Infocomm Development Authority of Singapore

Kiana Shek, Senior Manager - Corporate Relationship Enterprise Solutions, Hong Kong Broadband Network

Udo Fetzer, Fiber Optics Market Manager, JDSU

Terry (Teruhiko) Omori, Manager, Fujikura

Peter Macaulay, Chair, Application and Solutions Committee, FTTH Council Asia-Pacific

Jung Yo Moon, Overseas Sales Manager, Inno Instruments

Dr Ching-Sheu Wang, Senior Director, Corporate Planning Department, Chunghwa Telecom Co Ltd

Lo Sui Lun, Chief Technology Officer, Hong Kong Broadband Network

Revolin Simulsyah Nasution, Executive General Manager Broadband Division, PT. Telekomunikasi Indonesia Tbk

Shri N. Ravi Shanker, Chairman & Managing Director, Bharat Broadband Network Limited

Dr Tan Ching Seong, Associate Professor, Multimedia University (MMU)

Sergio Salvador, Head of Southeast Asia, Strategic Partnerships, Google Inc.

Dr Lin Sun, Telecom Consultant, China

Arief Musta'in, VP Infrastructure Service and Governance, PT. Telekomunikasi Indonesia Tbk

Lau Bik Soon, Group CEO, REDtone

Akter UI Alam, CTO, Fiber@Home Bangladesh Ltd

Wei Leping, Chairman of Technology Steering Advisory Committee, China Telecom Corporation

Nor Akmar Shah Minan, Head, Broadband Management Division, Malaysian Communications and Multimedia

Commission

Abdus Salam, Managing Director, Agni Systems Ltd

Moncef Maghrebi, Associate Director, Arthur D Little

Roland Montagne, Principal Analyst, iDATE

Dr Khairuddin Ab. Hamid, Vice Chancellor, University Malaysia of

Computer Science & Engineering (UniMy)

Honourable Carlo Jose Martinez, Deputy Commissioner, National

**Telecommunications Commission (NTC)** 

Jane Wu, Vice President, Dr Peng Telecom

James Seng, Vice President, 21Vianet Group

Suresh Ramasamy, Principal Consultant, DiGi Telecommunications

Muhammad Firdaus Abdul Monir, General Manager of Network

Architecture, Telecom Malaysia

Peter Nodbak, Head of Transmission Department, Telenor DK

Gunadi Dwi Hantoro, Manager Wireless Broadband, PT.

Telekomunikasi Indonesia Tbk

Dilir Hossain, Head of Transmission Planning, Grameenphone

Craig Thomas, Director, International Field Marketing, Calix

Gillian Trenerry, Managing Director, ICT Connect, Director, Fibre

**Optics NQ** 

Julie Kunstler, Principal Analyst, Components, Ovum

Stefan Stanislawski, FTTH Council MENA

Dr Takuo Kikuchi, Assistant Professor, Polytechnic University

Senior Executive, Infotech Enterprises Limited

Dr. Hideyuki Iwata, NTT Labs

**Masahide Migata, NTT West** 

Kiyoshi Omoto, Senior Research Engineer, NTT Access Service

**System Labs** 

### **Tentative Speakers:**

K. L. Chhabra, CGM (HR&A) Bharat Broadband Network Ltd



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### Pre-Conference Day, 3 June 2014 Stream A – FTTH Master-Class

Workshop Leader: Bernard Lee, VP, FTTH Council Asia-Pacific

09:30	Key challenges and obstacles to FTTH deployments in Asia-Pacific: Practical challenges Bernard Lee, VP, FTTH Council Asia-Pacific
10:00	Lack of manpower an obvious FTTH Stopper! The importance of adequate skill workforce Dr. Hideyuki Iwata, NTT Labs
10:20	The reality of laying the network: Common pitfalls of deployment Senior Executive, Infotech Enterprises Limted
10:50	Morning Tea
11:20	Ways to track and identify potential problems before they occur Peter Macaulay, Chair, Application and Solutions Committee, FTTH Council Asia-Pacific
11:40	How telcos in the region have mitigated costs and overcome the challenges to FTTH deployment by means of modern test and management systems Udo Fetzer, Fiber Optics Market Manager, JDSU
12:00	Measures put in place by telcos, regulators and the real estate community to assist FTTH deployment: What you need to know Kiana Shek, Senior Manager – Corporate Relationship Enterprise Solutions, Hong Kong Broadband Network
12:30	Workshop Summary, Q&A Stream A
13:00	Close of Workshop

## Pre-Conference Day, 3 June 2014 Stream B – FTTH in Mobile Backhaul Forum

Workshop Leader: Roland Montagne, Principal Analyst, iDATE

#### 09:30 Panel: Examining the drivers shaping LTE evolution and the future of mobile backhaul

- LTE overview: Market size, pace of deployment
- How are Asia's customers' demands changing? Is speed still the key ARPU enhancer?
- What is the massive upgrade that will have to be made to mobile backhaul networks worldwide?
- Where and how does fiber technology fit into this space?
  - Fiber networks for backhaul: Build, lease or share?

    Suresh Ramasamy, Principal Consultant, DiGi Telecommunications

    Dr Ching-Sheu Wang, Senior Director Corporate Planning Department, Chunghwa Telecom
    Co Ltd

Revolin Simulsyah Nasution, Executive General Manager Broadband Division, PT. Telekomunikasi Indonesia Tbk

#### 10:20 More bandwidth: Fiber to the Antenna (FTTA) and to small cells

- How are operators deploying fiber "all the way" to handle the massive upgrades that mobile operators are demanding?
- New RRH and CPRI architectures mean more fiber will be deployed right to the antenna what are the design considerations, challenges and solutions for FTTA?
- Small cell sites will differ significantly from BTS sites how to get fiber and power to lamp posts, utility poles, and street furniture

#### 10:50 Morning Tea

#### 11:20 Panel: Examining the challenges to effective fiber-optic small cells deployment

- What is most cost effective way to deploy and backhaul small cells?
- Design and optimisation of fiber-optic small cell backhaul
- Exploring shared backhaul as a solution to efficient small cell deployments
- Lessons learnt from existing small cells deployments using fiber-optics Panellists:

**Gunadi Dwi Hantoro**, Manager Wireless Broadband, **PT. Telekomunikasi Indonesia Tbk Dilir Hossain**, Head of Transmission Planning, **Grameenphone** 



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### Site Visit: Tour of Penang's Telecommunications Infrastructure

- 14:00 Get a behind-the-scenes look at Penang's growing network infrastructure together with government officials and representatives of the telecommunications industry. This is an excellent opportunity to network with your peers and share insights on common challenges, solutions, and trends in FTTH deployments.
- 17:00 Return to Conference

#### 12:00 Integrating Wi-Fi offloading in an overall traffic management strategy

- Fiber + Wi-FI offloading the next steps of network advancement?
- What are some of the challenges for utilising Wi-Fi as a offloading strategy in Asia
- What are the economies of scale to be achieved and the real impact on backhaul?
   Lau Bik Soon, Group CEO, REDtone

## 12:30 Moderated Q&A: Comparing fiber technology with copper, satellite and microwave: Timelines, investment and cost

- What backhaul options exist to cater to the high-capacity demands of mobile networks?
- FTTH: The end all solution for Mobile Broadband? When can this be realised?
- Proportion of microwave links and fiber connections for backhaul infrastructure
- Integration of Ethernet
- CAPEX & OPEX considerations
   Roland Montagne, Principal Analyst, iDATE
   Muhammad Firdaus Abdul Monir, General Manager of Network Architecture,
   Telekom Malaysia

#### 13:00 Close of Workshop

17:30 Welcome Reception

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### Main Conference Day One, 4 June 2014 (Wednesday)

## FTTH Council Asia Pacific Conference & Exhibition 2014

08:00 Registration and Coffee

**Plenary Session** 

08:45 FTTH Council Asia-Pacific Opening Remarks

Zony Chen, Annual Conference Chair, FTTH Council Asia-Pacific Monique J. Morrow, President, FTTH Council Asia-Pacific

09:00 Keynote: FTTH - The foundation of a new digital society

- Economic prosperity through business, social and entertainment opportunities
- Approaching fiber deployment in Penang: A government's perspective Honourable Lim Guan Eng, Chief Minister, Penang State

Chaired by: Bob Fox, Director, Foxcom Pte Ltd

#### 09:20 Developing Penang's next generation network

- The timelines and strategy for the development of Penang's next generation network
- Impacts on telecommunication operators, developers and regulators
   Honourable Jeff Ooi, Member of Parliament, Chairman, PDC Telecommunication
- 09:50 FTTH Deployment: Future challenges to be met by the industry

Rob Shaddock, CTO, TE Connectivity

#### 10:20 Examining Malaysia's model for fast, efficient, nationwide FTTH deployment

- Latest updates on HSBB and plans over the next three years for FTTH
- How much spending will be needed to sufficiently to upgrade exchanges nationwide?
- What are the current deployment challenges faced in Malaysia?
   Dr Farid Sani, Chief Strategy Officer, Telecom Malaysia

## 10:40 Morning Tea and Exhibition Viewing

### 11:10 India: Insights into the National optical fiber network (NOFN)

- Current technology trends, applications and opportunities for FTTH in India
- Where is the huge demand for FTTH coming from in India?
- How can clear government policies and approvals help to improve the development of FTTH deployment?
   Shri N. Ravi Shanker, Chairman & Managing Director, Bharat Broadband Network Limited

### 11:40 Panel: FTTH vs. LTE-Advanced: Competition or Co-operation?

- Do LTE and LTE-Advanced networks present a threat to FTTH?
- LTE Advanced and performance of mobile networks in future compared with fiber
- Why should network operators be careful when deploying FTTH?
   Panellists:

**Dr Farid Sani,** Chief Strategy Officer, **Telecom Malaysia Wei Leping,** Chairman of Technology Steering Advisory Committee, **China Telecom Corporation** 



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## 12:20 Networking Lunch and Exhibition Viewing

## **Operator Deployment Case Studies**

## 13:40 Panel: Discussing what is needed in FTTH policy and regulation

- Examining regulatory framework FTTH across Asia and key lessons to be learnt
- Designing the right broadband policies accelerate FTTH
- Should FTTH deployment be given to municipal bodies or other cash rich utility services or with the TSP?

#### Panellists:

Kiana Shek, Senior Manager – Corporate Relationship Enterprise Solutions, Hong Kong Broadband Network

Nor Akmar Shah Minan, Head, Broadband Management Division, Malaysia Communications and Multimedia Commission Jeff Ooi, Chairman, PDC Telecommunication Honourable Deputy Commissioner Carlo Jose

Martinez, National Telecommunications
Commission (NTC)

Hock Yun Khoong, Assistant CEO, Infrastructure and Services Group, Infocomm Development Authority of Singapore

## 14:30 Examining Singapore's FTTH regulatory policies and best practice

- The regulatory framework in Singapore
- Challenges seen in upcoming FTTH regions and learning from Singapore's model Hock Yun Khoong, Assistant CEO, Infrastructure and Services Group, Infocomm Development Authority of Singapore

#### 14:50 Examining the top FTTH challenges in Asia-Pacific

- Examining South Korea FTTH deployment s
- Fiber splicing user experience in different countries and INNO global exposure in FTTH
- Introducing next generation connection technology Jung Yo Moon, Overseas Sales Manager, INNO Instrument

### **FTTH Monetisation**

## 13:40 Envisioning FTTH in Penang to expand the state-wide Wi-Fi offering

- Diversifying business into WiFi offerings to customers
- The opportunities brought on by increased fiber networking
   Lau Bik Soon, Group CEO, REDtone

## 14:00 Future-proofed services and the monetisation of fiber

- Development of content services in Asia Pacific for entertainment, OTT, etc
- New business models for content delivery
- How capacity and demands for bandwidth will change
- How Google Fiber will change the game Sergio Salvador, Head of SouthEast Asia, Strategic Partnerships, Google

## 14:20 Expanding the market with complimentary services and FTTH

- Opportunities and challenges as a private broadband operator in China
- Lessons learnt in fiber deployment
- Developing the differentiator: Complimentary services
   Jane Wu Zheng, Vice President, Dr Peng Telecom

## 14:40 Solutions on optical access networks for mass deployment

Kiyoshi Omoto, Senior Research Engineer, NTT Access Service System Labs

### **Evolution of FTTH**

#### 13:40 10G-PON and NG-PON in the FTTH ecosystem

- Lessons learned at G-PON
- Upgrade scenarios and co-existence of the different PON technologies
- Challenges in the field
- Role of test instruments and systems in securing the best customer experience
   Udo Fetzer, Fiber Optics Market Manager, JDSU

#### 14:00 Using SDN to optimise user experience for Fiber to the Home

- The importance of common control and active management of broadband services
- Managing subscriber traffic flows through SDN enabled network elements
   James Seng, Vice President, 21Vianet Group

## 14:30 Designing a FTTx Network with the latest technology, standards and best practises

- How FTTH deployment is changing
- Strengthening the weakest link of a FTTH network
- Ways to minimise the costs of network deployment and likeliness of network failure
   Bernard Lee, VP, FTTH Council Asia-Pacific

#### 14:50 Solving FTTH's connectivity crisis

- Challenges operators are facing in FTTH deployments
- Innovative approaches to optimising the network Terry (Teruhiko) Omori, Manager, Fujikura



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## 15:10 Afternoon Tea and Exhibition Viewing

### **Operator Deployment Case Studies**

## 15:50 Strategies in place to grow the FTTH footprint in Taiwan

- Chunghwa Telecom's latest plans to develop and expand the FTTH network in Taiwan
- Challenges faced in expanding the network and increasing FTTx subscribers
- Pushing on-demand services with a MOD multimedia bandwidth services
   Dr Ching-Sheu Wang, Senior Director, Corporate Planning Department, Chunghwa Telecom Co Ltd

## 16:20 Adapting infrastructure finance techniques to fund FTTH

- Basic structures and criteria for infrastructure finance of fiber
- Why this approach may benefit incumbents
- The importance of regulatory stability
- Aligning the incentives between financiers, operators, regulator and government
- Balancing the split of revenue between service providers and an NBN
   Stefan Stanislawski, MENA Smart Cities
   Committee Member, FTTH Council MENA

### **FTTH Training and Education**

## 15:50 Up-skilling Malaysia's telecom workforce to prepare for FTTH deployment

- Training schemes to provide basic FTTH Testing and Measurement, FTTH Service Provisioning & Commissioning, Fault Troubleshooting and Fixing
- How FTTH deployment was achieved in Malaysia and training activities in place in the industry for the next 5 years
   Dr Tan Ching Seong, Associate Professor, Multimedia University (MMU)

## 16:15 **Designing a comprehensive FTTH training** programme throughout Japan and the world

- Analysing the training systems that have been established today
- Leveraging the skills of world class experts to train network installation engineers
- How the training programme can be adapted elsewhere in Asia Dr Takuo Kikuchi, Assistant Professor, Polytechnic University

### **Evolution of FTTH**

#### 15:50 Operational System Services for FTTH

- The implications of IPTV deployment, Digital TV services on network build out
- How current network design lacks scalability, is too labour intensive, slow and inconsistent
- Dealing with the scale and complexity of FTTH
- New technology: intelligent optical distribution networks (iODN)

Senior Executive, TE Connectivity

## 16:20 Examining the standards behind FTTH interoperability

- How can the interoperability of fiber access equipment encourage the deployment of next generation broadband?
- What is included in BBF .247 and BBF .255 standards, and how will operators / vendors make their products compliant to the new standards?

**Peter Macaulay,** Chair, Application and Solutions Committee, **FTTH Council Asia-Pacific** 

16:40 Closing remarks from chairman

17:00

Close of Conference Day One, Networking Drinks

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### Main Conference Day Two, 5 June, 2014 (Thursday)

## FTTH Council Asia Pacific Conference & Exhibition 2014

08:30 Registration and Coffee

### **Morning Plenary**

09:00 Chairman's Opening Remarks

#### 09:10 Keynote: FTTH strategy as an incumbent operator

- Analysing the world's top incumbent operators with a strong FTTH following
- The double squeeze of incumbents forced to partner?
   Moncef Maghrebi, Associate Director, Arthur D Little

#### 09:30 Deploying fiber networks in Indonesia: What's to come?

- The major developments in the broadband industry in Indonesia
- The challenges and future plans to expand network capacity Indonesia Revolin Simulsyah Nasution, Executive General Manager Broadband Division, PT. Telekomunikasi Indonesia Tbk

#### 10:00 Upgrading to an all fiber access network in China

- Continuing the deployment of GPON based FTTH in China
- Examining the impact of China's latest mandates: Mandatory FTTH connectivity in new homes
- What have been the main challenges in fiber deployment in China and what steps have been taken to address these issues?
   Wei Leping, Chairman of Technology Steering Advisory Committee, China Telecom Corporation

## 10:30 Morning Tea and Exhibition Viewing

#### 11:00 Updates on HKBN's core network upgrades and strategies for ARPU enhancement

- Update on HKBN's network development
- Optimising and upgrading the backend for FTTH network
- Strategies to increase ARPU in a developed market
- Business models that ensure ROI of fiber deployment
   Lo Siu-Lun, CTO, Hong Kong Broadband Network Limited

#### 11:30 Panel: Operational, regulatory and technological challenges to FTTH deployment in Asia's emerging markets

- Challenges for fiber deployment in emerging markets: What lessons are being learnt?
- Optimising the regulatory environment and legal frameworks for fiber deployment
- Market readiness and demand for emerging markets around Asia-Pacific
- Reviewing operational and technical challenges to deployment in Asia-Pacific's emerging markets
   Arief Musta'in, VP Infrastructure Service and Governance, PT. Telekomunikasi Indonesia Tbk
   Honourable Deputy Commissioner Carlo Jose Martinez, National Telecommunications Commission (NTC)
   Craig Thomas, Director, International Field Marketing, Calix



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## 12:20 Networking Lunch and Exhibition Viewing

### **Operator Deployment Case Studies**

Chaired by: Alexis Bernardino, Board Member, FTTH Council

## 13:40 Examining the future deployment strategy for FTTH in New Zealand

- New Zealand's ultra-fast broadband programme plans and current status
- Brining fiber to the home challenges

## 14:00 Continuing the growth of FTTH connectivity in Bangladesh

- Data centers, cloud computing and other applications
- FTTH network deployment challenges
   Abdus Salam, Managing Director, Agni Systems
   Ltd

## 14:20 Panel: Maximising the adoption and absorption of fiber technology in rural areas

- Minimising the cost of deploying fiber to rural areas
- Key challenges of fiber technology adoption and absorption in rural areas
- Strategies to utilise government infrastructure to deploy fiber to rural areas
   Panellists:

Akter UI Alam, CTO, Fiber@Home Bangladesh Ltd

Dr Khairuddin Ab Hamid, Vice Chancellor, University Malaysia of Computer Science & Engineering (UniMy)

### **Fiber for Mobile Networks**

## 13:40 Fiber based solution models for mobile backhaul

- Meeting the challenges for 4G LTE backhaul
- How can broadband providers assist the mobile operator to better deploy their mobile network more cost effectively?
- Moving the main unit from MSC close to the remote unit and how will the application of CWDM technology plays into this strategy Akter Ul Alam, CTO, Fiber@Home Bangladesh Ltd

## 14:10 Opportunities for broadband operators in Wi-Fi Offloading and Small Cells for LTE networks

 Strategies for capturing the booming market for small cell and Wi-Fi backhaul
 Julie Kunstler, Principal Analyst, Components, Ovum

## 14:40 Transitioning to Gigabit service delivery architecture

- Global market trends in Gigabit communities and key drives for the adoption of these networks
- Architectural impacts of Gigabit service delivery
- Utilising existing infrastructure for near-Gigabit services with G.Fast.
   Robert Conger, Director of Product Management, ADTRAN

### **Vertical Markets & FTTH Applications**

# 13:40 Evolutionary directions for FTTH facilities with a view on changes and future development of our business environment

**Masahide Migata, NTT West** 

#### 14:10 Case Study: FTTx Smart Camp

- Running the next generation "smart mine"
- Optimising productivity and how fiber contributes to better monitoring, assessment and operation Gillian Trenerry, Managing Director, ICT Connect, Director, Fibre Optics NQ

## 14:40 Powering cities of the future: Smart Grids and Power

- The upping importance of energy efficiency and means to achieve a "green city"
- Experiences in setting up a smart grid system with fiber optic networks
- The importance of fiber communications infrastructure to support smart grid applications



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## 15:00 Afternoon Tea and Exhibition Viewing

### **Closing Plenary**

Chaired by: H. Munasir Choudhury, General Manager, FTTH Council Asia-Pacific

#### 15:30 Worldwide panorama of FTTx rollout: Figures and open questions

- Picturing FTTx rollouts in APAC, Europe vs Americas
- The reasons for success and failures recently
- What are the strategies of today's main players deploying FTTH or FTTX platforms?
   Roland Montagne, Principal Analyst, iDATE

#### 16:00 Looking ahead into the future of FTTH service differentiation

- Where the world is trending in terms of FTTH deployment
- Differentiating based on service offerings rather than network availability
- FTTx network planning for business services
- How is FTTH landscape changing what will be the next generation network LTE, VDSL2
   Julie Kunstler, Principal Analyst, Components, Ovum

#### 16:30 Questions & Answers Round-Up

Dr Lin Sun, Telecom Consultant, China Roland Montagne, Principal Analyst, iDATE Julie Kunstler, Principal Analyst, Components, Ovum

#### 16:40 Panel: FTTH Council around the world

As a final summary to the FTTH Council Asia-Pacific Conference, join the leaders of FTTH from Americas, Europe, Africa and the Middle East as they form a global picture of the future of fiber deployments. What do operators around the world need to expect and how does it compare with Asia? What are the market drivers? What countries show the most promise and what will the future of the FTTH market look like?

#### Moderator:

H. Munasir Choudhury, General Manager, FTTH Council Asia-Pacific Panellists:

Monique Morrow, President, FTTH Council Asia-Pacific
Nadia Babaali, Communication Director, FTTH Council Europe
DuGuan Hou, Chair, International Committee, FTTH Council Americas
Gilberto Guitarte, President, FTTH Council Americas - LATAM Chapter
Dr. Suleiman Al-Hedaithy, Chairman, FTTH Council MENA
President, FTTH Council Africa

### 17:30 Closing Remarks from the FTTH Council Asia-Pacific

H. Munasir Choudhury, General Manager, FTTH Council Asia-Pacific

18:00	Close of Conference Day Two, Networking Drinks
18:30	Start of Official FTTH Council Asia-Pacific Gala Dinner