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| **14th APT POLICY AND REGULATORY FORUM (PRF-15)** |
| 3-5 August 2015, Singapore | 2 November 2015 |

Secretary General

**summary records of**

**the 15th APT POLICY AND REGULATORY FORUM (PRF-15)**

1. **INTRODUCTION**

The 15th APT Policy and Regulatory Forum (PRF-15) was held from 3 to 5 August 2015 in Singapore. The meeting was organized by Asia-Pacific Telecommunity (APT) and hosted by the Infocomm Development Authority of Singapore (IDA).

The agenda and the programme of the meeting appear as Documents [**PRF-15/ADM-01 Rev2**](http://www.apt.int/sites/default/files/2015/07/PRF-15-Draft_Provisional_Agenda_Draft_1_12d.docx) and [**PRF-15/ADM-02**](http://www.apt.int/sites/default/files/2015/08/PRF_2015_-Tentative_Programme_6d_0.docx)respectively.

The Meeting was attended by 100 participants representing Members, Associate Members, Affiliate Members, International/Regional Organizations and other organizations. List of Participants appears as Document [**PRF-15/ADM-03**](http://www.apt.int/sites/default/files/2015/08/PRF-15-ADM-03-Participant_List_EXT_v.18_0.pdf).

1. **OPENING SESSION (Monday, 03 August 2015, 09:30-10:00)**
	1. **Welcome Address by Ms. Areewan Haorangsi, Secretary General, Asia-Pacific Telecommunity**

Ms. Areewan Haorangsi, Secretary General of APT delivered a welcome address.

Ms. Areewan indicated that this was the first PRF following the Asia-Pacific ICT Ministerial Meeting in Brunei Darussalam last September at which Ministers agreed on six key priority areas including area on policy issues. Later in November in Myanmar, the new APT Strategic Plan 2015 to 2017 was adopted by the 13h Session of the General Assembly. The Strategic Plan set out a course of actions for the PRF.

This year, the PRF also commemorated the 150th Anniversary of the International Telecommunication Union.

The full text of the address can be found in document [**PRF-15/INP-01**](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-01-Welcome-Address-SG-APT.pdf).

* 1. **Address by Ms. Nur Sulyna Abdullah, Vice-Chairman of PRF**

Ms. Nur Sulyna Abdullah, Vice-Chairman of PRF delivered an address.

In her address, Ms. Abdullah congratulated Ms. Areewan on her appointment to the position of Secretary General and encouraged participants at the PRF to progress the APT’s agenda of building a smart digital economy through ICT in the Asia-Pacific region.

* 1. **Message by Mr. Houlin Zhao, Secretary General of ITU**

Mr. Houlin Zhao, Secretary-General of ITU delivered his message on the occasion of the 150th Anniversary of the ITU through a video presentation. Mr. Zhao thanked the APT and its Members for their dedication and continuous commitment to building an enabling ICT environment in the region and expressed his wish for a successful PRF in Singapore.

* 1. **Inaugural Address by Ms. Jacqueline Poh, Managing Director, IDA, Singapore**

Ms. Jacqueline Poh, Managing Director, IDA, Singapore delivered an inaugural address.

In her address, Ms. Poh indicated that the Asia-Pacific region contains all the ingredients to be the hub for the development of the global digital economy. She noted that to build a Smart Nation or to build a Digital Economy takes a distinct attitude to innovation. The experience of Singapore in rolling out its broadband infrastructure and facilitating the development of telecommunication markets was provided as an illustrative example.

The full text of the address can be found in document [**PRF-15/INP-02**](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-02-Inaugural-address-IDA-SG.pdf).

1. **Session 1 (Monday, 3 August 2015, 10:30-12:15)**
	1. **Election of Chairman of the PRF**

The election of the Chairman of the PRF was conducted by Ms. Nur Sulyna Abdullah, Vice-Chairman of PRF.

Ms. Nur Sulyna Abdullah introduced Mr. Leong Keng Thai, Deputy Chief Executive and Director General (Telecoms & Post), IDA Singapore as the nominee from the host country for the Chairman of the PRF.

The meeting elected Mr. Leong Keng Thai as the new Chairman of the PRF.

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| **Decision No. 1 (PRF-15)** |
| Mr. Leong Keng Thai, DCE/DG (Telecoms & Post), IDA, Singapore was elected as the Chairman of the PRF. He will continue his term until the PRF meeting in 2016. |

* 1. **Remarks by the Chairman of the PRF**

Mr. Leong Keng Thai, Chairman of the PRF delivered his remarks.

He emphasised the importance of the PRF as a platform for policy makers and regulators to conduct dialogue. He stressed the theme of the Brunei Darussalam Ministerial Statement on Building Smart Digital Economy through ICT and the role of the PRF to support the Brunei Darussalam Statement. He then outlined the PRF programmeme and wished all the participants a fruitful forum.

* 1. **Adoption of Agenda *(Document*** [***PRF-15/ADM-01 Rev2***](http://www.apt.int/sites/default/files/2015/07/PRF-15-Draft_Provisional_Agenda_Draft_1_12d.docx)***)***

The Chairman introduced the provisional agenda of the meeting contained in document [**PRF-15/ADM-01 Rev2**](http://www.apt.int/sites/default/files/2015/07/PRF-15-Draft_Provisional_Agenda_Draft_1_12d.docx)and sought approval. It was approved.

* 1. **Building a Smart Digital Economy through ICT**
		1. **Outcomes of the APT Ministerial Meeting in Brunei and Implementation of the APT Strategic Plan 2015 – 2017  *(Document*** [***PRF-15/INP-18***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-18-Outcome-MM-Implement-SP.pdf)***)***

Ms. Areewan Haorangsi, Secretary General, APT presented the document.

* 1. **Commemoration of the 150th Anniversary of the ITU**
		1. **Speech by Mr. Ioane KOROIVUKI, Regional Director, Regional Office for Asia and the Pacific, International Telecommunication Union (ITU)**

Mr. Ioane KOROIVUKI, Regional Director, Regional Office for Asia and the Pacific, International Telecommunication Union, delivered ITU 150th Celebration speech. The full text of Mr. KOROIVUKI’s speech can be found in document [**PRF-15/INP-04**](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-04-ITU-Celebration-Speech.pdf).

* + 1. A video on the ITU’s 150th Anniversary was shown.
		2. A Congratulatory Message from the APT was read out by Ms. Areewan Haorangsi, Secretary General of the APT.
1. **Session 2 : Update on ITU and Sub-regional Issues on Policy and Regulation (Monday, 3 August 2015, 14:00-15:30)**

**Chair :** Mr. Leong Keng Thai, Chairman of PRF

* 1. **Outcomes of the 15th Global Symposium for Regulators (GSR-15) *(Document*** [***PRF-15/INP-08***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-08-ITU-Outcome-GSR-15_v1.pdf)***)***

Mr. Ioane KOROIVUKI, Regional Director, Regional Office for Asia and the Pacific, International Telecommunication Union, presented the document.

The 15th ITU Annual Global Symposium for Regulators (GSR-15) was held in June 2015 in Libreville, Gabon. Mr. Koroivuki presented a summary of the main outcomes of the Symposium discussing the trends, best practices and the latest policy and regulatory issues in what was a rapidly evolving ICT environment.

* 1. **Latest ICT Strategies and Telecommunications Policy in Japan *(Document*** [***PRF-15/INP-15***](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-15-Japan-Latest-ICT-STrategy-Policy.pdf)***)***

Mr. Kenji Kaneko, Deputy Director, International Cooperation Division, MIC, Japan presented the document.

The presentation introduced Japan’s ICT Strategy including ICT competition policies and radio policies towards 2020 and ICT utilization. Mr. Kaneko also provided an overview of the telecommunications market and current status of broadband in Japan.

* 1. **Update on Sub-regional Issues on Policy and Regulation South East Asia *(Document*** [***PRF-15/INP-17***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-17-Update-Subregion-SEA_v1.pdf)***)***

Mr. Charles Chew, Director (International), IDA, Singapore presented the document.

The presentation provided a brief overview of ICT stakeholders in ASEAN, which includes the ASEAN Telecommunications and IT Ministers Meeting (TELMIN), ASEAN Telecommunications Senior Officials Meeting (TELSOM), and ASEAN Telecommunications Regulators Council (ATRC). Mr. Chew also mentioned the ASEAN ICT Masterplan 2015 (AIM2015), including the plan for five years.

* 1. **Sub-regional issues on Policy and Regulation of the South Asian Sub-Region *(Document*** [***PRF-15/INP-13***](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-13-MLD-Subregion-SA.pdf)***)***

The meeting took note of the document.

* 1. **Update on Sub-regional Issues on Policy and Regulation - Pacific *(Document*** [***PRF-15/INP-21***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-21-Pacific-Subregion.pdf)***)***

Mr. Kila Gulo-Vui, Director, the National Information and Communications Technology Authority (NICTA), PNG presented the document.

The presentation outlined key stakeholders of ICT in the Pacific. He discussed Regional ICT Strategies in the Pacific and current focus that included capacity building, infrastructure development, emergency telecommunications, cybersecurity, regulatory and market environment. He then explained the 2015-2030 Pacific Regional ICT Strategic Action Plan (PRISAP), including plans for the next 5 years.

* 1. **Q&A**
* Mr. Sang-hun Lee from the Republic of Korea asked about the ASEAN ICT Masterplan, particularly in terms of the single market which was one of the long-term goals. He wanted to have more details on the issue. He further sought elaboration on the issue of cybersecurity in the Pacific and activities in this area.
* Mr. Chew replied on the ASEAN ICT single market that ASEAN was working on Terms of Reference and the project had been undertaken by TELSOM with the Philippines being the project coordinator. He mentioned that ASEAN was happy to share details and willing to work with the Republic of Korea.
* Mr. Kila replied on the activities of cybersecurity in the Pacific where the current focus was on policy and regulatory frameworks and cyber-legislation in order to ensure trust and confidence in the cyber environment. He also mentioned the programmeme supported by ITU to help maintain CERT facilities.
1. **Session 3 : Business Dialogue: New mobile technology and service: enabler for better life and challenges for policy maker and regulator (Monday, 3 August 2015, 15:45-17:15)**

**Chair :** Mr. Alasdair Grant, Head Of Asia, GSMA, Hong Kong

* 1. **New Internet Connectivity Options *(Document*** [***PRF-15/INP-11***](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-11-Google-New-Internet-Options.pdf)***)***

 Mr. Paul Harwood, Emerging Market Access Evangelist, Google Inc. Singapore, presented the document.

Mr. Harwood discussed new options for providing Internet access to marginal areas that would be coming in the next few years and what the policy levers were to make these options more successful.

* 1. **Enhancing Internet Connectivity Through Innovation & Partnerships** **(*Document*** [***PRF-15/INP-25***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-25-FB-enhancing-internet-connectivity.pdf)***)***

Mr. Alvin Sheng Hui Tan, Head of Public Policy, Southeast Asia, Facebook, presented the document.

There are three key reasons people are not online: Relevance, Affordability and Infrastructure: Facebook shared information on efforts to enhance internet connectivity through innovation and partnerships around the world.

* 1. **Disruptive Technologies – a Whole New World** **(*Document*** [***PRF-15/INP-24***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-24-Singtel-Disrutptive-Tech.pdf)***)***

Mr. Wong Soon Nam, Vice President of Consumer Products, Consumer Singapore, Singtel, Singapore, presented the document.

Disruptive mobile technologies will enable new innovative services and support the growth of smart cities across the planet. The presentation discussed some technologies and services that made this whole new world possible including considerations for policy makers and regulators.

* 1. **Q&A**
* Mr. Grant queried Mr. Harwood on the operation of High Altitude Platforms (HAPS).
* Mr. Harwood replied that HAPS provided a stationary service similar to geo-stationary satellite. They operate lower than satellites but higher than commercial planes. The HAPS used terrestrial frequency bands. The regulation was done on a country-by-country basis.
* Mr. Grant queried Mr. Alvin from Facebook on net neutrality aspects of Internet.org.
* Mr. Alvin replied by stressing the key point that Internet.org was not the Internet. It is a tool to get people to connect to the Internet. He referred to the statistic that 50% of people who were on Internet.org would connect to the Internet within 30 days.
* Dr. Mahesh from BSNL, India commented on the Internet.org initiative from Facebook that Internet.org discriminated and was not opened to all.
* Mr. Alvin replied that Internet.org was not meant to discriminate as it was an open platform for all operators and developers.
* Mr. Soni from India queried Mr. Wong from Singtel on the success and challenges of Virtual Network Operators (VNO) in Singapore.
* Mr. Wong shared that many years ago, VNO’s were launched in Singapore but it was not successful and closed down. On the challenges faced, he mentioned that VNOs take away market share; they introduce competition but do not encourage investment and innovation, which could result in the dilution of value.
1. **Session 4 : Roles of Policy Makers and Regulators to build a Smart Digital Economy - Trend in ICT industry and respective policy/regulatory measures (Network/Infrastructure)** **(Tuesday, 4 August 2015, 9:00-10:30)**

 **Chair :** Dr. Jongbong Park, Director Project Development, APT Secretariat

* 1. **Policies and Regulatory Frameworks to Enable a Smart Nation *(Document*** [***PRF-15/INP-30***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-30-SG-Smart-Nation.pdf) ***)***

Mr. Ong Tong San, Cluster Director (Competition & Resource Development), IDA, Singapore presented the document.

The presentation gave an overview of Singapore’s vision to be a Smart Nation and discussed some of the policies and regulatory frameworks that help support and enable a transition towards the digital economy.

* 1. **Trend in ICT Industry & Respective Policy / Regulatory Measures (Network/Infrastructure)** ***(Document*** [***PRF-15/INP-10***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-10-PAK-Trend-ICT-Policy-Regulatory-measure_v1.pdf)***)***

Mr. Wasi Ullah Khan, Director General, Pakistan Telecommunication Authority, Pakistan presented the document.

Convergence of telecommunication and ICT has opened up new opportunities and challenges. Telecommunication has become the Internet of things. This converged environment will drive the economy of the country.

* 1. **Regulatory Views of IP Based Services *(Document*** [***PRF-15/INP-19***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-19-VN_OTT.pdf)***)***

Dr. Vu Hoang Son, VNTA, MIC, Viet Nam presented the document.

The presentation provided an overview of OTT services in Viet Nam. Dr. Son also discussed the study group’s deliberations about a regulatory approach on OTT Services such as VoIP. Market-oriented regulatory approaches should be taken to promote both innovation and infrastructure developments.

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* 1. **Broadband Policy Toolkit for Southeast Asia *(Document*** [***PRF-15/INP-26***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-26-OECD-BB-Policy-TK.pdf)***)***

Ms. Lorrayne Porciuncula, Economist/Policy Analyst, OECD presented the document.

This presentation reported on the lessons learnt from the Broadband Policy Toolkit for Latin America and the Caribbean and informed APT members on the ongoing drafting of a Broadband Policy Toolkit for Southeast Asia.

**6.5 Q&A**

* Dr. Mahesh made an observation on the presentation from IDA. He wanted to know why a percentage of households in Singapore have broadband connections excluding fiber.
* Mr. Ong replied that the reason that 62% of households has other broadband connection excluding fiber such as optical fiber and cable, or optical fiber and ADSL is because the way the broadband service is packaged. Some of the services offer one price for two platforms. Resiliency is also another consideration.
* Mr. Kila from PNG queried Dr. Vu from Viet Nam on whether there is any licensing applied for an OTT provider.
* Dr. Vu replied that the rules of licensing for OTT players were currently being drafted.
1. **Session 5 : Roles of Policy Makers and Regulators to build a Smart Digital Economy - Trend in ICT industry and respective policy/regulatory measures (Service/Application) (Tuesday, 4 August 2015, 10:45-12:15)**

**Chair :** Mr. LEE, Sang-hun, Director of Ministry of Science, ICT and Future Planning, Republic of Korea presented the document.

* 1. **Korean New ICT Initiative : K-ICT *(Document*** [***PRF-15/INP-27***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-27-ROK-K-ICT.pdf)***)***

Mr. LEE, Sang-hun, Director of Ministry of Science, ICT and Future Planning, Republic of Korea presented the document.

The presentation introduced Korea’s economy and ICT and the current issues around ICT in the Republic of Korea. It also explained K-ICT vision and priority tasks which focus on structural reform of the ICT Industry, expanded investment in ICT convergence, strengthening of global cooperation, and fostering of strategic industries.

* 1. **Telecommunication/ICT Policy and Regulation in Lao PDR *(Document*** [***PRF-15/INP-12***](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-12-Lao-Telecom-ICT-Policy_0.pdf)***)***

Mr. Chaleun Sibounheuang, Deputy Director General, Ministry of Post and Telecommunication, Lao PDR presented the document.

The presentation provided brief information concerning the status of telecommunications in Lao PDR. He also shared information related to the policy and regulation.

* 1. **Thailand’s Digital Economy Policy *(Document*** [***PRF-15/INP-06***](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-06-Thailand-DE-Policy.pdf)***)***

Ms. Arthidtaya Sutatam, Executive Director of Policy and Strategic Bureau, MICT, Thailand presented the document.

We have witnessed the impact of Digital technology on changing the world at an unprecedented rate. Digital technology has transformed fundamentals that enabled consumers, companies, and the country to realize the benefits of using digital technology to improve the economy and social welfare.

* 1. **An Internet for Inclusive Growth *(Document*** [***PRF-15/INP-31***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-31-ISOC-internet-fro-inclusive-growth.pdf)***)***

Ms. Noelle De Guzman, Regional Programme Coordinator, Internet Society Asia presented the document on behalf of Mr. Rajnesh Singh, Managing Director, ISOC, Singapore.

The Internet Society put forward policy and regulatory suggestions that could help facilitate e-inclusion, promote online confidence, and encourage continuous innovation to hasten the growth of a fully functioning digital economy, especially for developing countries in the region.

* 1. **Q&A**
* Chair queried Mr. Chaleun on success factors and obstacles in attaining the goals as set by government policy.
* Mr. Chaleun responded that government policy set the target that by the year 2020, Lao PDR will be out of LDCs. He mentioned that within the telecommunications sector, there is a 5-year strategic plan which is being drafted. There is also a regulatory framework to promote telecommunication development.
* The Chair queried Ms. Arthidtaya on how the Thai Government is allocating national resources to boost the digital economy.
* Ms. Arthidtaya replied that the government has allocated a budget to support the Digital Economy according to the 5 pillars as presented. For example, to support infrastructure to expand the network to cover rural areas, there is cooperation among state enterprises, government agencies and the private sector.
* Mr. Chew from IDA, Singapore queried Mr. Lee on how to encourage young people to be interested in and take up an ICT-related career.
* Chair replied that the best way to encourage people to work in ICT related fields is to give them more rewards, help them to create their own companies, to provide more opportunities and recognition in society.
1. **Session 6 : Strategic initiatives for new ICT technologies - Emerging new technologies and services and their impact (Network/Infrastructure) (Tuesday, 4 August 2015, 14:00-15:30)**

**Chair** : Ms. Aileen Chia, ACE/DDG (Telecoms & Post), IDA Singapore

* 1. **Strengthening the National Broadband Plan to maximize the socioeconomic contribution of ICT : The Pentahelix Approach *(Document*** [***PRF-15/INP-22***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-22-Indonesia-Strengthen-NBP_0.pdf)***)***

Dr. Muhammad Imam Nashiruddin, Member, Indonesian Telecommunication Regulatory Body, Indonesia presented the document.

 Broadband Network/Infrastructure is very important and critical for the country, but the people expect more socio-economic impact. The Penta-Helix Model (Academic-Business-Government-Community + Regulatory) is strongly recommended to accelerate national broadband implementation.

* 1. **Industry Trends Driving Telco/ICT Strategies *(Document*** [***PRF-15/INP-33***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-33-M1-Industry-Trend.pdf)**)**

Mr. Sim Ling Hui Willis, Chief Product Development & Corporate Solutions Officer, M1, Singapore presented the document.

The challenges in balancing revenue/cost, network speed and infrastructure availability continue to put increasing pressure on service providers to deliver new innovative offerings. M1 shared its perspectives on the forces shaping the telecoms industry today, as well as the government’s role in encouraging innovation in the Telco/ICT industry in Singapore.

* 1. **Net Neutrality & Internet Governance *(Document*** [***PRF-15/INP-23***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-23-BSNL-NetNeutrality.docx)**)**

Dr. Mahesh Shukla, Senior General Manager, BSNL, India presented the document.

In his presentation, Internet neutrality is usually seen as a domestic regulatory issue. It is the concept of policies, to be applied to broadband access networks, which are typically licensed and regulated at national/state and local levels. Net Neutrality is not confined exclusively to one nation. It is a global issue.

* 1. **Q&A**
* Chair queried Dr. Imam on the key policy ingredient in Indonesia that are useful in pushing commercial interests for encouraging innovative services.
* Dr. Imam replied that firstly Indonesia focused on how to deliver network and provide incentives to the private sector. The challenge is in empowering them in some difficult areas such as in the eastern part like Papua. He explained that for difficult areas, the government provides subsidies to bring bandwidth and uses the Universal Service Obligation (USO) to expand networks to difficult areas.
* He added that mobile devices are the second source of trade deficit on the national financial balance sheet. He mentioned that within the next 5 year, Indonesia has set the target for all devices to be 100% from local sources.
* On the application side, Indonesia encourages more local applications and content. He said that the Indonesian Government works hand in hand with OTT on this issue.
* Dr. Mahesh from India shared the story that India is migrating from 3G to 4G and the government is providing fiber connections across the nation through a national initiative.
1. **Session 7 : Strategic initiatives for new ICT technologies - Emerging new technologies and services and their impact (Service/Application) (Tuesday, 4 August 2015, 15:45-17:15)**

**Chair :** Mr. Md Emdad Ul Bari, Director General, Bangladesh Telecommunication Regulatory Commission (BTRC), Bangladesh

* 1. **Policies and Strategic Initiatives for New ICT Technologies - Emerging new Technologies, Services and their Impact *(Document*** [***PRF-15/INP-16***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-16-Indonesia-ICT_IndustryRMB_3_0.pdf)***)***

Dr. Rony Mamur Bishry, Member, Indonesian Telecommunication Regulatory Body, Indonesia presented the document.

The policies and strategic initiatives for new ICT technologies are aimed at: 1) creating efficient and accessible digital services; 2) establishing a digital economy; 3) establishing information, data and archives management; and 4) developing information security and privacy of individuals. While the objectives of the government are to attain: 1) efficient digital services; 2) ICT as-a-service; and 3) ICT innovation.

* 1. **Digital Services – connect, engage and inspire *(Document*** [***PRF-15/INP-29***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-29-Digi-Digital-Services_0.pdf)***)***

Mr. Eugene Teh, Chief Corporate Affairs Officer, DIGI Telecommunications Sdn. Bhd, Malaysia presented the document.

The Internet increases the opportunities to connect, engage and inspire consumers with Digital Services, to benefit them in many ways. Some examples that were discussed included: (i) Mobile payment - becoming more prevalent with consumers moving into cashless transactions; (ii) Digital identity - providing trusted ID to enhance security and privacy for consumers; and (iii) M2M - allowing embedded devices the ability to automate and enable smarter applications.

* 1. **SITA – Emerging technologies in the Air Transport Industry *(Document*** [***PRF-15/INP-34***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-34-SITA-Service-Air-Industry.pdf)***)***

Ms. TANG Mei Chyn, Director, Regulatory Affairs, Asia Pacific, Societe Internationale de Telecommunications Aeronautiques (SITA), Singapore presented the document.

SITA has been paving the way for the application of new emerging technologies to the business of air transport. The presentation looked at some of these new technologies and the regulatory challenges they posed.

* 1. **Global IoT Solutions: Societal Benefits and Business Models *(Document*** [***PRF-15/INP-32***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-32_ATT-Global-IoT-Solution.pdf)***)***

Ms. Chris Perera, Senior Director, AT&T Global Network Services Hong Kong Limited, Hong Kong, China presented the document.

By 2020, the number of things connected to the Internet will be approximately seven times greater than the number of people. AT&T is a global leader in developing and deploying Internet of Things (IoT) solutions across the world. This presentation looked at how IoT was expanding across and benefiting all sectors of the economy.

* 1. **Q&A**
* Mr. Grant from GSMA queried Ms. Perera on the spectrum required to support Internet of Thing (IoT). He wanted to know the capacity required and the spectrum band used for IoT.
* Ms. Perera replied that IOT devices require narrowband and low power. They use ISM band. The data from the devices will be sent to data centers via existing networks such as cellular, WiFi, Mesh Network, or Satellite. The amount of data is very small and they do not expect there to be any issue in the short term.
* Ms. Livera from Sri Lanka asked SITA whether there will be any upgrade on flight tracking systems.
* Ms. Tang replied that SITA is working with ICAO on flight tracking solutions. With flight tracking, the aircraft is equipped with satellite and VHF equipment and the system can track the aircraft every 15 minutes. The service is currently available.
1. **Session 8 : 5G and Next Generation Services (Wednesday, 5 August 2015, 9:00-10:30)**

**Chair :** Mr. Chinzorig Ganbold, Director General, Information Technology, Post and Telecommunications Authority (ITPTA), Mongolia

* 1. **Development of the world’s most advanced ICT infrastructure, – Radio Policy Vision towards 2020 *(Document*** [***PRF-15/INP-14***](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-14-Japan-Radio-Policy-Vision-2020.pdf)***)***

Mr. Kenji Kaneko, Deputy Director, International Cooperation Division, MIC, Japan presented the document.

The presentation introduced the radio policy vision towards 2020 in Japan. It focused on the future of new radio spectrum use including the current state of radio spectrum use in Japan and major mobile communication systems in 2020 and beyond.

* 1. **Technologies and Policies for Advanced Mobile Communications *(Document*** [***PRF-15/INP-36***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-36-Qualcomm-Tech-Policies-Advanced-Mob-Comm.pdf)***)***

Mr. Alexis Orange, Director, Government Affairs, Qualcomm Incorporated, Hong Kong, China presented the document.

Mobile communications has grown to be a global platform delivering voice and broadband services with over 7 billion subscriptions. The presentation outlined this growth, and the services mobile generations have and will enable, how new generations of technology may assist regulators, and the regulatory solutions that may be applied.

* 1. **5G Spectrum Policy Considerations *(Document*** [***PRF-15/INP-20***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-20-GSMA-5G-Spectrum-Policy.pdf)***)***

Mr. Joe Guan, Spectrum Policy Manager, Asia Pacific GSMA presented the document.

He shared with the audience the latest development and trends in 5G.

* 1. **Policy and Regulatory Issues on 5G and Next Generation Services *(Document*** [***PRF-15/INP-35***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-35-Detecon-5G-NGS.pdf)***)***

Dr. Werner Knoben, Detecon Asia Pacific, Thailand presented the document.

The presentation covered the following key issues: (i) Overview of 5G technology and resulting regulatory challenges; (ii) 5G and its spectrum requirements and spectrum allocation; (iii) 5G, service providers and OTT.

* 1. **Q&A**
* Dr. Imam from Indonesia queried on the spectrum band to be used for 5G from sub 1 GHz 1-6 GHz, and beyond 6 GHz. He wanted to know how much bandwidth is required for 5G.
* Dr. Knoben shared the case of Mexico where the entire 700 MHz band was issued to only one operator. This is similar to a monopoly. He mentioned that we should wait to see the outcome of practices elsewhere.
* Mr. Guan shared his view on the spectrum for 5G, that we cannot tell until the specifications of 5G is finalized. However, there are options for consideration.
* On the frequency to be used for 5G, Mr. Orange had the view that it would be a limiting policy if we were to assign frequency to a certain generation of technology. He encouraged countries to consider allocating spectrum for the use which has highest value, i.e., advanced mobile communications.
1. **Session 9 : Social Transformation and Technology - Expand and strengthen the role of ICT in society (Wednesday, 5 August 2015, 10:45-12:15)**

**Chair :** Mr. Sunil Bahadur Malla, Secretary, Ministry of Information & Communications, Nepal

* 1. **ICT and Social Transformation in Bangladesh *(Document*** [***PRF-15/INP-09***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-09-BLD-ICT-Social-Transform.pdf)***)***

Mr. Md Emdad Ul Bari, Director General, Bangladesh Telecommunication Regulatory Commission (BTRC), Bangladesh presented the document.

With an ambition of propelling the country to emerge as a middle-income one by 2021, the Government of Bangladesh had undertaken in 2009 a drive called “Digital Bangladesh”. Based on ICT, this drive is aimed primarily at widening inclusion of people living in underprivileged rural areas, who constitute more than 70 per cent of the country’s population.

* 1. **Social Impact of ICT in Mongolia *(Document*** [***PRF-15/INP-37***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-37-Social-impact-Mongolia.pdf)***)***

Mr. Chinzorig Ganbold, Director General, Information Technology, Post and Telecommunications Authority (ITPTA), Mongolia presented the document.

The widespread use of mobile communication and the internet has given Mongolia new ways of tackling its social problems. Since it is clear new technology and applications will further transform our economic and social life, what can be done to make sure that ICT is fully leveraged for national well-being?

* 1. **Driving a Big Data Revolution for Global Development and Humanitarian Action *(Document*** [***PRF-15/INP-28***](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-28-UN-Global-Pulse-Big-Data-Revolution_0.pdf)***)***

Dr. Jong Gun Lee, Data Scientist, UN Global Pulse presented the document.

Today, people generate a huge amount of digital data, for instance by using many digital devices and services for their daily lives. This talk introduces the opportunities of Big Data for Social Good with some examples of projects that UN Global Pulse has conducted across different development and humanitarian sectors.

* 1. **Q&A**
* Dr. Imam from Indonesia queried on how Mongolia measures social impact. He mentioned that Indonesia tries to measure it through a happiness index. He also asked how the Mongolian Government responds to new services.
* Mr. Ganbold replied that measures of social impact are done by the World Economic Forum on a limited sample group. On the response to new services, he said that Mongolia adopts a hands-off approach by seeing how new services affect the market and will intervene if a negative impact is seen.
* Dr. Imam queried Bangladesh regarding mobile financial services (MFS), particularly on the financial regulation of the bank and mobile company.
* Mr. Md. Emdad Ul Bari replied that for the MFS, cross industry cooperation is needed.
* Dr. Imam queried on how to regulate big data.
* Dr. Lee commented that big data research is for the public good and that regulation should allow research bodies to try new methods to explore and prepare for the future.
1. **Session 10 : Panel Discussion : Way Forward to implement the Brunei Darussalam Statement on Building Smart Digital Economy through ICT (Wednesday, 5 August 2015, 14:00-15:30)**

**Moderator :** Dr. Jongbong Park, Director Project Development, APT

**Panelists :**

* Mr. Lu Jianwen, Deputy Director General, MIIT, China
* Mr. Lee, Sang-Hun, Director of MSIP, Republic of Korea
* Mr. Babar Hassan, Additional Secretary, Ministry of Information Technology, Pakistan
* Mr. Kila Gulo-Vui, Director, NICTA, PNG

At the request of PNG, Dr. Park invited Mr. Kila Gulo-Vui to introduce the issue of Numbering Misappropriation in the Pacific Islands. Mr. Kila presented the document [**PRF-15/INF-03**](http://www.apt.int/sites/default/files/2015/08/PRF-15-INF-03-Number-Misappropriation.pdf)on Overview of International Revenue Share Fraud (IRSF) and Number Misappropriation in the Pacific. Mr. Veikoso, Vice-President of PITA, mentioned that number misuse has affected the Pacific Islands’ international reputation and resulted in revenue loss for telco companies.

Following the presentation, the panel had a discussion on the Way Forward to implement the Brunei Darussalam Statement. Three questions were posed to the panelists:

* 1. **Question 1: With emerging ICT technologies and the impact thereof, what do you see as the key roles of Policy Makers and Regulators in this new ICT ecosystem towards building smart digital economy in Asia-Pacific, and what are your achievements if you have some?**

The following key points were made by the panelists:

* Mr. Lu mentioned three efforts in coordinating ICT development, security and stability which are: (i) Speed up broadband infrastructure as a national strategic public infrastructure; (ii) Encourage Innovation in ICT applications; (iii) Strengthen network security and emergency response capacity.
* Mr. Lee said that the government has the role to nurture young talent, create a conducive environment and increase more investment in R&D, and collaborate with other countries. Government should be faster, more aggressive, and adaptable to the changing environment. Government should take a leadership role and policies should be stable and predictable in order to facilitate innovation.
* Mr. Hassan said that policy makers and regulators should be more cooperative. Policy and regulation should protect consumer, promote R&D and HRD.
* Mr. Hassan updated the Forum about the experiences of the Government of Pakistan, and highlighted the vision of the Government of Pakistan on ICTs, which is for an ‘Accelerated Digitization Ecosystem’ with special emphasis on ‘Bridging Broadband Divide’ and how this vision enables socio-economic development.
* Mr. Hassan shared examples of initiatives in Pakistan including e-applications, initiatives to provide subsidies for start-ups, and initiatives to provide services to underserved areas.
* Mr. Kila mentioned that it was critical that policy and regulation were formulated in a manner to encourage the sector in developing an appropriate ecosystem. He noticed that policy makers/ regulators and technology developers were disconnected. There should be closer cooperation among them.
* Policy and Regulation within the national framework should be conducive and should embrace new emerging technologies.
	1. **Question 2: What are some suggested concrete activities for Members and the APT Secretariat in implementing the Brunei Darussalam Statement and the APT Strategic Plan for 2015-2017?**

The following key points were made by the panelists.

* Mr. Lu suggested the following: (i) Formulate conducive policy for sustainable growth of ICT both in the aspect of network/infrastructure and service/application; (ii) Build safe and secure society through ICT; (iii) Foster regional cooperation for ICT development.
* Mr. Lee suggested that APT should enlarge cooperation with international monetary organizations such as the World Bank (WB), the Asian Development Bank (ADB) and the Asian Infrastructure Investment Bank (AIIB). He mentioned that funding is required to establish infrastructure. We should learn and share experiences in terms of the process of engaging with WB, ADB, and AIIB.
* He also suggested that the programme should talk about convergence in detail as the ecosystem now includes many areas and there is competition between industries and companies. Lastly, he suggested that we should also learn from other regions.
* Mr. Hassan suggested that we should provide universal, affordable, and equitable access to the people. We should provide access to ICT services for all. He mentioned the telecenter project in Pakistan that addressed this issue.
* He suggested that we should also act together to cope with disasters. He shared the information that Pakistan is drafting a National Telecom Disaster Plan with ITU and would be willing to share information on this. He also mentioned the success of the verification of SIM cards in Pakistan in addressing the terrorism issue.
* On sustainable ICT through innovation, he suggested that there should be an R&D fund. Also e-application development should be supported. On capacity building, he emphasized sharing experiences and utilizing best practices.
* Mr. Kila suggested that APT should focus on HRD and capacity building. APT should recognize the development gap and focus its effort to solve disparities in the region. Efforts should be targeted to developing countries which are in need.
	1. **Question 3 : What are some suggested discussion topics for the next PRF? Any suggested new modalities to discuss these topics at the PRF?**

From the discussion during the PRF, Dr. Park mentioned OTT and Mobile Banking as potential topics for the next PRF. The following key points were made by the panelists:

* Mr. Lu suggested that the topic for the next PRF should be on how to build safe and secure society through ICT.
* Mr. Kila suggested applications, interconnection, and security as topics for the next PRF
* Dr. Park summarized topics for the next PRF including OTT and Network Security.
1. **Session 11: Closing (Thursday, 5 August 2015, 15:45-17:15)**

**Chair :** Mr. Leong Keng Thai, Chairman of PRF

**13.1 Election of Vice Chairmen of PRF**

Ms. Areewan Haorangsi, Secretary General, APT, referred to the Working Methods of the PRF that four Vice Chairmen will be selected to represent the four sub-regions of Asia-Pacific. She announced the result of consultation for the nomination of the Vice-Chairmen of the PRF as follows:

* Ms. Seonmin Mina Jun, Coordinator of ITU-D & APT, Korea Information Society Development Institute (KISDI), Republic of Korea was appointed as a Vice Chairman to represent the East Asia sub-region
* Mrs. Tharalika Livera, Deputy Director, Telecommunications Regulatory Commission of Sri Lanka was appointed as a Vice Chairman to represent the South Asia sub-region
* Mr. Charles Chew, Director (International), Infocomm Development Authority of Singapore was appointed as a Vice Chairman to represent the South East Asia sub-region,
* Mr. Kila Gulo-Vui, Director, The National Information and Communications Technology Authority (NICTA), PNG was appointed as the Vice Chairman to represent the Pacific sub-region

The meeting agreed to accept the nomination of all Vice Chairmen. They will continue their term until the PRF meeting in 2017.

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| **Decision No. 2** (PRF-15) |
| The meeting elected 4 Vice Chairmen of the PRF: Ms. Seonmin Mina Jun from Republic of Korea, Mrs. Tharalika Livera from Sri Lanka, Mr. Charles Chew from Singapore and Mr. Kila Gulo-Vui from Papua New Guinea. All Vice Chairmen will continue their term until the PRF meeting in 2017. |

**13.2 Revised Working Methods of PRF**

**13.2.1** Dr. Park, Director Project Development, APT Secretariat, introduced the document [**PRF-15/INP-07**](http://www.apt.int/sites/default/files/2015/07/PRF-15-INP-07-Revised-Working-Methods-PRF.docx)on the Revised Working Methods of PRF.

* + 1. He explained that the changed text of the Working Methods included provision to deal with the event that Chairman and/or Vice-Chairmen could not fulfill their duties. It was also proposed that PRF might include a Closed Session for Policy Makers and Regulators during the PRF to facilitate policy makers and regulators in the exchange of candid views and opinions on issues in the Asia-Pacific region. He sought views from the meeting on the proposed changes to the Working Methods of PRF.
		2. Referring to document [**PRF-15/INP-38**](http://www.apt.int/sites/default/files/2015/08/PRF-15-INP-38-Revised-Working-Methods-PRF-Singapore.docx), Ms. Lee from Singapore introduced changed text to the Working Methods to include the duties of Vice Chairman.
		3. Chairman asked for comments from the floor. As there were no comments from the floor, the meeting approved the Working Methods for PRF as contained in Document [**PRF-15/OUT-01**](http://www.apt.int/sites/default/files/2015/08/PRF-15-OUT-01-Working-Methods-PRF_0.docx). The revised Working Methods would be circulated to Members before referring the document to the MC.

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| **Decision No. 3** (PRF-15) |
| Meeting approved the Working Method of PRF as contained in Document [**PRF-15/OUT-01**](http://www.apt.int/sites/default/files/2015/08/PRF-15-OUT-01-Working-Methods-PRF_0.docx). The working methods will be circulated to Members before referring the document to the APT Management Committee for further consideration. |

* 1. **Theme of the next PRF**

**13.3.1** Chairman sought views and suggestions from the meeting on themes for the next PRF.

* + 1. As there were no comments from the floor, Dr. Park, Director informed the meeting that according to the Working Methods, the Steering Committee of the PRF would work with the APT Secretariat to finalize a theme for the next PRF, if possible, before the Management Committee meeting. However, this would depend also on the input from the next host of the PRF.

**13.4 Date and Venue of the PRF-16**

Japan offered to host the next PRF and will submit a proposal to the Management Committee. Chairman thanked Japan for offering to host the next PRF. He looked forward to Japan to host the next PRF.

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| **Decision No. 4** (PRF-15) |
| The meeting accepted that Japan would host the PRF-16 in 2016. |

**13.5 Any Other Business**

**13.5.1** Dr. Park, Director Project Development, APT Secretariat, mentioned that the draft Summary Record would be prepared and sent to the participants for comments before publishing on the PRF website.

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| **Decision No. 5** (PRF-15) |
| The draft summary record would be prepared and sent to participants for comment before publishing on the PRF website. The report of PRF will be submitted to the Management Committee. |

**13.6 Closing**

**13.6.1** Ms. Areewan Haorangsi, Secretary General, APT thanked Mr. Leong Keng Thai, Chairman of the PRF for hosting the PRF-15. She also thanked IDA team, speakers and participants.

Mr. Leong Keng Thai, Chairman of the PRF reiterated that “Building Smart Digital Economy through ICT” required continued collaboration at all levels including local, regional, and international. The PRF is the platform reminding that we are not alone in the journey and we can learn from each other. He then thanked all speakers and panellists for their contributions to the Forum. Lastly, he thanked all participants for their active participation in the Forum. He then declared the meeting closed.

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