



FTTH COUNCIL

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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, **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?
 Panellists:
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
 Panellists:
Wes Oxlee, Business Development Manager, **TE Connectivity**
Udo Fetzer, Market Manager, Fiber Optics APAC, **JDSU**
Craig Thomas, Director, International Field Marketing, **Calix**
Robert Conger, Director of Product Management, **ADTRAN**
- 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
 Panellists:
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, **Telecom 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**

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

Mark Hesling, Vice President of Product Management, Broadband Network Solutions Division, **TE Connectivity**
Kevin Ressler, Director, **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**

11:30 **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**

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, **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**

14:40 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**

FTTH Monetisation

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

13:40 Envisioning Fiber infrastructure 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**

14:10 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

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

14:30 Solutions on optical access networks for mass deployment

- Mass deployment strategies, and the challenges that arise
- Future proof deployment solutions
- Service provision management for customers

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

14:50 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**

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**

14:10 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**

14:40 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**

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 **China's FTTH deployment opportunities and challenges**

OPERATOR

- Targets of "BB China" Strategy
- FTTH deployment status and latest trends
- Major challenges for FTTH
- Impacts of LTE on FTTH

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

Tilak 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**

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

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

Operator Deployment Case Studies

Chaired by: **Alexis Bernardino**, Director, **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**

Fiber for Mobile Networks

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

13:40 **Fiber based solutions for mobile backhaul**

OPERATOR

- 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**

FTTH Market Implementation

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

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**

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| OPERATOR | 14:00 | Continuing the growth of FTTH connectivity in Bangladesh <ul style="list-style-type: none">Data centers, cloud computing and other applicationsFTTH network deployment challenges Abdus Salam , Managing Director, Agni Systems | 14:10 | Opportunities for broadband operators in Wi-Fi Offloading and Small Cells for LTE <ul style="list-style-type: none">Strategies for capturing the booming market for small cell and Wi-Fi backhaul Julie Kunstler , Principal Analyst, Components, Ovum | 14:10 | The role of software defined networking, service orchestration and network function virtualisation in the evolution of fiber to the home services <ul style="list-style-type: none">The demands placed on service provider infrastructure by FTTH and cloud servicesHow software defined networking and service orchestration provides the foundation for efficient agile FTTH servicesThe future of combining cloud and virtualised infrastructure with SDN and service orchestration to create on-demand network services through NFV Dr Richard Wade , Technology Architect, APJC Service Provider CTO Group, Cisco Systems |
| | 14:20 | Maximising the adoption and absorption of fiber technology in rural areas <ul style="list-style-type: none">Minimising the cost of deploying fiber to rural areasKey challenges of fiber technology adoption and absorption in rural areasStrategies to utilise government infrastructure to deploy fiber to rural areas Moderator: Alexis Bernardino , Director, FTTH Council Asia-Pacific Panellists: Akter Ul 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 <ul style="list-style-type: none">Global market trends in Gigabit communities and key drives for the adoption of these networksArchitectural impacts of Gigabit service deliveryUtilising existing infrastructure for near-Gigabit services with G.Fast. Robert Conger , Director of Product Management, ADTRAN | 14:30 | Case Study: FTTx Smart Camp <ul style="list-style-type: none">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 |
| PANEL | 15:00 Afternoon Tea and Exhibition Viewing | | | | | |
| | Closing Plenary | | | | | |
| Chaired by: H. Munasir Choudhury , General Manager, FTTH Council Asia-Pacific | | | | | | |
| Q&A | 15:30 | Worldwide panorama of FTTx rollout: Figures and open questions <ul style="list-style-type: none">Picturing FTTx rollouts in APAC, Europe vs AmericasThe reasons for success and failures recentlyWhat 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 <ul style="list-style-type: none">Where the world is trending in terms of FTTH deploymentDifferentiating based on service offerings rather than network availabilityFTTx network planning for business servicesHow is FTTH landscape changing – what will be the next generation network LTE, VDSL2 Julie Kunstler , Principal Analyst, Components, Ovum | | | | |
| PANEL | 16:30 | Questions & Answers Round-Up Roland Montagne , Principal Analyst, iDATE Julie Kunstler , Principal Analyst, Components, Ovum | | | | |
| | 16:40 | FTTH Council around the world As a final summary to the FTTH Council Asia-Pacific Conference, join the leaders of FTTH from Europe, Middle East, Latin America, and Asia-Pacific as they form a global picture of the future of fiber deployment in their region. What are the market drivers? What have been the main challenges for FTTH deployment in their region and what is the industry doing to address these challenges? 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 Gilberto Guitarte , President, FTTH Council Americas - LATAM Chapter Dr Suleiman Al Hedaithy , Chairman, FTTH Council MENA | | | | |
| | 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 | | | | | | |