



THE 12th APT POLICY AND REGULATORY FORUM (PRF-12)

21-23 May, 2012, Bangkok, Thailand

PROCEEDINGS

I. Introduction

- 1.1. The 12th APT Policy and Regulatory Forum was held from 21 to 23 May, 2012 in Bangkok, Thailand. The Ministry of Information and Communication Technology and the National Broadcasting and Telecommunications Commission (NBTC) of the Royal Government of Thailand co-hosted the forum.
- 1.2. A total of 161 participants representing APT Members, Associate Members, Affiliate Members and International Organizations attended the event.

II. Opening Session

- 2.1 Welcome Address was given by Mr. Toshiyuki Yamada, Secretary General, APT. He welcomed all the distinguished delegates to the APT Policy and Regulatory Forum. He thanked MICT and NBTC, Thailand for the support and arrangements for the PRF and specially thanked H.E. Gp.Capt. Anudith Nakornthap, Minister of Information and Communication Technology, Thailand for gracing the occasion.

In his speech, he mentioned the significant advancements made by the region in the development of their telecommunications and the high usage of mobile broadband technology in the region. He also elaborated on many challenges that come with the advancement including demand for more spectrum, deficit in infrastructure, the content and the human resources, policies on open access, and impact of social media. The full text of the address is attached in Doc. No. PRF-12/ADM-04.

- 2.2 Welcome Remarks was given by H.E. ACM Thares Punsri, Chairman of NBTC, Thailand. He welcomed participants to Thailand.

In his remarks, he mentioned the challenges and opportunities that surround telecommunications and ICT development.

He noted, the important changes and development in ICT in the last decades is due to improvement of technology and increasing competition which also

brought up new challenges for policy makers and regulators. The policy makers and regulators need to develop high level of policy standards and regulatory framework that encourage competition, quality of service and technology innovation.

He further stated that as socio-economic development relies on ICT infrastructure and services, it is important at the present economic climate to concentrate utilizing limited resources in areas that will provide the greatest socio-economic impact. Therefore, it is essential that clear priorities be developed by the countries and that this meeting will help to discuss and share such knowledge. The full text of the address is attached in Doc. No. PRF-12/ADM-05.

- 2.3 The Inaugural Address was delivered by H.E. Gp. Capt. Anudith Nakornthap, Minister of Information and Communication Technology, Thailand. He welcomed all delegates to the forum. In his address, he stressed the importance of PRF as a platform for policy makers and regulators to discuss key policy and regulatory issues.

He shared the information in Thailand's 2nd ICT master plan to move forward the country to be smart Thailand and to improve quality of life to be knowledge-based society. One of the goals laid out in the plan is bridging the existing digital divide by deployment of high speed ICT network nationwide with high quality services under reasonable price. This will be a key infrastructure for social and economic development of the country by means of which Thai people would be able to get a better access to education and healthcare, participation in the government and political affairs would be facilitated, and the overall quality of life uplifted.

He further added that while implementing the Second ICT Master Plan, Thailand is already in the process of formulating "ICT 2020 Policy Framework", envisioning Thailand's ICT direction for the next decade.

He then stressed the importance of close cooperation among policy, regulators, and business sector as key success in all pillars of telecom and ICT advancement. Lastly, he wished the forum a successful deliberation. He then declared the forum opened. The full text of the address is attached in Doc. No. PRF-12/ADM-06.

- 2.4 The Secretary General, Mr. Toshiyuki Yamada presented tokens of appreciation to H.E. Gp. Capt. Anudith Nakornthap and H.E. ACM Thares Punsri, Chairman of NBTC, Thailand for inaugurating the event.
- 2.5 A group photo was taken at the end of the opening session.

III. Session 1

Adoption of Agenda

- 3.1 The Secretary General explained that one agenda item relating to the future Ministerial Meeting was added as the result of discussion at the Steering Committee meeting held last evening. He also mentioned one special session on this agenda item is scheduled in the afternoon of the 2nd day. As there was no comment from the floor, the draft agenda of the PRF was adopted (PRF12/ADM-01).

Decision no. 1 (PRF/2012/1)

The draft agenda of the meeting was adopted as proposed

Election of the Chairman of the PRF

- 3.2 Mr. Pitjapol Jantanasaro, Deputy Secretary General, the Office of NBTC from Thailand was introduced by the Secretary General as the nominee from the host country for the Chairman of PRF.
- 3.3 Mr. Pitjapol Jantanasaro, Deputy Secretary General, the Office of NBTC, Thailand was elected as the new chairman of the PRF and will continue his chairmanship until the next PRF meeting in 2013 according to the Working Methods of the PRF.

Decision no. 2 (PRF/2012/2)

Mr. Pitjapol Jantanasaro, Deputy Secretary General, the Office of NBTC, Thailand, was elected as the chairman of the PRF. He will continue his term until the PRF meeting in 2012.
--

Remarks by the Chairman of PRF

- 3.4 Mr. Pitjapol, Chairman of PRF delivered his Remarks. He thanked the participants of the Forum for the confidence they have in him and gave his assurance for his commitment in his role as the Chairman of the PRF.

Business Dialogue – New trends, opportunities and challenges in ICT – Roles of Regulators

Chairman: Mr. Pitjapol Jantanasaro, Chairman of PRF

- 3.5 The presentation “**How can Asia-Pacific States secure competitive advantage through regulating for new and emerging communications developments? – An Asian Operator Perspective**” was delivered by Mr. Robert Borthwick, Vice President, Group Regulatory Affairs, Axiata Group Berhad, Malaysia. (Doc. No. PRF-12/INP-18)

Globally, economic growth is under pressure following the 2008-09 recession and as a result of the Eurozone crisis. At the same time the communications sector is maturing from a high-growth to a low-growth industry. Expect these

developments to place significant consolidation pressure on operators internationally.

Successful regions and countries will be those that ensure an open, effectively competitive market space for communications operators, bring forward the creation of additional competitive inputs, notably harmonized spectrum, and limit pressures for taxation and preferential treatment of national providers.

Growing voice and internet penetration will be more difficult in challenging economic circumstances, but repeating and extending policies which have proved successful for voice will facilitate mass-market availability of low-priced data services for Asian citizens.

In contrast, policies which fragment regional and national markets or which have otherwise proved unsuccessful should be re-examined, and more effective approaches adopted.

These approaches can generate sustained locational competitive advantage for Asian countries and for the region overall.

- 3.6 The presentation “**The Changing Role of Regulators in the new Telecommunication environment: NGN Networks and Applications-based pricing**” was presented by Dr. Anthony Jude De Silva, Telsoft, Australia. (Doc. No. PRF-12/INP-01)

This presentation discusses how the role of Regulators and approach to pricing, is changing, in an eco system where NGN is an enabler of value creation at a scale that is unprecedented in economic history. The paper discussed new approaches to applications-based pricing that is able to better reflect and capture the value created. The paper also looked at why this is essential particularly to speed up the opportunities for an entire population in a country.

He emphasized the role of the sector to be visualized as the enabler of information flow and adding value to other socio-economic sectors.

- 3.7 The presentation “**A Glimpse in the success of mobile growth in India - Role of Policy and Regulation**” was delivered by Mr. J. P. Garg, NSN, India. (Doc. No. PRF-12/INP-05)

The presentation brings out briefly the highlights of the evolution of progressive role of Telecom policy and regulation in India (1992 to 2012) towards the success story of rapid growth of mobile services in the country within a short period of time, including a flavour of the current policy/regulatory issues.

Q&A

- Ms. Read from O3B asked for comments on the impact of government decision on telecom taxation.
- Mr. Garg from NSN, India responded that the revised telecom policy would consider the issues of taxation which would hopefully assist the problems of taxes.
- Dr. De Silva from Telsoft gave the example of the economic impact of the telecom sector in Australia. He mentioned that the government should look at the revenue downstream from the sector rather than the revenue from tax imposed upfront.
- Mr. Borthwick from Axiata had a view that there is a disconnection between digital divide and the tax. He mentioned that country may miss good opportunity of growth with the inefficient management of USF.
- Pakistan sought elaboration from Axiata on the investment decision of the industry and the value-added services. On USF, he mentioned that it is understandable that the operators will focus more on commercial development but the government sector also has social obligation.
- Mr. Borthwick responded that investment decision will take into account factors such as market entry, competition, etc. He mentioned that the investment has to be more discriminatory to be profitable. Investors will look at the long-term track record of the country in terms of taxation.
- On the value-added services, he replied that one should look at the standardized code rather than the licensing. The hit-and-run business model which the operator reaps up money from large number of customers and leaves is not desirable. On the USF, he had a view that the USF and tax-led approach may not be the right approach. He mentioned that objective-led approach is preferred.
- Dr. De Silva from Telsoft complemented that the industry is looking for outcome-driven approach that is measurable.
- On the query from Ms. Markova, Telsoft regarding the net neutrality, Mr. Borthwick responded that net neutrality is seen in the US market. He explained that Net Neutrality will not be necessary if there is enough competition in the market.

IV. Session 2: Business Dialogue – New trends, opportunities and challenges in ICT – Policy on Spectrum

Chairman: Mr. Leong Keng Thai, Deputy Chief Executive and Director-General (Telecoms & Post), IDA, Singapore

- 4.1 The presentation “**Delivering mobile broadband - now and future**” was delivered by Dr. Hakan Ohlsen, Director Technology and Industry APAC, Ericsson, Vietnam. (Doc. No. PRF-12/INP-08).

The world is going mobile with its rapid growth in wireless communications that is now serving about 6 billion mobile subscriptions worldwide and with 4 billion people connected. The penetration is globally 82% and the mobile technology has fundamentally changed the way people interact and conduct business. By 2016 there will be almost 5 billion connected mobile broadband users and smartphones is coming down in price due to economy of scale and this will assist in closing the digital divide. Globally harmonized spectrum arrangements, or at least regionally, is a key ingredient in achieving economy of scale products and plays an important role in affordable products that gives access for all to broadband, assisting in fostering new businesses, and at the same time paves the way for innovative solutions and services for future.

Today an average of around 325 MHz is licensed in each country to mobile following frequency band arrangements for GSM/HSPA/LTE. Some countries have almost twice that amount while other countries have not more than a third of that licensed to mobile. With current data traffic increase, even when considering the continuous technology development that is ongoing, it is expected that five times that amount of spectrum will be needed beyond 2020 and now is the time to start prepare and work for this future.

- 4.2 The presentation “**The Economic Benefits of Early harmonization of the Digital Dividend Spectrum**” was delivered by Ms. Chris Perera, Senior Director - Spectrum Policy & Regulatory Affairs- Asia Pacific, GSMA, Hong Kong. (Doc. No. PRF-12/INP-15)

The APT (Asia Pacific Telecommunity) identified 698- 806 MHz as the band for the Digital Dividend and developed the 2x45 MHz band plan for the Asia Pacific region. Australia and New Zealand have committed to implementing this band in full alignment with the APT band plan and India has publicly stated this to be their preferred option also. However, most countries in the region are yet to make any decisions. This presentation considers the economic benefits of early harmonization of the Digital Dividend Spectrum for the Asia Pacific region.

- 4.3 The presentation “**Mobile communications development and its policy implications**” was delivered by Mr. Alex Orange, Qualcomm, Hong Kong. (Doc. No. PRF-12/INP-17)

The mobile communications ecosystem is global in nature and the economic and social benefits that it creates through the deployment of mobile technology is assisted through cohesion within the ecosystem and harmonization between nations especially in regards to the allocation and use of its primary resource, the radio spectrum. This cohesion and harmonization is facilitated through international and regional standardization efforts. In this presentation recent trends, and developments related to mobile technology and its use are outlined and the policy implications on Asian Pacific Nations were explored.

- 4.4 After these presentations, general discussion as well as questions and answers ensued. The following observations and comments were made by the speakers of this session and the floor:

Q&A

- Mr. Ilyas from Maldives queried on the support of manufacturer on the APT's 700 MHz band plan.
- Mr. Orange from Qualcomm, Hong Kong responded that Qualcomm had played the leading role in developing the band plan including chairing the AWG working group on that band plan and within 3GPP standardization of the band plan. Qualcomm has built the equipment supporting the APT band plan including the US band plan. He explained that the process of making chipset and equipment such duplexer and filter to the reference design takes around 1 year and that the product will be seen on the shelf in around 18 months.
- Dr. Ohlsen from Ericsson, Vietnam added that Ericsson also participated in the work including the standardization of the LTE. He also mentioned that the chipset will be seen in the market very soon.
- Mr. Mohamed El Min from Boeing asked how to implement the system to ensure the fair access to secondary spectrum and whether this will be done on regional or national basis.
- Dr. Ohlsen explained that the spectrum sharing aspect discussed is more on the licensed spectrum. He mentioned that the licensed Spectrum can be shared. In the case that the frequency is not highly used, others can make use in a cost efficient way. The secondary spectrum here is not meant to be the secondary in the regulatory meaning.
- Dr. De Silva from Telsoft asked for comments on mobile offloading in the shortage of spectrum and how soon traffic is offloading from mobile device.
- Mr. Orange responded that the network is being stressed by the demand from customer and operators are currently implementing WiFi offload. This is done on the best effort basis and there is no QoS guaranteed. There are other technologies such as Femtocell doing the similar thing but it requires backhaul. He also added that until infrastructure is in place, the LTE ad 3G can provide QoS for data service.
- Mr. Hussain from Pakistan commented that there is an exponential growth of data in cellular network. He wanted to know how this data growth relates to the revenue growth for the companies and what business model will translate data growth into business growth.
- Dr. Ohlsen responded that to address the issue the pricing model needs to be changed. He mentioned that flat rate pricing does not work properly and it does not reflect cost and income of the operator.
- Ms. Perera from GSMA, Hong Kong added that prices of services have come down and more emphasis was put on providing packages with low prices. There is high expectation from customer. She mentioned that the

mismatch between data and revenue growth is the common issue of operators around the world.

- Mr. Orange added some positive incentive by the manufacturers on the growing demand for more bandwidth is that the cost of infrastructure has drastically come down which will assist the operators to cut down their investment costs.
- Mr. Leong from IDA, Singapore commented that Telcos are getting into the business of application and content. He mentioned that profits are shifting to the content side such as IPTV, application portals and that operator sees it as a longterm goal.
- Mr. Hussain from Pakistan commented that making spectrum available involves reallocation / refarming of the existing users and there is cost associated. He commented further there needs to be a very strong case showing economic value for both to the operators and to the governments in return for the extra spectrum that is required by the operators.
- Mr. Orange referred to the BCG report which contains economic and society benefit of 700 MHz broadcast spectrum compared to the use of it for mobile. The report shows that using spectrum for mobile vastly exceeded the benefit when using it for broadcasting.
- Mr. Garg from NSN India commented on issues such as interference issues when we consider the Technology Neutrality (any technology/any service). He stressed that the term needs to be used cautiously due to possible serious implications of interference issues like inter-technology, including FDD/TDD, inter-TDD, (within the country and cross border) and possible significant wastage of spectrum in guard bands. Adequate regulatory controls are implied.
- Dr. Ohlsen replied that when we talk about technology neutrality, it is important that we should not allow increase in interference and one needs to work with regulatory organization to make sure that the interference is minimized and related issues are well taken care of by the regulator.
- Mr. Leong asked for comments on the Machine to Machine communications (M2M). When looking at the vast increase of M2M which will become a big part in the future, he wanted to know whether it will create new problems especially when M2M sometimes going cross border.
- Mr. Orange replied that the size of the market of M2M is still embryonic at the moment but its growth is exponential. To the question "Does it create international issue such as cross-border or interference issue?", he opined that no new issues being introduced when compared to existing forms of communication such as the issue of security and privacy which are being addressed.
- Dr. Ohlsen replied that within 3GPP standardization, there is some ongoing work in many areas such as efficient signaling for devices and battery consumption. There is also a new standardization body being formed to address the M2M application to develop relevant interfaces and protocols. He mentioned that it is also important to handle this from the regulatory point of view.
- Mr. Hussain from Pakistan queried whether on the work done to address the security in M2M.

- Dr. Ohlsen and Mr. Orange responded that Ericsson and Qualcomm both have worked on the issue.
- Ms. Perera from GSMA complemented that within GSMA, there is a group looking into the security issue of M2M application.
- Mr. Orange further gave an example Smart Grid combined with electric vehicle connected to it showing the complication of the issue. He mentioned that the government also had a role to play on the issue.

4.5 Chairman then summarized the session.

V. **Session 3: New trends, opportunities and challenges in ICT – Business Strategy**

Chairman: Mr. Robert Borthwick, Vice President, Group Regulatory Affairs, Axiata Group Berhad, Malaysia

5.1 The presentation “**ICT Trends and opportunities**” was presented by Mr. Sebastien Lauren, President, Managing Director, Alcatel Lucent, Thailand. (Doc. No. PRF-12/INP-19)

ICT sector is a powerful driver of sustainable growth and employment. The Internet and the next generation ubiquitous access is becoming the society and economy backbone, all being connected through very high speed broadband to the IP world. It plays a major role in boosting innovation, creativity and competitiveness across all industry and service sectors through new applications. On a global scale, broadband usage evolution is fast and data traffic is exploding with end-users (Consumers, Business, society) as the driving force. Investment in intelligent network is becoming crucial to cope with new applications and services. To foster growth and innovation, Governments and regulators have an important role to foster investment in ubiquitous networks.

5.2 The presentation “**Communication & Beyond: Development of a Mass Market for Mobile Data – Socio Economic Contribution vs challenges**” was delivered by Mr. Mashid Rahman, Senior General Manager, Regulatory Affairs, Orascom Telecom Bangladesh Ltd, Bangladesh. (Doc. No. PRF-12/INP-10)

Mobile communication and data usage is the key for the growth of Asia. Accessibility to mobile phone, cheaper handsets, innovative mobile services and data usage can reshape the dynamics; Despite the global economic climate, mobile services shall continue to make a strong socio-economic contribution but mobile operator revenue growth rates have been declining for the past few years due to the economic climate, market maturity and greater regulatory interventions; To ensure competitiveness and reignite long-term revenue growth, the mobile industry continues to invest in product and service innovation; Mobile industry investment in new technologies and infrastructure can also act as part of Economic stimulus to help promote economic recovery.

- 5.3 The presentation “**Key Support for Broadband Deployment**” was delivered by Mr. Chalermchai Ittimaiya, Head of Network Operations Center, Triple T Broadband, Thailand. (Doc. No. PRF-12/INP-14)

Wireline broadband expansion is one important goal of Thailand national broadband policy to reach out to households. Currently, there is not so much investment from private sector in wireline broadband due to the high investment, more complicated and sophisticated implementation/service, lack of common infrastructure for telecommunications. This presentation mainly points out the key support for wireline broadband deployment that needs the government sector to involve and regulate.

Q&A

- Mr. Ilyas from Maldives asked for comments on the possibility of sharing revenue between the service provider and the content provider.
- Mr. Rahman from Orascom Telecom Bangladesh responded that Bangladesh has new guidelines. For the revenue sharing, he mentioned that the pricing model has to be developed taken into account the bandwidth and revenue.
- Mr. Chalermchai from Triple T, Thailand responded on the revenue sharing that currently this is in initial stage and the network provider has to individually negotiate with content provider. He added that in the future, the regulator may have to step in to ease the process.
- Mr. Rahman added on the revenue sharing model that there needs to be registration and the lines have to be drawn between the service provider and content provider and that one has to strike the balance between them.
- Mr. Laurent from Alcatel Lucent, Thailand responded from user’s perspective that the user has to be able to pay for the service at the end of the day. This relates to the value of delivered service. User will pay for service with good quality of service and of value.
- Ms. Chow from BT Hong Kong wanted to have some views from the panelists on the data privacy and data protection in the growth of Next generation services. She mentioned that there is no standardization across and the issue is fairly amplified. There are challenges in the region without harmonization of data protection.
- Mr. Laurent replied that as long as there is no specific regulation, people can freely use the service. He had a view that the regulation has to be put in place.
- Mr. Rahman added that the lack of regulation in data protection may lead to distrust in using the service.
- Ms. Chow from BT Hong Kong wanted to know the current status of harmonization of data protection in the region as she is interested in the aspect of delivering the cross border service such as cloud computing.

- Mr. Laurent responded that there is no harmonization at this point in time.
- Ms. Karnova from Telsoft queried on the role of regulatory and policy maker in innovating the service.
- Mr. Rahman replied that innovative services should be patented. All elements including CAPEX and OPE need to be taken into account when developing the services.
- Mr. Laurent replied that the innovation is out there and the openness of the internet will help propagate the innovation. He mentioned that the network provider has to be the enabler. The regulator also has the role to push forward and that education is an important element in stimulating the innovation.

Day 2 : 22 May 2012

VI. Session 4: Broadband – Policy and Development

Chairman: *Mr. Yahkup Menudin, Chief Executive, Authority for Info-communications Technology Industry, Brunei Darussalam*

- 6.1 The presentation “**China Broadband Development Overall and Relevant Policies**” was delivered by Mr. CAO Ji Guang, Deputy Director, Dept. of Telecom Development, MIIT, China. (Doc. No. PRF-12/INP-02)

The presentation introduces the development overall of China's broadband network and applications, and the relevant policies about broadband networks; analyzes these existing problems which block the broadband network development; and briefly introduces the future great efforts to push information infrastructure in China.

- 6.2 The presentation “**Multimedia Sign Language for the deaf and hard of Hearing**” was presented by Mr. Johannes Adi Purnama Putra, Industrial Partnership Manager, RDC Telekom Indonesia, Indonesia. (Doc. No. PRF-12/INP-16)

i-CHAT (I Can Hear And Talk) was developed by TELKOM INDONESIA, based on the notion that Information and Communication Technology should bring benefit to all people, either normal or with special needs. The goal of the i-CHAT program is to provide an interactive media for the deaf, so that it can enable them to improve their communication capability and share knowledge by sign language and speech reading learning method.

- 6.3 The presentation “**A new regulatory focus: Regulated Access for Business Markets**” by Ms. Elaine Chow, Head of Regulatory Affairs, BT Asia-Pacific, Hong Kong. (Doc. No. PRF-12/INP-09)

The needs of the business markets are often overlooked by regulatory authorities or misunderstood to be similar to that of consumer markets.

However we are now seeing a greater awareness of the need to develop regulation specific to the needs of business users. This is particularly important given the impact that advanced ICT availability has on the business sector and in turn, on national productivity and GDP growth. As regulators in Asia Pacific contemplate their regulatory frameworks for Next Generation Networks, it is opportune that they also examine how regulated access should be provided to competitive operators catering for the business segment.

Q&A

- Mr. William from MCMC, Malaysia commented on the consideration of the access regulation which is meant to be nationwide and that the SLA of 100% even in the central business area may not be practical.
- Ms. Chow from BT Hong Kong responded that the main thing is the terms and conditions. She agreed that the business grade SLA may not be practical. However, she had a view that the customized product for business sector should be regulated and that the approach taken by incumbent should be monitored. One needs to ensure that there is no discrimination. There shall be fair and reasonable terms and conditions on equivalent basis with incumbent operator.
- Mr. Hussain from Pakistan queried on the pricing of the business service and residential service and commented that global operator has more access to resource such as IP pipes so they will have more competitive edge compared to the incumbent local operator.
- Ms. Chow responded that business services and residential service are separate market and their prices may differ recognizing different SLA's are required.
- On the comment regarding the global operator vs incumbent operator, Ms. Chow mentioned that a lot of local incumbents are in partnership with global operators and they are not less competitive to global operator. She mentioned that the access price shall be acquired under same terms and conditions.
- Mr. Ratnayake from Sri Lanka queried on the ICT for people with special needs apart from the application for the hearing impaired and on the possibility of collaboration and sharing of information. He mentioned similar work done in Sri Lanka and Mongolia.
- Mr. Adi from PT Telkom Indonesia replied that the applications for the blind are already available in the market. He added that the University of Bandung is also developing an application for the blinds. He also said that the international collaboration is welcomed.
- Mr. Hussain from Pakistan commented that the applications and the developments on ICT for the people with special need in our region should be shared.

VII. **Session 5: International broadband connectivity - eliminating the bottlenecks**

Chairman: Mr. Charles Punaha, CEO, NICTA, PNG & Vice Chair PRF

- 7.1 The presentation “**International broadband connectivity: Eliminating the bottlenecks - South Asian Case**” was delivered by Mr. Wangay Dorji, Head of Telecommunications, BICMA, Bhutan. (Doc. No. PRF-12/INP-03)

The presentation focuses on the importance of International Internet Connectivity for the promotion of quality broadband services within the South Asian countries. It also focuses on the present scenario as well as the impedance on the regional internet connectivity and the recommendation for improving the regional internet connectivity for providing better quality broadband services.

- 7.2 The presentation “**National Broadband Deployment - the Ka-band Satellite Potential**” was delivered by Ms. Joslyn READ, VP Regulatory Affairs, O3B Networks, USA. (Doc. No. PRF-12/INP-20)

Satellite services have played a pivotal role in the advancement of communications networks throughout the countries of the Asia Pacific Telecommunity for years, notably satellites operating in the traditional C- and Ku-band. Now, new geostationary and non-geostationary satellite systems in the Ka-band are being developed and launched to serve the APT member countries that hold significant promise for the deployment of high speed broadband services and connectivity for remote and underserved communities (such as for example the O3b medium earth orbit satellite network). The unique technology and regulatory challenges and opportunities presented by these new higher frequencies, Ka-band satellite systems, was presented.

- 7.3 After these presentations, general discussion as well as questions and answers ensued. The following observations and comments were made by the theme speakers of this session and the floor:

- Ms. Sulyna from Malaysia commented on the dependency of submarine cable that 95% of global communication still relies on submarine cable. She mentioned that ASEAN’s dependency on submarine cable is still high. She mentioned that ASEAN has conducted the redundancy and diversity study within ASEAN on a regular basis.
- She shared the work within ASEAN to address the issue of internet browsing that there is a plan to set up ASEAN internet exchange for the intra-ASEAN traffic to bring the cost down. This is expected to start by next year.
- She also mentioned other activities within ASEAN including TELMIN and TELSOM, the infrastructure taskforce, and regulator’s forum to address the issue of connectivity.

- She commented on the use of Ka-Band and queried whether there is associated research on the usage of the band in high rain areas.
- Ms. READ from O3B replied that the O3B satellites are closer to the earth (8062 km) and penetrate heavy weather better than Ka-band geostationary satellites (at 36000 km). In addition, there are mechanisms such as uplink/downlink power control, and specific modulation techniques which have positive impact to the Ka-band satellite performance during rain. She explained that O3B has also studied the possibility of pairing Ka-band with C-band to maintain essential connectivity during periods of extreme rain. She mentioned that a C-band link speed might be slower during the very heavy rain periods but there will still be connection until the Ka-band system could resume. She said that O3B is very hopeful and confident of the benefits of its new Ka-band satellite system, especially for the Asia-Pacific countries.
- Chair stressed that the issue of connectivity shall be addressed from the regional basis rather than national basis.
- Mr. Ikhsan from Indonesia gave the example of Indonesia which consists of many islands and it is impossible to cover the whole country with land cable. He mentioned a big project of submarine cable and backbone that is going on in Indonesia. He also pointed out that in deploying Ka-band there should be International collaboration to avoid interference with other systems using Ka band. He mentioned that in Indonesia the Ka-band is also used for terrestrial system.

7.4 Chairman summarized the important points of all presentations.

VIII. Session 6: Cybersecurity / Cyberwellness

Chairman: Ms. Nur Sulyna Abdullah, Acting Senior Director, International Affairs, Corporate Communications & Legal, MCMC, Malaysia & Vice Chair PRF

8.1 The presentation on “**Security Issues in the Internet Address Infrastructure**” was delivered by Mr. German Valdez, External Relations Program Director, APNIC, Australia. (Doc. No. PRF-12/INP-22)

There is an increasing awareness of the diversity of security issues that are being posed by the broad adoption and deployment of the Internet. Integrity of the name and address infrastructure is an essential component for the Internet stability. The presentation explained the different aspects of security issues in IPv6, DNSSEC, Whois Database etc. that are covered by the Asia Pacific Regional Internet Registry, APNIC.

8.2 The presentation on “**Cyberspace, Cyberwarfare and Cybersecurity Threats**” was delivered by Mr. Prinya Hom-Anek, President, ACIS Professional Center, Thailand. (Doc. No. PRF-12/INP-26)

Cyberwarfare refers to politically motivated hacking to conduct sabotage and espionage. It is a form of information warfare sometimes seen as analogous to conventional warfare although this analogy is controversial for both its accuracy and its political motivation. The presentation looked at the nature of Cyberspace and Cybersecurity. The presentation also demonstrated “today and future cybersecurity threats against the Cyberspace” and “How to protect our organization from those threats”.

The presentation also demonstrated the threats on the privacy of personal information that new communication technologies especially the mobile technologies and global services are creating without much awareness of its users.

8.3 After the presentation, general discussion as well as questions and answers ensued. The following observations and comments were made by the theme speakers of this session and the floor:

- Chair commented on the limited regulatory power over the usage of Facebook. Governments and regulators can pass law on data protection but there is an important role that should be played by the user of the service him/herself.
- Chair also pointed out the ISO new standard that is about to be released which has broadened the scope of security.
- She had a view that we should separate between cyber threat and illegal behavior perpetrating over the internet.
- Mr. Hussain from Pakistan commented that law on privacy policy is relevant to the problem of Facebook and other global platform and this is subjected to jurisdiction of law. Internet of governance should not be subjected to the law of one country.
- Chair mentioned that mutual legal assistance from foreign affair can be the solution but it is a time consuming process. She stressed that it take a lot of efforts to solve the problem and this should not be dependent on the law of only one country. She mentioned Budapest convention and similar conventions can give rise to cross border assistance.
- Chair mentioned that within ASEAN, there is an effort to work with the Social Network service in regard to the respect of local law. She mentioned that Twitter, for example, has worked closer with governments on the matter.
- Mr. Ilyas from Maldives commented that it is very difficult for regulator to go about the problem of social media. He had a view that citizen shall be made aware of the cyber threats.

IX. Session 7: Green initiatives

Chairman: Mr. Toshiyuki YOKOTA, Director-General for International Affairs, MIC, Japan

- 9.1 Chairman opened the session by introducing the issue. He mentioned that after the critical nuclear incident, Japan has a serious plan to implement smart grid.
- 9.2 The presentation “**Smart Grid**” was delivered by Mr. Samerjai Suksumek, Deputy Director-General, Energy Policy and Planning Office, Ministry of Energy, Thailand. (Doc. No. PRF-12/INP-23)

The presentation talked about the developments of Smart Grid in Thailand, the benefits of Smart Grid, role of key players on Smart Grid development, policy plan for Thailand Smart Grid Development and the current progress on Smart Grid development.

- 9.3 The presentation “**Green Initiatives in Telecom - India**” was delivered by Mr. Shri P.K. Panigrahi, Sr. DDG BW, DoT, India. (Doc. No. PRF-12/INP-12)

The presentation highlighted the exponential growth in telecommunication in India and the penetration in rural areas which calls for Green Initiatives in Telecom. It explains passive infrastructure sharing and the reduction in telecom network power consumption in India. It also talks about the adoption of environment friendly green policy in telecom sector and reduction in carbon footprints in India. India has incentivised the use of renewable sources for sustainability. Lastly, the presentation touched on the regulatory frame work on “Approach towards Green Telecommunication – Broad directions and goal”.

- 9.3 After these presentations, general discussion as well as questions and answers ensued. The following observations and comments were made by the theme speakers of this session and the floor:

- Chair mentioned the difference between the power supply industry and the telecom industry that the power supply industry which is one way but the telecom industry is two-way. He added Smart Grid can make the power supply industry to become two-way industry. Example is that the electric vehicles can charge the power during the daytime and supply the power at the night time. He added that smart meter is needed at the household level and that the standardization of Smart metering is encouraged.
- Chair questioned on the cooperation between energy and ICT sector in Thailand. He also asked on the policy for the use of Renewable Energy Technology (RET) in rural areas in India.
- Mr. Samerjai from Ministry of Energy, Thailand replied that Thailand is in the process of drafting the roadmap of smart grid. He agreed that there shall be cooperation between sectors. He replied further that in drafting the roadmap, there are subcommittees being set up under which there is one working group coming from ICT sector.

- Mr. Panigrahi from India mentioned that there is reluctance from operator. He added that government has promoted the use of RET by providing 30% subsidy for CAPEX in installation of RET and the taxation benefit. He mentioned that rural sites are scattered. He also mentioned that apart from telecom, lighting and others in the rural areas are to be considered as well.
- Mr. Rahman from Orascom Telecom Bangladesh commented that the issue is not due to the reluctance from the operator but more due to the upfront cost that makes it difficult for the operator to invest in renewable energy. He mentioned that in encouraging investment of renewable energy for rural area, the private sector should be kept in the loop in developing the policy probably along with the use of the USF.
- Mr. Panigrahi mentioned that the concept of RESCO (renewable energy service company) is coming up that will help in the investment without burdening the service provider.
- Mr. Hussain from Pakistan queried on the source of fund of the subsidy and whether the policy document exists.
- Mr. Panigrahi replied that the subsidy is for all renewable energy project not just telecom. He also mentioned that the policy document already exists.

X. Special Session

Chairman : Mr. Toshiyuki Yamada, Secretary General, APT

- 10.1 Secretary General gave the background of Bali Statement and the Ministerial Meeting held in Bali, Indonesia in 2009. He mentioned that ministers wanted to hold another ministerial meeting and had a view that 5-year period of ministerial meeting is too long. Suggestion is made that Ministerial Meeting should be held every 3 years. APT is considering to organize another Ministerial Meeting next year pending the offer of hosting and approval of the Management Committee. He mentioned that host country which can ensure high level of security is needed and the considerable budget needs to be approved by the next MC. APT is seeking a host for the future ministerial meeting. Next PRF meeting should do some preparation work for ministerial meeting if the Ministerial is to be held next year.

This session is to provide the background for members, to call for input for the next Ministerial Meeting, and to invite Member to be the host for the meeting.

10.2 Bali Action Plan and Input to the future Ministerial Meeting

- Mr. Amir, Director Project Development, APT presented the update of the activities in Bali Action Plan and the input to the future Ministerial Meeting. (Doc. No. PRF-12/INP-25)
- Mr. Punaha of PNG stated that APT should do the stock-taking on the work done by the member countries towards the objectives of the Bali Plan of Action. In this regard it is required to collect information on national development of broadband in each country in relation to the Action Plan. The summary of what we have achieved and not achieved to be presented

- to the next Ministerial Meeting. For the areas that we are not able to achieve, APT and other stakeholders can do to assist.
- Secretary General replied that Secretariat will try to collect as much information from Members as possible, compile them, and report to MC for consideration. He advised that Secretariat has already circulated letter requesting information as decided by the last MC. It is important that member countries provide information to the Secretariat. He stressed that the collaboration from Members is essential.
 - Ms. Sulyna of Malaysia mentioned that it is not only to collect information but also to do the assessment and see how the programmes in the last 3 years have helped members to achieve the goals. She further pointed out that PRF is a good place to discuss what have been achieved and what could be the input to the next declaration.
 - Secretary General suggested discussing the themes and input to the next Ministerial Meeting in the next PRF.
 - He further explained that the Secretariat needs enough time to prepare for Ministerial Meeting and at least 2 meetings for preparation are required.
 - Mr. Oh from Republic of Korea wanted to know the progress after the meeting and how to progress the work.
 - Secretary General replied that the progress can be seen in the developments in Member countries. He mentioned that the Action Plan is reflected in each work programme and each work programme is requested to implement the action items relevant to it and report to MC.
 - He mentioned that the progress of this PRF may not be concrete as this is information sharing forum. He gave example the IMR WG report as one concrete outcome from the APT activities.
 - Ms. Kalaya from Thailand agreed with Malaysia that the assessment of Bali Action Plan should be done. If it cannot be finalized in this meeting, perhaps we can be discuss the assessment in the ADF this year.
 - Mr. Yokota from Japan commented information sharing forum such as PRF is difficult to do the assessment. We can discuss what kind of programme shall be augmented to strengthen the capacity of the Member.
 - Mr. Oh commented that we should look at the objectives of high level meeting such as Ministerial meeting considering the high expense of holding such a high level meeting.
 - Mr. Amir answered that the objective of the Ministerial Meeting is to make sure the region going to the desired direction and to see the development. There are two areas of implementation which is the implementation by APT and implementation by Members themselves. Another point is that the Ministerial Meeting will provide strategic guidance to the APT and its members at the highest level. It also provided opportunity for the highest level commitment and involvement in the regional. Lot of enthusiasm was seen in the last Ministerial Meeting.
 - Secretary General mentioned that it is the role of MC to decide on the holding of next Ministerial Meeting. He mentioned that the Secretariat wants to have input from high level and feed as input to MC.

- Ms. Sulyna agreed with Mr. Amir and mentioned that the Bali Statement represented political will of the region
- Mr. Punaha stressed that APT should do the stock-taking and the result of which shall be made ready for the next MC.

Decision no. 3 (PRF/2012/3)

- | |
|---|
| <ol style="list-style-type: none"> 1. It was agreed that the theme and input to the future declaration of the Ministerial Meeting be discussed in the next PRF. 2. The APT Secretariat is to take stock of the current status of the implementation of Bali Plan of Action and report to the next Management Committee Meeting. |
|---|

Day 3 : 23 May 2012

XI. Session 8: International Mobile Roaming and best practices in regulating mobile markets

Chairman: Mr. Ilyas Ahmed, CEO, CAM, Maldives

- 11.1 The presentation “**Outcome of the APT Workshop on International Mobile Roaming**” was delivered by Ms. Helen Lai, Chairperson of the APT’s WG on IMR. (Doc. No. PRF-12/INP-11)

After the 3rd APT International Mobile Roaming Workshop, the IMR Working Group has finalized the Working Group Report, which includes the guidelines and recommendations put forward by the Working Group for addressing the issue of high IMR prices. In this presentation, the speaker reviewed various aspects of works that have been undertaken by the IMR Working Group and presented on the outcome of the APT Workshop on IMR.

The following points were noted from the Report of the IMR Working Group:-

- Need to enhance transparency of IMR information to arouse consumer awareness and thereby protect consumer interests
- Measures to address bill shock will offer consumer protection and help maintain customer confidence on mobile data usage
- Roaming substitutes should be facilitated and promoted so that consumers are well aware of the choices that are available in the market
- Without a common supranational regulatory framework in Asia Pacific that encompasses all the economies in the region, it would be not be feasible to implement IMR price regulation in Asia Pacific on a regional basis. Furthermore, price regulation may not necessarily make the IMR services market more competitive
- Instead of price regulation on a regional basis, APT member economies may explore the feasibility of bilateral or multilateral arrangement on IMR as a way to address the issue of high IMR prices

- 11.2 The presentation “**Sharing Regulatory Best Practice (Spectrum, Auction and Mobile Termination rate)**” was presented by Mr. Matthew Howett, Practice Leader, OVUM, UK. (Doc. No. PRF-12/INP-06)

Ovum has recently developed and launched a series of reports called “Regulatory Scorecard” which is an assessment of regulatory performance in an initial set of 5 European best practice countries (France, Germany, Italy, Spain, UK).

Key issues discussed in the presentation includes:

- How regulators have made spectrum available to support next generation mobile services such as LTE. How these auctions were designed and what measures were put in place to protect competition. How much money these auctions have raised. Where additional spectrum come from.
- In the last couple of years the European Commission has taken a particularly strong ‘pro-consumer’ stance and has dramatically intervened to reduce mobile termination rates and the cost of using your mobile phone abroad. The regulation has now been reviewed and the EC has proposed a bold new remedy that allows consumers to separate the roaming element from their contract and there will be regulated access for MVNOs.

- 11.3 After these presentations, general discussion as well as questions and answers ensued. The following observations and comments were made by the theme speakers of this session and the floor:

- Mr. Ikhsan from Indonesia mentioned that the IMR issue is raised in even the WTO forum. He mentioned that it is difficult to resolve the issue at the government to government level. It was claimed that the market mechanism does not allow the government to interfere with IMR. He wanted to know how to resolve this problem.
- Ms. LAI from the IMR WG responded that normally the levels of wholesale and retail roaming charges are commercial decisions of operators, and the WG noted that it would not be feasible to implement IMR price regulation in Asia Pacific on a regional basis. As such, the WG has focused on non-price measures to offer consumer protection and provide consumers with choices of substitutes. The WG suggested that price regulation should be the last resort for addressing the issue of high roaming prices.
- Mr. Howett from OVUM added that even in the EU, the intervention is difficult and the EU undertook the intervention as they see high IMR as the obstruction of international business within EU.
- On the query regarding the possibility of reselling the spectrum in EU without returning it to the government, Mr. Howett replied that spectrum trading is possible. However, no significant trade of spectrum has been seen given the scarcity of spectrum. He mentioned that the opportunity cost of holding spectrum and not using it should explored by the regulator.

- Mr. Borthwick from Axiata Group Berhad, commented on the regulation on MTR and IMR in EU may lead to negative impacts on industry and consumer.
- He mentioned that the roaming regulation in EU is all about politics and not so much on economic.
- Ms. Sulyna from Malaysia shared experience from Malaysia that ASEAN had conducted index study on how operators set the roaming rate and discovered that telcos made a lot of money from roaming. As the Intra ASEAN roaming traffic is high, ASEAN felt that regulatory intervention should be done. As in the case of Singapore-Malaysia bilateral agreement, 3 years notice was given to operators. Singapore and Malaysia took different approaches. Singapore used the regulatory instrument whereas Malaysia does not. She mentioned the success of the bilateral agreement. She also mentioned that the final objective is the benefit of the consumer and it has to be fair to all parties. She also noted the positive attitude of the operators and their contributions for the successful arrangements between Singapore and Malaysia.
- As for substitutes for IMR, she felt that consumer wants the convenience which substitutes cannot provide. She further mentioned that if non-price measure for IMR failed, there shall be regulatory intervention and that each country should look at its own market and take the measure that suits the market best.
- Mr. Borthwick from Axiata believed that the market approach for IMR is appropriate. As for substitutes, he believed that consumers who are price sensitive may opt to use substitutes despite their inconvenience.
- Mr. Ikhsan from Indonesia noted that he wants to hear the declaration/reference from WTO or the like that IMR rate is a market failure. The WTO reference can be used for government to interfere the IMR rate. As long as this has not been proven, we shall do something to solve the problem.
- Chair commented that although the substitutes could alleviate the IMR issue, the value of roaming service that has been designed since its inception could be lost.

XII. Session 9: Ongoing Policy and Regulatory Issues

Chairman: Ms. Areewan Haorangsi, Executive Director of Policy and Strategy Bureau and Acting Principal Adviser for Foreign Affairs, MICT, Thailand

- 12.1 The presentation “**Future of the Thai Telecommunications under the Role of NBTC: 2.1 GHz Spectrum Project**” by Dr. Suthiphon Thaveechaiyagarn, Commissioner, NBTC, Thailand. (Doc. No. PRF-12/INP-27)

The topic deals with the major change in telecommunications regulatory environment in Thailand which alters from the concession contract by the state to the spectrum allocation by ‘auction’ approach by the NBTC. It is one of the most significant key roles of the NBTC under the current law, the NBTC

Act 2010, which is enacted in compliance with the constitution. As a result, both first establishment of an independent convergent regulator (the NBTC) as well as the spectrum allocation by auction approach will lead to free and fair competition in a telecoms market and increase consumer welfare. With the help of new regulatory environment, it will develop not only the telecoms market itself, but also overall relevant industries towards right direction to the future on both regional and international level.

- 12.2 The presentation “**Status and policies of Korea ICT in Smart Era**” was presented by Mr. Oh Sung Kon, Director, the convergence policy office, KCC, Republic of Korea. (Doc. No. PRF-12/INP-21)

The presentation gave an overview of Korea’s ICT development. It also talks about the paradigm shift and issues in the smart era. There are big changes in global ICT market including changes in global ICT leader, change of internet browser, and mobile phone market. Everything from subscribers to devices is now connected to internet. Contents are getting more important. The role of ventures is ever increasing. Anyone is possible to add up new value by using Internet. Creative knowledge development is essential for competitiveness of the future ICT.

The presentation ends with the consideration of ICT policies in smart era. The concern from the policy point of views is to enhance user’s benefit, build fair competition environment, and encourage experiment and innovation.

- 12.3 The presentation “**A Benchmark of Physical Infrastructure Access**” was presented by Mr. Matthew Howett, Practice Leader, OVUM, UK. (Doc. No. PRF-12/INP-07)

Next Generation Access (NGA) continues to dominate the regulatory and policy agendas especially as Governments have committed to ambitious roll out of broadband infrastructure. However, the access remedies imposed on dominant incumbents has varied greatly between countries – some have only opted for fiber bit stream access, others have gone for virtual unbundling, full unbundling of fiber and in many cases access to passive infrastructure (ducts and poles). The presentation discussed on:

- Access obligations and regulated pricing being imposed. Importance of access to passive infrastructure (ducts and poles). The presentation shares insights from duct/pole regulatory cost model/benchmarking exercise and the comparison of various offers.
- Challenges with duct/pole offers and practical experience

Q&A

- Mr. Hussain from Pakistan sought the advice as how to derive the reserve price of spectrum and on the anti-collusion measure.

- Dr. Suthiphon of NBTC, Thailand, replied that the reserve price was formerly set up during the NTC period and was calculated to be around 12,000 Million THB for 15 MHz. Presently, according to the NBTC, such reserve price is now under reviewing process cooperated with the Faculty of Economics, Chulalongkorn University. It is expected to be submitted to the Telecommunications Commission for approval soon
- On the Anti-Collusion measure, he said that the social measure is used to supplement legal measure. NBTC had received materials from ITU on anti-collusion. He mentioned that we need to increase social responsibility of Thai citizen, operators, and related agencies.
- Ms. Sulyna from Malaysia asked about the setup of NBTC. She wanted to know whether the commission had delegate power to chairman or whether NBTC is the only decision making body. She wanted to know whether the broadcasting side is involved in spectrum side.
- Mr. Suthiphon explained that the commissioners of NBTC consist of commissioners from telecom sector and broadcasting sector. He added that Chairman alone cannot make decision. Decision has to be made by the combination of commissioners. Law does not delegate all power to NBC or NTC. Some decision must be made by the full body of the commission. So far NBTC has not delegated power to make decision to the Chairman.

XIII. Session 10: Policies on Disaster Preparedness and Mitigation

Chairman: Dr. Suthiphon Thaveechaiyagarn, Commissioner, NBTC, Thailand

- 13.1 The presentation “**ICT Strategy for Recovery of Japan - Toward new city building based on disaster experience**” was presented by Mr. Hiroyasu Hayashi, Director for Technical Cooperation, Global ICT Strategy Bureau, MIC, Japan. (Doc. No. PRF-12/INP-13)

In March 2011, the Great East Japan Earthquake and resulting tsunamis caused vast damage to wide area. This presentation reviewed the impacts on telecommunication network and framework to maintain telecommunications services during emergency situation.

It also introduced actions taken to strengthen the communications services maintenance after the earthquake and measures for recovery the disaster area including a new approach for city building utilizing ICT, based on the lessons learned from disaster experience.

- 13.2 The presentation “**ICT platform and policy for disaster prevention, preparedness and mitigation in Viet Nam**” was presented by Mr. Tran The Phuong, Official of Viet Nam Telecommunications Authority, Vietnam (Doc. No. PRF-12/INP-04)

From the scope of disaster control related functions and responsibilities of the Ministry of Information and Communications of Viet Nam assigned by the Prime Minister, this presentation provides some details about the use of communications platform especially the telecommunications infrastructure for disaster control and some ICT policy issues related to disaster mitigation.

Q&A

- Chair commended Japan for the excellent warning system. He mentioned that the success of Japan's disaster management lies in good regulation, good management, good cooperation between private and public sector, good centralization of decision and command, and good heart of Japanese people.
- Ms. Sulyna from Malaysia queried whether the technology deployed in Japan is proprietary, whether it is commercialized, and the possibility of technology transfer of the technology.
- Mr. Hayashi from Japan replied that the early warning and dissemination system technology can be transferred to the use of other countries. He also mentioned that it is not the technology alone but the management is also important to serve the residents. He also stressed the importance of educating people and the government should consider this point.
- Mr. Phuong from Vietnam mentioned that in the past Vietnam focused on the water-related disaster. Recently, Vietnam begins to work on other types such as earthquake and tsunami. Of recent, the earthquake warning system was introduced in the pilot phase. He mentioned the application of ICT to ensure the communication during the disaster should be expanded. He would like to learn about the experience in using of internet and Facebook as a means for disaster warning.
- Mr. Ilyas from Maldives shared experience in disaster preparedness. It is very difficult to get all diverse stakeholders to cooperate and work together.
- Mr. Hussain from Pakistan raised the importance of standardizing resources such as spectrum, and the coordinated actions between countries such as Tampere Convention that will be useful in the disaster management.
- Ms. Read from O3B mentioned that the satellite community has made available the capacity for free use during the disaster but it is very hard to find the right person to inform.
- She suggested setting up a central contact point so that the service provider can provide equipment and capacity from outside so it can be used efficiently. She also queried how broadcaster can come in to assist during the disaster and whether there is license issue involved.
- Mr. Hayashi shared the experience during the disaster that Japan also made use of the satellite communication with the assistance of ITU.
- Mr. Phuong answered that in Vietnam the broadcasters are state-owned so there is no issue in coordinating the effort.
- Mr. Varilla from Philippines is interested in the use of Cloud system for local governments in disaster management. In Philippines, many local

governments were affected by disasters. He asked whether there is any guideline or the mandate to use the cloud system for local governments.

- Mr. Hayashi replied that there is no special guideline but government recommended the use of cloud system.
- Ms. Sulyna stressed the importance of networking and strengthening the ties together in disaster management.

XIV. Way Forward

Chairman: Mr. Pitjapol Jantanasaro, Chairman of PRF

14.1 Replacement of Vice Chairmen of PRF

- a. Secretary General reported to the Forum that due to the change of the position, Mr. Amgalanbat Batsuren from Mongolia, the Vice Chairman of PRF for East Asia sub-region and Mr. Ali Mehmud, from Pakistan, the Vice Chairman of PRF for South Asia sub-region, were not able to continue the vice-chairmanship and that replacements for Vice Chairmanship are sought.
- b. The Secretary General announced the result of consultation regarding the replacement of the Vice Chairmanship of PRF for South Asia sub-region and East Asia sub-region.

From the East Asia sub-region, Mr. Tamir Jargalsaikhan, Director General, Policy and Planning Department, Mongolia was proposed to replace Mr. Amgalanbat Batsuren, Mongolia for the post of Vice Chariman of PRF for East Asia sub-region.

From the South Asia sub-region, Mr. Mudassar Hussain, Director, Telecom Wireless, Ministry of Information Technology, Pakistan was proposed to replace Mr. Ali Mehmud, Pakistan for the post of Vice Chariman of PRF for South Asia sub-region.

The proposals were approved with acclamation.

Decision no. 4 (PRF/2012/4)
<ol style="list-style-type: none">1. From the East Asia sub-region, Mr. Tamir Jargalsaikhan, Director General, Policy and Planning Department, Mongolia has replaced Mr. Amgalanbat Batsuren, Mongolia as the Vice-Chairman of the PRF.2. From the South Asia sub-region, Mr. Mudassar Hussain, Director, Telecom Wireless, Ministry of Information Technology of Pakistan has replaced Mr. Ali Mehmud as Vice-Chairman of PRF.

14.2 Discussion on Themes for the next PRF

- a. Chairman of PRF requested for input regarding the themes and topics to be included in the next PRF.
 - b. Mr. Hussain, Vice Chair mentioned that some of the key areas such as broadband development and roaming are interrelated. He suggested having a round table discussion.
 - c. To make PRF more objective-driven, he suggested having mechanism for constant feedback and coordinated activities. Secretariat should have online update of activities from administration and made available as input to the next PRF.
 - d. He also suggested that the preparation of Ministerial Meeting should start now and that the coordination groups and structured questionnaire should be developed.
 - e. Mr. Punaha, Vice-Chair suggested that update of activities be collected as input to the next meeting. He also suggested the business dialogue to engage the industry more.
 - f. He also suggested Vice Chairs to consult members in respective subregions and advise the topics of interest to the Secretariat as input to the next PRF.
 - g. Ms. Sulyna, Vice Chair suggested having round table discussions in business dialogue and PRF. She suggested developing the format of information sharing on specific issue to continue the work during meetings.
 - h. She suggested the topic of IMR in a mixed session. She also suggested including the topic of cybersecurity, cyberwellness, awareness campaign on different topics, data protection, submarine cable protection, and broadband.
 - i. Chairman of PRF commented that enough time shall be dedicated to participants to speak.
 - j. Mr. Varilla from Philippines suggested looking at the objectives of Bali Statement and aligning them with the programme in order to review and update the status. Time should be provided to participants to share the activities. There should be five sessions, one for each objective of Bali Statement and one extra session for consolidation.
- b. Secretary General mentioned that with all the inputs, Secretariat and Vice Chairmen were tasked to finalize the themes for the next PRF.

14.3 Date and Venue of the next PRF

- a. Secretary General reported that there is no Member offering to host the next PRF. He mentioned that the next PRF be probably hosted in first half of 2013. The exact date and venue will be decided at the MC.
- b. Ms. Sulyna thanked Thailand for excellent arrangement.

XV. Closing Session

- 15.1 Closing remarks were delivered by Mr. Pitjapol Jantanasaro, Chairman of PRF and Mr. Toshiyuki Yamada, Secretary General, APT.
- 15.2 Secretary General thanked MICT and NBTC of Thailand for the hospitality and the preparation of the forum.
- 15.3 The meeting was then closed.
