



**FTTH COUNCIL**

**ASIA PACIFIC** | FIBER TO THE  
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**Conference & Exhibition 2014**

**See the Light**

**3-5 June 2014**

**Hotel Equatorial Penang, Malaysia**

## 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**, Senior Research Engineer, Supervisor, Research & Development Planning Department, **NTT Access Network Service System Laboratories**
- 10:20 **The reality of laying the network: Common pitfalls of deployment**  
**Kiran Solipuram**, Planning and Design Head – APAC Telecommunications, **Cyient**  
**Mohammad Syibli**, Manager – OSP Design, **PT Telekomunikasi Indonesia**
- 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**, Market Manager Fiber Optics APAC, **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**

### 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**

17:30 **Welcome Reception**  
 Sponsored by **PDC** and **Senko**

## Pre-Conference Day, 3 June 2014

### Stream B – FTTH in Mobile Backhaul Forum

Workshop Leader: **Roland Montagne**, Principal Analyst, **iDATE**

- 09:30 **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?
- Panelists:  
**Suresh Ramasamy**, Principal Consultant, **DiGi Telecommunications**  
**Dr Wang Ching-Sheu**, Senior Director Corporate Planning Department, **Chunghwa Telecom**  
**Revolin Simulsyah Nasution**, Executive General Manager Broadband Division, **PT. Telekomunikasi Indonesia**
- 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
- Panelists:  
**Wes Oxlee**, Business Development Manager, **TE Connectivity**  
**Udo Fetzer**, Market Manager, Fiber Optics APAC, **JDSU**
- 10:50 **Morning Tea**
- 11:20 **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
- Panelists:  
**Gunadi Dwi Hantoro**, Manager Wireless Broadband, **PT. Telekomunikasi Indonesia**  
**Dilir Hossain**, Head of Transmission Planning, **Grameenphone**
- 12:00 **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**
- 12:30 **Close of Workshop**

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

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 **FTTH – the foundation of a new digital society**

KEYNOTE

- 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**

09:10 **Examining Malaysia's broadband infrastructure, regulations and FTTH initiatives**

- How can regulatory policy support the roll-out of fiber to the home networks

- Maximising the investment incentive with FTTH initiatives and incentives

**Dato' Mohd Ali Hanafiah**, Chief Officer for Industry Development, **Malaysia Communications and Multimedia Commission**

Chaired by: **Bob Fox**, Director, **Foxcom**

09:30 **Developing Penang's next generation network**

KEYNOTE

- 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**

FEATURED

**Rob Shaddock**, CTO, **TE Connectivity**

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

OPERATOR

- 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)**

OPERATOR

- 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**

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

PANEL

- 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**

**Rob Shaddock**, CTO, **TE Connectivity**

12:20 **Networking Lunch and Exhibition Viewing**

#### Operator Deployment Case Studies

Chaired by: **Tim Clark**, Vice Chair, PCE Committee, FTTH Council Asia-Pacific

- 13:40 **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, **HKBN**  
**Nor Akmar Shah Minan**, Head, Broadband Management Division, **MCMC**  
**Jeff Ooi**, Chairman, **PDC Telecommunication**  
**Edgardo Cabarios**, Director for Common Carrier and Authorization Department, **National Telecommunications Commission (NTC)**  
**Khoong Hock Yun**, Assistant CEO, Development 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

**Khoong Hock Yun**, Assistant CEO, Development Group, **Infocomm Development Authority of Singapore**

- 14:50 **Examining the top FTTH challenges in Asia-Pacific**
- Examining South Korea FTTH deployment and lessons learnt for emerging markets
  - Fiber splicing user experience in different countries and INNO global exposure in FTTH
  - Next generation connection technology
- Jung Yo Moon**, Overseas Sales Manager, **INNO Instrument**

#### FTTH Monetisation

Chaired by: **Bernard Lee**, VP, FTTH Council Asia-Pacific

- 13:40 **Envisioning FTTH in Penang to expand the state-wide Wi-Fi offering**
- Diversifying business into WiFi offerings
  - The opportunities brought on by increased fiber networking

- 14:10 **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**

- 14:40 **Solutions on optical access networks for mass deployment**

- Mass deployment strategies, and the challenges that arise
- Future proof deployment solutions
- Intelligent fiber management

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

#### Evolution of FTTH

Chaired by: **Steve Foster**, Chair, Emblem Committee, FTTH Council Asia-Pacific

- 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 Fetzner**, Market Manager Fiber Optics APAC, **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 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**

15:10 **Afternoon Tea and Exhibition Viewing**

#### Operator Deployment Case Studies

Chaired by: **Tim Clark**, Vice Chair, PCE Committee, FTTH Council Asia-Pacific

- 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 Wang Ching-Sheu**, Senior Director, Corporate Planning Department, **Chunghwa Telecom**

- 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

Chaired by: **Bernard Lee**, VP, FTTH Council Asia-Pacific

- 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

Chaired by: **Anil Pande**, Treasurer, FTTH Council Asia-Pacific

- 15:50 **Disruptive business models for residential 1Gbps FTTH services**

- Momentum is starting to build for 1Gbps FTTH residential service offerings around the world
- New disruptive techniques and business models are emerging – the use of social media and alternative financing techniques
- What are the implications for APAC and how should incumbent and alternate service providers position themselves?

**Kevin Ressler**, Director, **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 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**  
Sponsored by **PDC** and **Senko**

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

08:30 Registration and Coffee

### Plenary Session

Chaired by: **Bob Fox**, Director, **Foxcom Pte Ltd**

09:00 **Chairman's Opening Remarks**

09:10 **FTTH strategy as an incumbent operator**

KEYNOTE

- 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?**

OPERATOR

- 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**

09:50 **Upgrading to an all fiber access network in China**

OPERATOR

- 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**

10:10 **Developing Sri Lanka's FTTH Ultra-Fast Broadband: Plans and goals for the next 5 years**

- Enhancing the broadband footprint in Sri Lanka
- Driving broadband-based consumer and enterprise services and other key objectives

**Thilak De Silva**, Chief Innovation Officer, **Sri Lanka Telecom**

10:30 **Morning Tea and Exhibition Viewing**

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

OPERATOR

- 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 Sui Lun**, CTO, **Hong Kong Broadband Network**

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

PANEL

- 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

Panellists:

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

**Edgardo Cabarios**, Director for Common Carrier and Authorization Department, **National Telecommunications Commission (NTC)**

**Craig Thomas**, Director, International Field Marketing, **Calix**

**Thilak De Silva**, Chief Innovation Officer, **Sri Lanka Telecom**

12:20 **Networking Lunch and Exhibition Viewing**

### Operator Deployment Case Studies

### Fiber for Mobile Networks

### FTTH Market Implementation

Chaired by: **Alexis Bernardino**, Director, **FTTH Council Asia-Pacific**

Chaired by: **Steve Foster**, Chair, Emblem Committee, **FTTH Council Asia-Pacific**

Chaired by: **Anil Pande**, Treasurer, **FTTH Council Asia-Pacific**

13:40 **Exploring the FTTH migration strategy in Philippines**

- Drivers for FTTH migration and status of development
- The changing product landscape and opening of new market segments

**Alexis Bernardino**, Director, **FTTH Council Asia-Pacific**

13:40 **Fiber based solutions 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 UI Alam**, CTO, **Fiber@Home Bangladesh**

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

- The changing business environment for FTTH
- Opportunities for operators in the new environment

**Masahide Migita**, Executive Manager, Access Networks Division, Network Department Plant Headquarters, **NTT West**

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

OPERATOR

- Data centers, cloud computing and other applications
- FTTH network deployment challenges

**Abdus Salam**, Managing Director, **Agni Systems**

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

- Strategies for capturing the booming market for small cell and Wi-Fi backhaul

**Julie Kunstler**, Principal Analyst, Components, **Ovum**

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**

**14:20 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

Moderator:

**Alexis Bernardino**, Director, **FTTH Council Asia-Pacific**

Panelists:

**Akter UI Alam**, CTO, **Fiber@Home Bangladesh Ltd**

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

**Dr. Hideyuki Iwata**, Senior Research Engineer, Supervisor, Research & Development Planning Department, **NTT Access Network Service System Laboratories**

**14:40 Transitioning to Gigabit service delivery architecture**

- Global market trends in Gigabit communities and key drivers 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**

PANEL

**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**

**Roland Montagne**, Principal Analyst, **iDATE**

**Julie Kunstler**, Principal Analyst, Components, **Ovum**

Q&A

**16:40 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**

Panelists:

**Monique Morrow**, President, **FTTH Council Asia-Pacific**

**Nadia Babaali**, Communication Director, **FTTH Council Europe**

**Gilberto Guitarte**, President, **FTTH Council Americas - LATAM Chapter**

**Dr Suleiman Al Hedaithy**, Chairman, **FTTH Council MENA**

PANEL

**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**