出國報告（出國類別：會議）

參加亞太經濟合作(APEC)電信暨資訊工作小組第 43 次會議報告書

服務機關	姓名	職稱
國家通訊傳播委員會	梁伯州	簡任技正
國家通訊傳播委員會	羅金賢	副處長
國家通訊傳播委員會	陳英俤	科長
國家通訊傳播委員會	謝志昌	專員
國家通訊傳播委員會	江易道	技士
國家通訊傳播委員會	林永裕	技士
行政院研究發展考核委員會	徐嘉臨	科長
交通部郵電司	盧美滿	專員
行政院國家資通安全會報技術服務中心	吳家祺	副主任
經濟部 PKI 推動專案辦公室	郭淑儀	主任
財團法人全國認證基金會	周念陵	執行長
財團法人全國認證基金會	盛念伯	經理
社團法人台灣數位文化協會	徐挺耀	理事長
社團法人台灣數位文化協會	洪進吉	顧問
財團法人二十一世紀基金會	蔡佳恬	專案經理
中華電信數據通信分公司	鍾福貴	副總經理
立德國際商品試驗有限公司	洪璟榮	資深副總經理
臺灣電子治理研究中心	陳敦源	主任

派赴國家：中國大陸

出國日期：100 年 3 月 26 日至 4 月 1 日

報告日期：100 年 6 月 21 日

出席亞太經濟合作（APEC）會議報告摘要表

一、 會議名稱	APEC 電信暨資訊工作小組第 43 次會議 （APEC TEL43 Meeting）
二、 會議日期	2011 年 3 月 27 日至 4 月 1 日
三、 會議地點	中國大陸杭州市黃龍大飯店
四、 出席經濟體及重要出席單位	APEC 美、加、澳等 18 個會員經濟體（另巴布亞紐幾內亞、秘魯、墨西哥等 3 個經濟體未派員）、APEC 秘書處、國際電信使用者協會（INTUG）、全球企業電子商務對話論壇（GBDe）、亞太網路資訊中心（APNIC）等賓客組織之代表
五、 會議主席	中國大陸劉子平先生
六、 我國出席人員姓名、職銜	國家通訊傳播委員會簡任技正　梁伯州 國家通訊傳播委員會副處長 羅金賢 國家通訊傳播委員會科長 陳英俤 國家通訊傳播委員會專員 謝志昌 國家通訊傳播委員會技士 江易道 國家通訊傳播委員會技士 林永裕 行政院研究發展考核委員會科長 徐嘉臨 交通部郵電司專員　　盧美滿 行政院國家資通安全會報技術服務中心副主任 吳家祺 經濟部 PKI 推動專案辦公室主任 郭淑儀 財團法人全國認證基金會執行長 周念陵 財團法人全國認證基金會經理 盛念伯 社團法人台灣數位文化協會理事長 徐挺耀 社團法人台灣數位文化協會顧問 洪進吉 財團法人二十一世紀基金會專案經理 蔡佳恬 中華電信數據通信分公司副總經理　鍾福貴 立德國際商品試驗有限公司資深副總經理 洪璟榮 臺灣電子治理研究中心主任 陳敦源
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2. 通過馬來西亞籍 Ms. Sulyna Abdullah 成為新任 TEL 副主席。
3. 通過 3 項自籌經費及 3 項申請經費之新提案計畫。
4. 規劃未來 TEL 會議之主辦經濟體：
TEL44：馬來西亞（吉隆坡）。
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		(2) 執行電信設備相互承認協定	相關單位：國家通訊傳播委員會
		(3) 推動資訊通信安全	相關單位：行政院研究發展考核委員會、國家通訊傳播委員會、行政院國家資通安全會報技術服務中心
		(4) 鼓勵民間部門積極參與電信基礎建設	相關單位：國家通訊傳播委員會、行政院國家資訊通信發展推動小組
	4. 其他民間機構應推動工作	積極參與電信基礎建設	相關單位：電信業者、電信資訊領域相關財團法人
十、 是否召開協調會議推動	於 100 年 3 月 21 日在國家通訊傳播委員會召開 TEL43 行前會議		

目錄

壹、目的

APEC 電信暨資訊工作小組（以下簡稱 TEL）目前共有 21 個會員經濟體，每年 2 次會議由各會員經濟體輪流舉辦。TEL 會議目標是藉由推動資通訊政策、監理措施及發展經驗之交流、研擬資通訊相關人力資源運用及發展合作策略等，進而促進亞太區域電信及資訊發展，實現建立「亞太資訊社會（Information Society）」的願景。

TEL 是我國參與之重要國際電信及資訊相關領域之官方組織。我國在 1991 年以正式會員身分加入 TEL 後，由國家通訊傳播委員會繼交通部電信總局擔任國內主政機關，每年籌組代表團積極參與會議，並與會員積極就如何藉由資通訊科技縮短數位落差、推動下（次）世代網路與科技發展、打造數位政府、推動相互承認協議、監理法規革新、資通訊安全等議題討論，在國際社會分享我國經驗，也展現我國務實外交軟實力。

此次會議，我國代表團為掌握各議題之發展，並適時與會員經濟體討論電信資訊議題，建立良好暢通管道，故依會前於國內討論之任務分工原則，由團員分別出席同時段舉行之各項 TEL 指導分組會議暨相關研討會，並積極發表簡報及參與會議之討論。

貳、過程

一、會議時間、地點

會議時間：2011 年 3 月 27 日至 4 月 1 日。

會議地點：中國大陸杭州市黃龍大飯店。

會議議程：

日期/時間	上午	中午	下午	晚間

3/27	■電信設備相互承認協議(MRA)專案小組會議 ■亞太地區網路安全政策發展研討會（SPSG）		■研訂 MRA 專案小組會議 ■國際行動漫遊進程研討會（LSG） ■亞太地區網路安全政策發展研討會（SPSG）	
3/28	■研訂 MRA 專案小組會議		■電信設備相互承認協議(MRA)專案小組會議 ■基礎設施共享以促進寬頻接取研討會（LSG 及 DSG）	
3/29	■基礎設施共享以促進寬頻接取研討會（LSG 及 DSG） ■產業圓桌會議（LSG）	團長及執行委員會議	參訪行程	聯誼之夜
3/30	第 1 次大會		■LSG 分組會議 ■DSG 分組會議	歡迎晚宴
3/31	■DSG 分組會議 ■SPSG 分組會議		■LSG 分組會議 ■SPSG 分組會議	
4/1	第 2 次大會			

二、各經濟體與會員代表

共有美、加、澳等 18 個會員經濟體（另巴布亞紐幾內亞、秘魯、墨西哥等 3 個經濟體未派員）、APEC 秘書處、亞太網路資訊中心（APNIC）、全球企業電子商務對話論壇（GBDe）、網際網路協會（ISOC）、OECD、國際電信使用者協會（INTUG）等賓客組織之代表。

三、會議主席

由中國大陸劉子平先生擔任主席。

四、大會

(一) 開幕式

中國大陸工業及信息化部副部長奚國華致詞歡迎各經濟體代表，並對日本大地震造成的生命及財產損失表示哀悼之意。他表示資通訊產業為 APEC 區域各經濟體經濟成長及社會發展的重要動力，他並指出中國大陸將在四個領域更進一步推動長期、穩定且快速的資通訊產業發展，

包括加速資訊網基礎建設、鼓勵資通訊技術及服務創新、推動社會經濟資訊化發展，以及強化通訊品質並改善市場秩序。他期許 TEL 會議能積極回應第八屆電信暨資訊專業部長會議所訂定的工作目標。

(二) 開幕致詞

TEL 主席劉子平歡迎各經濟體代表來到杭州參與第 43 屆 TEL 會議。主席表示，本屆會議為第八屆電信暨資訊專業部長會議後的第一次工作小組會議，他期待本次會議能依循 APEC 領袖及部長的指示，討論出有效的執行方案。

(三) 確認議程

大會議程經與會代表無異議通過。

(四) APEC 進展報告

1. APEC 2011 年重點目標及 2010 年成果報告

APEC 秘書處表示相關文件已上載至 APEC 官網，並說明 2011 年 APEC 將建立「無縫的區域經濟」，並將目標訂為三個重點：(1)加強區域經濟整合及拓展貿易，包括創新貿易及科技，以及發展 21 世紀新的貿易協定；(2)推動綠能發展；(3)促進監理合作及匯流。

秘書處同時說明上述第(1)及第(3)項重點和 TEL 的關連，以及 TEL 可以在今年所做的貢獻。

2. SCE 及各委員會議主要成果

APEC 秘書處報告最近 SCE 會議的四個主要成果：(1)排定各工作小組會議時程；(2)SCE 獨立評估（independent assessment）；(3)TEL 工作計畫；(4)策略計畫指南及範本。

首先，APEC 秘書處強調 SCE 在 2011 年 3 月通過的工作小組會議日期訂定政策，為了擴大參與及加強會議效益，SCE 請各工作小組主席應儘可能將工作小組會議安排在 SOM 會議舉行的同時段及同地

點。因此，APEC 秘書處建議 TEL 主席通知 SCE 主席有關 TEL 未來二年已排定的會議計畫。

其次，SCE 預計對 TEL 在內 5 個工作小組進行獨立評估，其評估計畫目前由 BMC 審核，通過後將在明年對 TEL 進行獨立評估。

第三，SCE 已通過包括 TEL 在內 16 個工作小組的工作計畫。

第四，為有效推動及統合 APEC 工作，SCE 討論了策略計畫準則及範本，並歡迎各經濟體表示意見。

APEC 秘書處並簡報了 2011 年 3 月召開的 CTI 會議，有關 CTI 將針對三個主要領域擬訂具有明確時程及目標的分階段工作計畫：(1)下世代貿易投資議題；(2)貿易便捷和供應鏈連結；以及(3)環保商品及服務(EGS)。特別是有關下世代貿易投資議題，CTI 將透過主席之友會在第 2 次 CTI 會議提出可能的議題清單，其中一些議題和 TEL 的工作相關，包括科技的創新及近用、供應鏈、雲端運算，以及包括基礎建設、資料的互通、標準、可攜性、安全性和隱私等議題。

有關以上 APEC 秘書處的報告，TEL 主席特別對 SCE 訂定的工作小組會議日期政策表示 TEL 在配合方面的困難，因為 TEL 已排定在 2012 年以前各次會議的主辦經濟體。

3. 計畫管理相關進展

APEC 秘書處簡介了最新有關申請經費補助的計畫管理程序，以及一個好的計畫應具備的要素：明確的、可評估的、易參與的、可實現的，以及即時的。秘書處特別提醒各經濟體有關 BMC 主要的改革成果—多年度計畫相關申請及管理程序。

TEL 主席強調各項計畫是推動 TEL 工作的重要動力，他建議秘書處可以將好的計畫案例提供給各經濟體參考，他並敦促各經濟體善加利用多年度計畫來推動 TEL 的中長期目標。

(五) 各經濟體國情報告

會議中，我代表團團長梁簡任技正伯州首先就我國國情報告提出簡報，隨後香港、美國、中國、越南、泰國、馬來西亞、菲律賓、日本等會員經濟體亦分別簡報其國情報告。

(六) 各指導分組會議報告

1. 資通訊技術指導分組會議（DSG）

DSG 召集人 Sudaporn Vimolseth 女士簡報 DSG 會議成果並請求大會通過三項申請經費的計畫提案：

(1) ICT 運用於特殊需求人士（年長及殘障人士）—日本及新加坡。

(2) 行動號碼可攜監理之教育訓練—越南。

(3) 多層次災害管理系統—俄羅斯。

召集人並提出在 TEL44 舉辦下列三場研討會：

「轉用綠能 ICT 以持續經濟成長之最佳實作案例研討會」—菲律賓，一天半時間。

「災害管理研討會」—日本，一天時間。

「加強寬頻及網際網路使用率以改善亞太地區網路及服務研討會」—秘魯，半天時間。

2. 自由化指導分組會議（LSG）

LSG 召集人 Shoji Mihara 先生簡報 LSG 會議成果並請求大會通過二項計畫提案：

(1) 加強消費者保護研討會—新加坡。

(2) 行動號碼可攜監理之教育訓練（跨 DSG 分組計畫）—越南。

LSG 同時提出在 TEL44 舉辦三場研討會：

「加強消費者保護研討會」—新加坡，半天時間。

「監理論壇」—馬來西亞，半天時間。

「產業圓桌會議」—馬來西亞及 INTUG，半天時間。

MRA 小組主席 Lawrence SM Kwan 先生簡報 MRA 會議成果，並提出在 TEL44 舉辦二個半天的 MRA 專案小組會議，以及二個半天的 MRA 新版本草擬或教育訓練會議。

3. 安全暨繁榮指導分組會議（SPSG）

SPSG 代理召集人 Anthony Teelucksingh 先生簡述 SPSG 會議成果並請求大會通過二項自籌經費計畫提案：

(1) 第三屆 APEC 網路保護研討會—韓國。

(2) 網路犯罪工作小組—美國。

代理召集人同時提出在 TEL44 舉辦下列研討會：

「DNSSEC 教育訓練及研討會」—馬來西亞，一天時間。

「網路犯罪工作小組」—美國，一天時間。

(七) 討論/通過新計畫提案/確定優先順序

大會通過下列 3 項申請經費及 3 項自籌經費計畫，並予以排列優先順序：

計畫名稱	經費	排序	分組	提案經濟體
ICT 運用於特殊需求人士（年長及殘障人士）	APEC（ASF）	1	DSG	日本、新加坡
行動號碼可攜監理之教育訓練	APEC（OA）	2	DSG/ LSG	越南
多層次災害管理系統	APEC（OA）	3	DSG	俄羅斯
第三屆 APEC 網路保護研討會	自籌		SPSG	韓國
加強消費者保護研討會	自籌		LSG	新加坡
網路犯罪工作小組	自籌		SPSG	美國

APEC 秘書處提醒各經濟體，所有申請第 2 期經費補助的計畫都應通過 TEL 認可及排序，並在 4 月 7 日前提交 SCE。自籌經費提案則不必經過排序，請儘早將完成的提案單送交 PDS。

(八) 討論未來會議主辦事宜

馬來西亞原宣布將在 10 月 3 日至 8 日主辦 TEL44 會議，惟考量 2011 年 APEC 第 3 期經費審核時程，馬來西亞考慮將會議提前至 9 月舉辦，一旦時間確定後將儘速通知各經濟體。(業通知各經濟體 TEL44 將於 2011 年 9 月 22 日（四）至 9 月 28 日（三）舉行）

TEL44 議程草案通過如下：

日期	上午	中午	下午	晚間
第 1 天 9/22 （四）	■電信設備相互承認協議專案小組會議（MRA TF） ■綠能資通訊技術（Green ICT）轉移以保持永續成長研習會 （DSG） ■網域名稱系統 安全性擴充（DNSSEC）培訓研討會（SPSG）		■電信設備相互承認協議專案小組會議（MRA TF）或訓練會議 ■綠色資通訊技術（Green ICT)轉移以保持永 續成長研習會 （DSG） ■網域名稱系統 安全性擴充（DNSSEC）培訓研討會（SPSG）	
第 2 天 9/23 （五）	■電信設備相互承認協議專案小組會議（MRA TF）或訓練會議 ■災害管理研討會（DSG） ■強化消費者保護研討會（LSG）		■電信設備相互承認協議專案小組會議（MRA TF） ■災害管理研討會（DSG） ■綠色資通訊技術（Green ICT）轉移以保持永續成長研習會 （DSG）	

日期	上午	中午	下午	晚間
第 3 天 9/24 （六）	■監理圓桌會議 ■網路犯罪專案小組續行會議（SPSG）	團長及執行委員會議	■產業圓桌會議 ■網路犯罪專案小組續行會議（SPSG） ■加強寬頻發展和網路使用以改善 APEC 會員經濟體之網路及服務研討會（DSG）	
第 4 天 9/25 （日）	休息日			
第 5 天 9/26 （一）	第 1 次大會		■LSG 分組會議 ■DSG 分組會議	歡迎晚宴
第 6 天 9/27 （二）	■LSG 分組會議 ■SPSG 分組會議		■DSG 分組會議 ■SPSG 分組會議	聯誼之夜
第 7 天 9/28 （三）	第 2 次大會			

越南確認將於2012年4月主辦TEL45會議，詳細議程安排將於TEL44確認。

俄羅斯確定將於 2012 秋季主辦 TEL46 會議。美國則表示將於 2013 年上半年主辦 TEL47，並且會儘早向 TEL 確認。TEL 主席則建議俄羅斯正式發函主席辦公室以完備程序，並感謝所有願意主辦 TEL 會議的經濟體，並鼓勵其他經濟體考慮主辦 TEL47 以後的會議。

(九) 觀察員及賓客報告

來自 APNIC、GBDe 及 OECD 的代表分別簡報各自最新的發展，並表達持續與 TEL 合作的意願。

(十) 文件分類

APEC 秘書處說明本次會議的所有文件將依需求分為公開或限制閱讀，並提醒各經濟體最遲於 4 月 11 日前將最後修正的版本完成上傳；另外在各指導分組以口頭報告進度的計畫主持人亦應上傳書面資料，俾各召集人追蹤進度。

(十一) 選舉新任副主席

TEL 主席宣布在團長及執行委員會議中獲得提名的馬來西亞通訊及媒體委員會 Sulyna Abdullah 小姐為新任副主席，隨後新任副主席致詞感謝各經濟體的支持，以及 TEL 主席對 TEL 的貢獻，並表達她願意和將就任的 TEL 主席 TANAKA 先生合作，也歡迎大家參加馬來西亞主辦的 TEL44 會議。

(十二) 卸任主席感言

TEL 主席劉子平先生首先感謝主辦單位中國工業和信息化部、浙江省通訊管理局，以及工信部電信研究所，還有本地秘書處和志工。

接著他總結這二年來擔任主席期間 TEL 的進展，他感謝各經濟體、即將就任 TEL 主席的 TAKANA 先生、APEC 秘書處計畫主任 YOO Myung-hee 小姐及各分組召集人，另外他特別感謝他的二位秘書李婷小姐及門汝靜小姐。

(十三) 新、舊任主席交接

TEL 主席正式由來自日本的 Kenji TANAKA 先生接任，許多經濟發言感謝卸任主席劉子平先生，並表達對新任主席、副主席的歡迎之意。

(十四) 新任主席致詞

新任主席 TAKANA 先生首先感謝各經濟體的支持，並感謝劉先生二年來領導 TEL 的貢獻，特別是在去年 10 月第八屆電信暨資訊部長會議

通過的 TEL 策略行動計畫。他同時強調 TEL 在亞太區域社會經濟成長扮演重要的角色，他期許各經濟體能採取必要的措施來實現部長宣言所通過的策略行動計畫，並持續支持 TEL。

(十五) 其他事項

美國代表團團長以身為 2011 年 APEC 領袖會議主辦國代表，建議 TEL 可以對領袖宣言做出貢獻，主席則建議美方可針對此事提出提案。

主席最後致詞感謝主辦國中國的熱情招待，以及完善有效率的會議安排，他同時感謝所有與會者的積極參與，以及各分組召集人的領導。

(十六) 閉幕

主席 TAKANA 先生宣布會議結束，並祝福所有與會者一個平安而愉快的歸途。

五、各指導分組會議及報告

(一) 資通訊技術指導分組（DSG）報告

DSG 會議計舉行二個半天，由泰國籍 Sudaporn Vimolseth 女士及中國籍庾志成先生主持會議，各經濟體共計 46 個代表與會。

1. 開幕

(1) 召集人及副召集人—開幕式及歡迎致詞

召集人及副召集人歡迎各經濟體代表，並感謝中國在風光明媚的的杭州舉行 APEC TEL 第 43 次會議。召集人指出 DSG 會議此次將有三項計畫提案，並表示 DSG 內國際合作將有助於達成「2010 至 2015 年—TEL 策略行動計畫」(TEL Strategic Plan 2010~2015)的目標。

(2) 議程檢視及修正

經與會者檢視議程草案，內容包含：2 項資訊分享報告、9 項現有計畫進度報告、1 項研討會成果報告，及 3 項新計畫提案。同

時將就「2010 至 2015 年—TEL 策略行動計畫」及「DSG 計畫表格更新上載」進行確認。

2. 資訊交流

(1) 各經濟體寬頻普及接取服務現況報告

A. 越南：越南報告各經濟體寬頻發展及網際網路使用現況報告。越南於 2005 年已建置完成多重用戶網路互連基礎建設(multi-users Internet connectivity infrastructure)。越南於 2008 年成功建置 VinaSat 衛星。2011 年，越南上網人數將近 2,720 萬，而寬頻用戶共計 364 萬人。於 2015 年底前，越南計畫將於全國達到 100%寬頻網路的佈建。

B. 泰國：泰國強調電信部門所扮演的角色，指出寬頻接取服務將持續成長，並於 2011 年內達到三百萬用戶。其中驅使寬頻接取服務成長的關鍵係源自於推廣活動、寬頻內容服務分享服務、社交網路服務，以及資通訊政策。

然而，相較於市區，偏鄉地區受限於網路覆蓋不足而限制其成長速度。為於 2015 年前達到寬頻服務的普及，推廣寬頻接取服務，泰國政府制定「國家寬頻網路發展政策」(National Broadband Policy)，目標是在 2015 年以前，提高全國網路覆蓋面至 80%，並在 2020 年進一步至少增至 95%。而泰國電信局(TOT)則配合該政策推出「THAI NET」低價寬頻網路服務，提供平價網路月租費率，2M 的網路速度使用網路 60 個小時，每月僅需支付 199 泰銖。

最後，泰國總結寬頻接接取用戶數成長，預計將於 2014 年底前達到 500 萬戶。

C. 中國大陸：中國統計其普及服務現況。其中「村村有電話」的目標已達成。而「城城有網際網路 」也於過去幾年達成。而 2010 年以前，網際網路固網寬頻用戶已達 1 億 8,800 萬戶，較過去 5 年成長達 3 倍之多。同時，3G 基地台也於過去 2 年內建置達 62 萬座。

然而，未來中國需要克服之困難，包括東部、中部及西部的不平衡寬頻發展，此外偏鄉地區的寬頻普及率僅達 15%，遠低於城市的普及率。

(2) 更新 IPv4 位址消耗及 IPv6 發展現況

亞太網路資訊中心(APNIC)Ms. Miwa Fujii 表示，網際網路號碼分配局(IANA)的 IPv4 可用位址，將於 2011 年 2 月消耗殆盡，而 APNIC 則將於 2011 年 4 月至 5 月用罄。為此，APNIC 網際網路技術社群已準備以技術支援政策及措施因應未來 IPv6 的轉移。TEL 第 8 次部長會議(TELMIN8)發表之「沖繩宣言」亦揭示 IPv4 位址即將用盡，以及依「IPv6 發展綱領」因應的重要性。

為此，APNIC 建議將 IPv6 於 TEL 會員經濟體間的發展現況，納入 DSG「資訊分享」之固定議程項目，召集人隨後經與會代表達成共識後，決議「IPv6 發展更新」應併入現有「寬頻普及接取服務現況」議程。

3. 現有計畫進度報告

(1) APEC 早稻田大學電子化政府研究中心—日本

日本表示此計畫係由許多經濟體支持並更新其執行進度。首先，該研究中心已於 2004 年落成，而計畫目標係為監測 APEC 區域的電子化政府活動(e-APEC)，並據以支援政府部門計畫，提供連

網及研討會相關核心研究資源，並建立 APEC 電子化大學網路(APEC e-University Networks)，支援國際學術相關活動。

自 TEL 第 41 次會議，包括 18 項有關電子化政府的活動，已自 2010 年 9 月至 2011 年 3 月由該中心於中國、我國、泰國、日本等經濟體舉行。

智利發言支持此項計畫，並提問未來該計畫執行的相關問題。日本回應該計畫已產出豐富的成果，計畫最終將由諮詢委員會（Advisory Committee）作出未來具體措施之決定。

(2) APII IPv6 測試基台—韓國

韓國已自 2010 年起持續進行共計 7 項「APII IPv6 測試基台(APII IPv6 Testbed)」相關研究活動。相關計畫進展自上次報告，涵括 DCN domain 用戶互連形象化(virtualization)、無線及感測技術、重疊網路(overlay network)、視聽傳輸內容技術(video & audio transmission technology)、多通道網際網路電視(multichannel IPTV)等技術，在健康及氣候方面之應用。

此外， 2010 年「KOREN/APII/TEIN 研究及測試計畫」已自 2010 年 6 月實施。將有其他國際性研究及測試合作計畫。而 APII Testbed 的新研究計畫將建立在包括開放式資訊流通(openflow)、DCN 技術及感測網路等未來網路上。另外，APII 研討會將於 2011 年秋季舉行。

(3) APII 研究發展測試基台—日本

日本表示，該項自籌經費計畫已由「APII IPv6 測試基台研究設計計畫(APII IPv6 R&D Testbed Project)」更名為「APII 測試基台研究網路計畫(APII R&D Testbed Network Project)」，係由於 APII IPv6 測試網路不僅用於 IPv6，更將用於未來網際網路相關計畫。最新的進

度包括自 2010 年 4 月至 2011 年 3 月 APII 測試活動已在河內舉行，以及 JGN-X Project 提出新提案等。

(4) 以資通訊技術投資促進經濟成長及復甦—美國

美國表示該「數位繁榮檢測表(Digital Checklist Prosperity)」已於共同提案經濟體(智利、日本、墨西哥及越南)的協助下完成。該計畫刻正進行其 APEC 區域內的最終調查。整體而言該計畫已落後原訂進度，然而調查問卷已完成且將遞交至 TEL 主席及 APEC 秘書處以傳遞至會員經濟體，以便於 2011 年 10 月前產出調查結果。美國並將於 TEL44 報告計畫執行結果報告。

(5) NGO 建置之災難資訊傳送系統及服務計畫—我國

我國代表台灣數位文化協會顧問洪進吉表示，該計畫已於 2010 年 7 月開始實施。研究小組已蒐集莫拉克颱風(Typhoon Morokot)相關實務案例，包括民眾及非政府組織如何運用社交媒體(social media)、雲端智慧以及開放源碼程式工具，來彌補政府及受災人民的資訊連結。研究小組所開發的非政府組織防災資訊平台可提供危險警示、區域災情、傷患救助及捐助等資訊。

該計畫目標包括：協助政府發佈最新災難警報資訊、區域災情、失蹤及傷亡、自願捐助等控制災難所需各項知識，並經由蒐集相關線上資訊並透過各媒體及政府救災機關加以確認訊息正確性，以傳遞正確消息，減少公眾恐慌，建立並管理人力資源系統及警告行動通訊系統的志工資訊，以及促進公私部門間交流互動。

該項由台灣數位文化協會(Association of Digital Culture, Taiwan, ADCT)所發展的訓練計畫，可分類為四項主要目標，包括：志願服務、災難防制及救助(disaster prevention and relief)、進階資訊技術

(advanced information techniques)及實習。志工不僅須具有災難防制資訊處理能力，更須具備志工服務及災難等相關基本知識。

透過實習及最終測驗，我國將確認學員完成相關訓練。日本及韓國發言支持這項計畫，日本亦指出該計畫與日本的計畫關係密切。

(6) 轉用綠能科技(Green ICT)以永續成長之最佳實例研討會—泰國

該計畫係於 2010 年 12 月 28 日獲 APEC 秘書處通過，並得到多達 7 個共同提案經濟體的支援，包括我國、汶萊、加拿大、日本等經濟體。其中，有關 APEC 區域內的綠能科技(Green ICT)發展及成果，將於 2011 年 4 月 4 日至 6 月 30 日透過線上調查(http://www.NSTDAacademy.com/APECgreenICT)開始進行。

該提案係由泰國國家科學技術發展機構(National Science and Technology Development Agency, NSTDA)提出，並將就調查資料於 2011 年 7 月 1 日至 9 月 30 日進行統計研析，並將緊接著於 TEL44 在馬來西亞舉行為期 1 天半的綠能科技研討會。為此，NSTDA 懇求所有會員經濟體協助辦理下列事宜：

A. 於各經濟體內傳遞並串連該線上調查的連結；

B. 協助推薦重要綠能科技專家或案例；

C. 於該計畫社交網頁分享實務經驗。

日本以共同提案經濟體的身分，表彰 APEC 區域內的綠能科技發展，及 TEL42 綠能科技研討會的成果，並感謝 TEL42 主辦經濟體汶萊，於該會議廣邀專家學者分享綠能科技知識經驗。

(7) 基於政策要求措施加速普及接取服務—智利

智利簡要表示該計畫已於 2009 年通過，並規劃透過會員經濟體間調查。該計畫的目標係有益於政府及政策制定者，涉及加速寬頻普及服務接取。該調查發佈迄今僅獲得極為少數的 4 個經濟體回復。智利為此將再次傳遞該調查文件，並期許各經濟提供積極協助。該計畫最終成果將於 TEL44 會議提交。

召集人鼓勵會員經濟體支持智利推展該計畫，包括協助填復調查以完成該計畫，以利達成寬頻普及接取的目標。日本亦支持召集人的建議。

(8) 強化寬頻發展及網際網路使用以增進 APEC 會員經濟體之網路服務研討會—秘魯

由於秘魯並未派員參與 TEL43 會議。因此，召集人表示此計畫已逾期，為此 APEC 秘書將聯繫秘魯，以瞭解該計畫執行進度，並要求其提供計畫完成之時程表以供 APEC 核准。

召集人並表示該計畫亦相當重要，將可促進寬頻發展及網際網路使用，為此建請會員經濟體協助秘魯之計畫執行顧問，填列相關調查問卷。

(9) 災難管理研討會—日本

日本報告該計畫將延後至 TEL44，係由於日本在 2011 年 3 月 11 日受到 9 級強烈地震，以及其伴隨之海嘯侵襲。因此，提升災難管理意識在 APEC 區域相當重要。為此，該研討會將就未來資通訊技術運用於各種災難管理防制，如何彈性運用於保障 APEC 經濟體之區域安全並免於災害損失，舉行討論及資訊交流研討會，並將著重於與災難管理相關的新興議題，包括用於市政府行動通訊系統、「直昇機—衛星通信救災系統(Heli-Sat System)」等。

4. 研討會成果

基礎設施共享以加速寬頻接取—中國

該研討會為期二個半天(3/28 下午及 3/29 上午)，係由中國於 TEL41 提案，並在 DSG 和 LSG 暨 TEL 大會均獲准通過。共同提案經濟體包括我國、中國香港、越南等國。而計畫監督人為中國籍庾志成先生。

研討會有將近 70 人參加，並有來自 7 個經濟的 11 位講者發表演說。該研討會主要目標係提供會員經濟體分享平臺，以討論基礎設施共享議題，包括政策制定、施行、技術問題、損益等，並分享其經驗於學習課程。

該研討會包括基礎設施及網路發展共享之最佳實務、技術議題及基礎設施共享之政策挑戰，並透過技術議題的小組討論及政策研究。多數經濟體認為基礎設施共享將節省網路建設支出及維護費用、保護環境及避免資源浪費、加強寬頻接取範圍，並縮小數位落差。

5. 討論新計畫提案

(1) ICT 應用於特殊需求人士(包括年長者及殘障人士)—日本及新加坡

該計畫尋求 APEC 經費補助 9 萬美金並自籌 2 萬美金，共計有 10 個共同提案經濟體，包括我國、泰國、美國等。計畫主旨係為開創有效資訊分享的有效平臺，以協助應用於年長者及殘障人士之資通訊技術及服務之創新發展。

該計畫係呼應 TELMIN8 的沖繩宣言，並將廣納各參與經濟體在 ICT 應用於年長者及特殊需求人士的實務執行經驗。

該計畫關鍵活動包括將於 TEL45 舉行專家會議，並在東京舉行一場研討會。計畫預計在 2012 年 3 月前設計報告，2012 年 3 月同時將與相關國際組織召開會議以詳談具體合作細節，2012 年 9 月出

版報告、2012 年 10 月在東京舉行政策制定者研討會。計畫執行結果將於計畫網頁上公佈並產出最終成果報告。2012 年東京研討會結束後，預計將於 2013 年提出一個自籌經費的後續計畫。

該計畫將整合 APEC 區域相關之人類資源，以用於 ICT 應用於年長者及殘障人士之能力建置，並提供技術支援以透過訓練、教育及數位技術轉移等方式，促使各經濟體得以發展。

計畫目標包括以下各項，係為

A. 加強瞭解：

a. 以 ICT 為基礎產品及應用於特殊需求人士的隱藏性障礙；

b. 用於老人及殘障者之 ICT 產品及應用成功要素。

B. 發展有益於年長者及殘障者之 ICT 產品應用，其評估各項衡量指標，包括：介紹、改良、影響、價值及回饋。

C. 連繫並整合現有研究機構、政策制定者、企業部門代表及非政府組織，以改良使用於年長者及殘障者之 ICT 相關人力資源發展措施，以及釐清所需的教育訓練的範圍。

D. 建立及運作用於老年之 ICT 之國際產業服務鏈，包括政策專家、非政府組織、公私部門組織、教育及研究機構涉任何相關產品研發者。以分享及轉移相關知識為可運行之計畫，以及行動細節，以加速產品和商業化創意解決方案，並迎合年長者及特殊需求者之各項需求。

加拿大發言支持該計畫，我國亦表示誠摯的支持意願，並列為該計畫提案之共同提案者。APEC 秘書處補充說明 ASF 與能力建構及訓練相關。智利表示，為回應「沖繩宣言」並著重 APEC 經濟體的利益，該計畫於「特殊需求」的定義將遭遇挑戰。俄羅斯支持這項提案，並指出該提案對於政策制定者的相關益處應加以說明。印

尼也表示支持該提案，並和智利一樣希望能釐清「特殊需求」的定義。該計畫終獲共識並於大會中通過。

(2) 行動電話號碼可攜規範能力建置—越南

該計畫申請 APEC 經費補助美金 90,115 元，並有我國、中國、韓國、日本等國作為共同提案經濟體。該計畫主軸係著重於行動電話號碼可攜的重要性。該議題係為關鍵電信政策之一，以強化號碼資訊的有效使用，促使公平競爭，並提供消費者更多使用行動電話的選擇，以及更佳的服務品質。

然而，行動電話號碼可攜規範對於部分 APEC 經濟體而言，係為新興議題。因此如何建立行動電話號碼可攜之能力，對於 APEC 經濟體監理者及政策制定者係為當前重要課題。該計畫目標參與者為 APEC 經濟體電信政府官員及行動電話業者，預計於 2011 年 12 月上旬在越南舉行為期三日的訓練課程，訓練目標如次：

A. 加強行動電話號碼可攜性之 APEC 政府官員監理議題；
B. 確保參與者將獲得廣泛建議，以明瞭如何及何時發展行動電話號碼可攜以促進公平競爭和滿足消費者需求；
C. 提供 APEC 會員經濟體間資訊及經驗分享平臺，以瞭解如何有效落實行動號碼可攜。

中國表示行動號碼可攜議題對部分經濟體而言極為複雜，因此該計畫有其重要性，且應對於會員經濟體及政策制定者相當有益。中國和加拿大呼應該計畫宜與自由化指導分組(LSG)併同執行，係由於該計畫亦涉及政策制定者。印尼贊同將研討會緊接於 TEL45 舉行。TEL45 主辦經濟體越南接受會員經濟體的建議並將評估其可能性，最終該計畫獲共識同意並將評估是否緊接於 TEL45 舉行。

(3) 多層次災難管理系統研討會—俄羅斯

該計畫尋求 APEC 經費補助美金 10 萬元，自籌基金部分則為美金 5 萬元，並有我國及日本作為共同提案經濟體。該計畫將目標設定於發展一套緊急災難管理系統，並將於 2012 年 2 月在俄羅斯莫斯科舉行研討會，而該計畫之結案報告則將於 2012 年 7 月提出。

我國支持該計畫並建議計畫宜緊接於下次 TEL 會議舉行。由於越南將主辦 TEL45，故建議俄羅斯再評估於 2012 年 2 月於莫斯科舉行之可能性。該計畫獲得通過。

6. TEL2010~2015 策略行動計畫

召集人強調該行動計畫已於 TEL 第 8 次部長會議通過，會員經濟體應採取更多積極作為或提出新計畫以呼應該行動計畫。

7. DSG 計畫明細表更新

召集人表示，後續有關 DSG 計畫的所有參考文件，倘接獲任何修正或其他資訊，將通知各計畫主持人重新檢視該項文件。

8. 其他事項

召集人總結 DSG 會議將有 3 項新計畫提案尋求 APEC 基金贊助，包括：

(1) 贊助基金 9 萬元美金：「 ICT 應用於特殊需求人士(包括年長者及殘障人士)—日本及新加坡」。

(2) 贊助基金 9 萬 115 元美金：「行動電話號碼可攜規範能力建置—越南」。

(3) 贊助基金 10 萬元美金：「多層次災難管理系統研討會—俄羅斯」。

TEL44 將舉行之 DSG 研討會，包括由泰國主辦一天半之「綠能科技(Green ICT)用於以永續成長之最佳轉移實務研討會」、日本主辦一天之「災難管理研討會」，以及由秘魯主辦半天之「強化寬頻發展及網際網路使用以增進 APEC 會員經濟體之網路服務研討會」。

9. 閉幕式

召集人感謝所有與會代表的合作及貢獻，使 DSG 會議圓滿結束，並強調後續仍須請各經濟體合作，以協助填復 DSG 各項計畫調查問卷並得到充足的數據。召集人同時鼓勵會員經濟體研提新計畫以呼應「TEL2010~2015 策略行動計畫(TEL Strategic Action Plan 2010-2015)」並達成 APEC 成立目標。

(二) 自由化指導分組（LSG）報告

1. 開場

LSG 會議於 3 月 30 日下午及 31 日下午舉行，由日籍召集人 Mr. Shoji MIHARA 及新加坡籍副召集人 Ms. Evelyn GOH 共同主持會議。G 氏表示自前幾次 TEL 會議以來，LSG 已有相當之進展，APEC 第 8 屆電信暨資訊專業部長會議亦體認 LSG 在促進自由開放之資通訊機制之重要性。若干 LSG 之努力如區域貿易協定/自由貿易協定電信要素準則及國際行動漫遊消費者資訊提供準則等，亦已正式已納入沖繩宣言中。

2. TEL42 LSG 會議報告

LSG 召集人提示 TEL42 LSG 會議報告要項如下：

(1) 2010-2015 年 TEL 策略計畫。

(2) 討論事項—研討會成果。

(3) 計畫活動報告。

(4) MRA 專案小組會議報告。

(5) 資訊分享。

(6) 新計畫提案。

3. 2010-2015 年 TEL 策略計畫

LSG 召集人提示 2010-2015 年 TEL 策略計畫，在沖繩宣言及 TEL 策略行動計畫中，諸多議題如寬頻、資通訊之使用、安全及可信賴之資通訊環境及區域經濟整合等，已被列為 TEL 之優先領域。在 TEL 策略行動計畫中，並有獨立章節敘及促進區域經濟整合議題，其中含 6 個要素如下：

(1) 自由開放貿易及投資。

(2) 技術符合評估及技術規格等同性。

(3) 國際行動電話費用。

(4) 消費資訊揭露。

(5) 同儕學習。

(6) 海纜保護。

4. 研討會成果

(1) 國際行動漫遊進展研討會

LSG 召集人代替澳洲 Mr. Richard Brown 報告國際行動漫遊進展研討會成果。該研討會計有香港、新加坡及國際電信使用者協會等提出簡報，分享有關亞太區域國際行動漫遊議題之進展，包括東南亞國協、亞太電信社群(Asia Pacific Telecommunity, APT)及歐洲之相關發展。

LSG 召集人簡述國際行動漫遊計畫之下一階段工作：即預訂於 2011 年 6 月 16 日在香港舉行講習會，並將接續舉行為期三日之亞太電信社群國際行動漫遊研討會。上述講習會以監理者之參與為目標對象，旨在提升消費者意識。另外，該講習會將提供補助經費予開發中經濟體俾供其參與講習。為期三日之促進國際行動漫遊市場競爭講習會預訂於 2011 年下半年舉行，日期擬訂於 TEL44 會議前後。

(2) 基礎設施共享以促進寬頻接取研討會

基礎設施共享以促進寬頻接取研討會於 2011 年 3 月 28-29 日舉行，該研討會由中國大陸主辦。大陸籍庾志成先生報告研討會成果，共有將近 70 人與會，計有 7 個經濟體推薦 11 個演講人，於會中分享並討論基礎設施共享相關議題，如基礎設施共享及寬頻發展之最佳實作、境內架構、技術議題及政策挑戰等。庾先生簡述基礎設施共享問卷之調查情形，結果顯示，多數經濟體咸認為基礎設施共享能節省網路建設維護費用、保護環境及避免資源浪費、促進寬頻接取及縮短數位落差。部分經濟體認為，基礎設施共享對新進業者而言是改善基礎設施瓶頸之重要方法。

(3) 產業圓桌員會議

中國大陸籍蔡國雷先生代替國際電信使用者協會報告產業圓桌員會議成果。該會議主題為雲端運算，演講人來自私部門、學術界、國際公司及境內企業，共計 11 人。與會者進行熱烈討論並界定若干議題，如雲端運算對隱私權、安全性、身分管理及機密性之意涵；行動雲端選項；雲端運算商業模式；雲端服務跨境政策議題；業務品質、標準及互運；小型企業、區域性、偏遠及原住民社群之機會；政府服務遞送之機會等。

5. MRA 專案小組會議報告

MRA 專案小組主席 Mr. Lawrence KWAN 報告 MRA 會議對修正加拿大準備草案概要之結果。

Mr. KWAN 建議下次 MRA 專案小組會議應在 TEL44 會議期間之開始兩天舉行，如同以往的安排，建議專案小組製作首版之指導方針草案，以便在下次會議討論。

6. 資訊分享(國內法規/FTA 政策)

(1) 中國大陸法規及 FTA 政策報告(中國大陸)

中國大陸 Ms. Tao Qing 報告大陸電信市場自由化及法規之發展。她介紹中國大陸 WTO 承諾，包括對基礎電信及加值服務市場國外資本參與之限制。Ms. Tao 並簡報中國大陸電信市場之發展。2010 年底計有 11.53 億電話使用者，其中 2.94 億是固網用戶，而 8.59 億是行動用戶，且網際網路用戶達到 4.57 億。Ms. Tao 強調監理架構的主要監理功能、市場進入、資源管理及品質服務等。

(2) APEC 2011(美國)

美國 Mr. John STRUBLE 分享 2011 年主辦 APEC 時，美國的優先重點。Mr. STRUBLE 強調 2011 年 APEC 的主要目標為促進亞太區域的貿易及投資，強化經濟復甦及創造工作機會。特別在下列 3 個領域為特殊優先重點：

A. 強化區域經濟整合及透過創造亞太自由貿易區以擴展貿易。
B. 促進綠能經濟成長。
C. 促進法規匯流及合作。

Mr. STRUBLE 強調 2011 年 APEC 的優先重點為達到與沖繩宣言及 TEL 2010 至 2015 年政策行動計畫之重點領域。

(3) 數位匯流政策創新議題介紹(我國)

國家通訊傳播委員會林技士永裕分享我國在數位匯流政策創新議題。他強調我國在促進寬頻發展著重在 5 個目標，分別為固網寬頻、光纖網路、無線寬頻、有線電視數位轉換及新興視訊服務。為達到這些目標，他強調包含下一代網路部署及促進國際合作在內的 6 個策略。他也介紹包含 6 個工作小組的數位匯流專案小組，並表達數位匯流的重要性。

(4) 亞太區域資通訊技術發展討論會之報告(日本)

日本 Mr. Naoki ISHII 綜述 2011 年 3 月 9 日於日本舉行之亞太區域資通訊技術發展討論會，該討論會有 3 次會議，Mr. ISHII 並簡略介紹與 LSG 有關第 1 次會議「區域經濟整合」之結果。他著重說明日本的新資通訊技術政策及經濟合作協議之政策原則。

7. 下次會議及未來工作

(1) 下次監理圓桌會議(TEL44 會議期間在馬來西亞舉行)

Mr. MIHARA 說明下次監理圓桌會議將於 TEL44 會議期間在馬來西亞舉行，及請求各經濟體就監理圓桌會議題於下次會議前向馬來西亞表達建議。他亦請求各經濟體就監理圓桌會議推薦演講者。

馬來西亞 Ms. Sulyan ABDULLAH 說明馬來西亞將與 LSG 召集人及副召集人就監理圓桌會議商討議程，並儘速將該議程送給各經濟體。

(2) 下次 TEL44 會議之新計畫提案及優先重點

2 件計畫提案提送 LSG 會議決定：

A. 新加坡提出「加強消費者保護研討會」計畫。

B. 越南提出「行動號碼可攜監理能力建立」計畫。

該 2 件計畫業經 LSG 核可，並將提送第 2 次大會。在優先重點部分，Ms. Evelyn GOH 請求各經濟體就 TELMIN8 簽署之 TEL 策略活動計畫加以審視，並考量 LSG 可作出貢獻的領域，除消費者保護及號碼可攜外，在該策略活動計畫中仍有其他領域與 LSG 工作有關。

8. 其他事項

(1) LSG 副召集人

Mr. MIHARA 說明 LSG 第 2 個副召集人的職位仍是空缺的，並請有興趣的經濟體與日本及新加坡聯絡。他強調應考量維持在 TEL 的區域平衡，及提名人選的經驗。

(2) 新加坡電信監理訓練課程

新加坡 Ms. Lina CHUA 向會議報告，新加坡資訊通信發展管理局將於 2011 年 9 月 12 日至 16 日安排第 5 次電信監理訓練課程。該 5 天的課程由新加坡資訊通信發展管理局資通訊技術從業人員執行辦理，將涵蓋如競爭管理、消費者保護及執照特許等政策及法規相關的議題，並將以廣播及匯流為重點。

9. 散會

Mr. MIHARA 說明 APEC 提供各經濟體 1 個平臺，以分享資訊。他邀請各經濟體於 TEL44 下次 LSG 會議分享他們的國內法規。

Ms. Evelyn GOH 重申 LSG 工作的重要性，並請求各經濟體於下次 TEL 會議提出新計畫，並考量提名第 2 位 LSG 副召集人事宜。

(三) 安全暨繁榮指導分組（SPSG）報告

1. 主席致詞並通過 TEL 43 SPSG 議程

首先美國籍的代理主席 Anthony Teelucksingh(代理 SPSG 主席 Jordana Siegel 小姐)歡迎所有 APEC 會員參與 APEC TEL SPSG 分組會議，並確認議程。

2. 中國大陸報告「中國大陸資安防制現況」

由中國代表，任職於 CNCERT 的周永林先生（Zhou Yonglin），發表「中國大陸資安防制現況」內容如下：

網際網路在中國發展進步很快，行動電話更是主要驅使因素，網際網路基礎建設應用之成長包含影像、音樂、業務，亦伴隨網路安全議題，網際網路之攻擊持續是嚴重議題，攻擊政府網站事件增

加，分散式阻斷服務攻擊（DDoS）攻擊變得複雜難以防護，商業詐欺亦伴隨垃圾郵件氾濫，行動電話之惡意程式而日漸升高。面臨該等威脅，中國提出之因應措施包含：

(1) 針對 Internet 安全與網路犯罪之法律與法規。

(2) 政府發展網路安全緊急應變計畫與資訊系統防護措施。

中國藉由上述之措施，獲致如下成果：

(1) 政府阻擋 5384 C & C servers 及惡意軟體來源。

(2) 中國大陸公安部逮捕超過 460 犯罪嫌疑者，停止了 14 個提供駭客之犯罪網站。

(3) 業者面向：成立反網路病毒聯盟(China anti-network virus alliance)、國家弱點資料庫(China National vulnerability database)，分享並移除惡意網址(URL)、降低垃圾郵件。

(4) 使用者面向：提升使用者資安意識宣導，諸如：中國大陸國家電腦網路應急技術處理協調中心(CNCERT)公布欄、資安趨勢、常見攻擊樣態、金錢詐騙防護、智慧手機安全概念等。

最後結語與建議：資安法律與法規宜採嚴罰原則、加強使用者自我防護資安意識、開始資安事件管理並推廣網路安全合作。

3. 新提案

(1) 可信賴的境外第三方認證以用於跨境互通(Frontier Trusted Third Party for Cross-Border Interoperability)

本提案由俄羅斯代表提案，擬建立跨境信賴第三者，以認證電子文件以提升 APEC 經濟體之跨境應用。本項提出經費補助費美金約 17 萬元，由於目的與內容並不具體，且避免與 ITU 曾經類似概念作法重複，因此本案未獲本會議採納。

(2) 第三屆 APEC 資安防護研討會提案

本提案旨在探討合作強化 APEC 成員之間網際網路上反恐議題，係由韓國提案之自籌經費專案，預計 2011 年 9 月 6~7 日在首爾舉行 2 天研討會，研討資安反恐議題，獲得日本、美國、新加坡與越南共同支援本案。

(3) 網路犯罪專案小組續行會議研討會提案

此提案為強化網路犯罪防制之專家能力提升，美國提案在下一屆 TEL44 時，舉辦 1 天的研討會，提供各經濟體在網路犯罪防制之實務應用。SPSG 支持本項由美國所提之自費提案。

4. 研討會報告

3/27 SPSG 所舉辦之亞太地區網路安全政策發展研討會，主要重點結論如下：

(1) 本研討會因區域業界之參與，而獲致成功。

(2) 腦力激盪指出 TSSOE 的改善之處。

(3) 強調經濟體間的資訊分享與時俱進。

(4) 獲得正面回饋，評估下一階段兩個努力方向，一為來自 SPSG 持續之建議，一為來自 TSSOE 之問卷回饋之建議。

5. APEC 與 OECD 在資安合作議題

由 OECD 代表 Briefing from Laurent Bernat 與加拿大籍 Jane Hamilton 之 WPISP -- working party on information security program 主席，報告重點包含：

(1) OECD 與 APEC 之合作，再次於 2010 年日本 Okinawa 宣言中述及加強雙方合作。

(2) 18 個經濟體之數位身分管理(IDM)之策略與政策之比較，並予以匯整至 OECD 相關文件中。

(3) 電子化政府網路經濟與網路安全願景。

(4) APEC 經濟體間兒童上網安全保護之合作。

(5) ISP 之 Bonets 防制合作。

(6) OECD security guidelines 審視合作。

6. 提升網際安全宣導活動

(1) TELMIN 資安宣導日-韓國與日本

韓國與日本代表報告 2010 年 10 月在日本 Okinawa 舉行之 TELMIN8 之各項活動，包含「Top Tip List」、「資安宣導之海報展示」及「資安宣導日」等活動，非常成功，同時感謝來自包含我國共計 10 個經濟體，24 張的資安海報提供，我國提供了 4 張。

(2) 網路宣導之調查研究-澳洲

澳洲報告其網路安全宣導之問卷調查分析，發現：

A. 對民眾之網路安全教育與宣導是澳洲優先事宜。

B. 法院委員會(parliamentary committees)網路犯罪與界定網路安全防範宣導為重要資訊社群活動。

C. 宣導活動內容應依對象作適切調整。

D. 某些宣導同時結合多項主題。

E. 評估宣導之成效比較不容易。

F. 建議建立設計評估宣導活動之效益評估方法。

G. 建議多利用線上宣導方式。

(3) 在資安宣導之努力-我國

我國行政院國家資通安全會報技術服務中心副主任吳家祺在會議中以「Awareness Raising-Chinese Taipei Perspective」為題，分享我國在電子化政府資安宣導的策略與實際活動，包含資安宣導的資安技能金盾獎、資安動畫金像獎、海報比賽、資安金句比賽、全民

資安網站、資安週、資安宣導手冊等，供與會者代表參考，現場並分送各代表一份有英文字幕的最新金像獎資安動畫作品。

(4) 在資安宣導之努力-美國

A. 美國國土安全部(DHS)以「Stop Think Connect」做為全民宣導口號。

B. 於 2010 年 10 月啟動「National Cyber Security awareness month」，國土安全部補助 PSA 提供全民建立資安影片，成立一個資安論壇協助國際間資安清倉調查計畫，計有 9 個經濟體回覆問卷，現仍接受回覆之問卷。

C. 未來將協助各經濟體在網路犯罪調查之宣導與訓練。

D. 鼓勵各經濟體展現如同在 TELMIN 8 資安宣導日之合作示範。

7. 網路犯罪執法

美方表示亞太地區為對抗網路犯罪，司法合作非常重要，SPSG 將持續在此議題上之研討，並對司法人員進行例行性訓練為可能之機會。美方預劃於下一屆 TEL44 在馬來西亞舉辦網路犯罪防護之研討會。

馬來西亞報告其在反垃圾郵件上之作法。

網路銀行任務防駭編組：防制釣魚網站、釣魚網站統計與趨勢、建立反釣魚攻擊之通報與程序、舉辦反釣魚之宣導活動、垃圾郵件觀察與監控、移除釣魚網頁或 email 來源等。

8. 專案報告

(1) 手持式行動裝置安全計畫—馬來西亞

所進行之手持式行動裝置安全問卷，請各經濟體持續提供回饋，以利更新實務指引。

(2) DNS 安全研討會—馬來西亞

本案旨在探討 DNS 安全議題，發展 DNSSEC 最佳實務指引，提升 DNS 安全意識宣導，並在下一屆 TEL44 舉辦技術研討會，並徵求各經濟體提供講者。

(3) 網路安全自願性 ISP 實務指引—澳洲

本案之研討會於台北之 TEL41 辦過一次，現以虛擬工作小組方式發展此網路安全自願性 ISP 實務指引，初版已於近日完成，並將請經濟體提供意見修改。

(4) APEC Training Program for Preventative Education on ICT Misuse—韓國

本案於 2009 年通過，為期 2 年，期間並舉辦經濟體成員參與之 ICT 誤用之安全防護研討會，已提供菲律賓、印尼當地之宣導與訓練。

(5) 海底電纜保護之資訊分享—澳洲

澳洲代表提出於 TEL39 海底電纜保護之資訊分享研討會情形，該研討會討論出關鍵需求，為發展 APEC 地區海底電纜維修資源，該等資源可加快維修海纜，並定出相關制度供參。

澳洲提出一個調查問卷已於 2010 年 6 月完成並發給經濟體，以利上述制度參考文件之完成，但回收情況不理想，澳洲請尚未回覆之經濟體能盡快予以回覆。並期望進一步釐清各經濟體之聯絡窗口。

(6) 國際電子公共金鑰基礎建設(PKI)及電子認證(e-Authentication)訓練計畫—我國

我國經濟部 PKI 推動專案辦公室主任郭淑儀，說明本案旨在提供經濟體成員 PKI 相關之宣導與訓練，截至 2010 年共舉辦過 6 場訓練，計有 114 位學員參加。我國將持續辦理此訓練。

(7) NGO 建置之災難資訊傳送系統及服務計畫—我國

本報告由我國財團法人二十一世紀基金會蔡佳恬經理提報，旨在分享我國建置以社交網路系統之平台，及時蒐集與提供災害資訊之分享發布，達到適時、適地、傳達給適切對象，並以此次日本地震為例，提供不少寶貴資訊給相關團體，以因應相關救災進行。

9. 經濟體報告

(1) 香港：WiFi 安全及數位經濟

香港報告在香港日益仰賴 wifi 之使用者，因安全威脅日增，政府已注意要加強宣導行動裝置在 Wifi 上之安全防護，然而亦欠缺如何有效之行動裝置安全之治理。

(2) 加拿大：國家資安策略

加拿大分享其國家資安策略三支柱：

A. 確保政府系統。

B. 聯盟防護政府外之系統。

C. 協助使用者上網之安全。

(3) 美國：資安進展

美國分享其 NCSD 網路安全架構與 NCIRP 應變計畫及 NCCIC 資訊中心，也簡述網路安全演習-- Cyber Storm exercise series

(4) 日本：資安進展

日本報告在 TELMIN 8 之活動，2011 年度資安月(2 月)活動，Nat'l Information Security Center 角色，2011 年新的資安研發方案等。

10. 提案通過

主席表示 SPSG 通過下述三案：

(1) ICT 防範教育之 APEC 訓練計畫展延。

(2) 第三屆 APEC 資安防護研討會。

(3) 網路犯罪專家小組。

11. 臨時動議

主席表示 SPSG 目前徵求 1 位副主席空缺之提名。

六、專案小組會議及研討會

(一) 電信設備相互承認協議(MRA)專案小組會議

1. 簡介

MRA 專案小組會議時間為，3 月 27 日至 3 月 28 日。

本會議由香港 Lawrence Kwan 先生擔任主席，新加坡 Melinda Tan 女士擔任副主席。本會議共有 13 個(Brunei Darussalam, Canada, China, Hong Kong China, Indonesia, Japan, Korea, Singapore, Russia, Chinese Taipei, Thailand, United States and Vietnam)經濟體 36 位代表參加。

主席歡迎所有與會代表，請各國代表自我介紹，並對大陸主辦會議表示謝意。

2. APEC TEL 42 汶萊 MRA 專案小組會議報告

專案小組主席表示汶萊會議之最終報告已完成且無任何附記。主席亦報告電信部長級會議(TELMIN8)之結果，各經濟體部長已於 2010 年 10 月 31 日，正式背書 MRA ETR 之文件。

3. 經濟體報告及更新

各經濟體報告其自願性參與 MRA 更新現況，包含符合性評鑑、技術規範及與其他經濟體合作進度。

(1) 加拿大：目前加拿大已指派 13 家加拿大實驗室，且被 6 個經濟體所認可。加拿大目前認可 52 家 APEC 架構下之境外實驗室，執行加拿大要求之測試。加拿大已指派 2 家加拿大驗證機構，為參與

經濟體所認可。加拿大目前認可 18 家 APEC 架構下之境外驗證機構，執行加拿大審驗要求。

(2) 中國：與新加坡洽談 MRA phase I 中，目前正執行雙邊 CAB 交換訓練中。

(3) 香港：目前已與 5 個經濟體參加 MRA-CA phase I，2 個經濟體參加 MRA-CA phase II。

(4) 韓國：韓國表示自 2011/01/24 起，韓國導入新的認證計畫/組織 (Korea Communications Laboratory Accreditation Program (KCLAP)，執行 ICT 產品之認可(authorization)相關工作。在新的驗證架構下，ICT 產品依其種類，須經：驗證(certification)、登錄(registration)或臨時驗證(interim certification)，方得取得上市之認可。韓國目前亦進行 MRA 對經濟影響之研究。KCLAP 目前亦規劃加入 APLAC 組織。

(5) 泰國：泰國未正式參與 APEC TEL MRA 討論。但目前正執行一個導入 APEC TEL MRA 之顧問案，正收集各方意見中。

(6) 越南：目前已與美國與韓國 導入 MRA-CA phase I。目前已接受 7 家美國的實驗室。

(7) 新加坡：新加目前認可 51 家境內外實驗室與 6 家境內外之驗證機構。與印尼與印度之 MRA 已分別於 2010/08 與 2011/03 開始施行。

4. 產業之個案研究

主席鼓勵各經濟體邀請產業代表與會。

5. MRA 專案小組計畫

(1) 專案 E：電信設備等同性技術規範 MRA ETR

主席報告電信部長級會議(TELMIN8)之結果，各經濟體部長已於 2010 年 10 月 31 日，正式背書 MRA ETR 之文件，且公告於 APEC TEL MRA 網站。即日起，各經濟體可依此文件導入 MRA ETR，若

有經濟體有意願參加，須先通知 APEC TEL 主席。相關提案與申請 MRA ETR 將透過 MRA 專案小組主席，通知各經濟體。

依據加拿大提供之 MRA ETR 導入指南(guideline)之準則草案，各經濟體於會議中討論概念與準則之細節。一個由加拿大、香港、中國、新加坡、台北、越南與美國組成之工作小組，將再於兩次會議間討論此指引，計畫於下次 TEL 44 中，提出第一份指引的草案。

(2) 計畫 F：MRA 實施與受益之調查

依據之前的實施的 MRA 受益調查結果，指出或許有舉行一場對經濟體與其產業之 MRA 訓練之需要。但目前尚未有經濟體回覆，對該訓練內容與教材之需求。

另有一提案，建議執行另一調查，做為多年前由美國執行的參加 MRA-CA 之經濟體益處調查之更新。該調查希望能將導入 MRA 的益處，具體以經濟數字呈現。韓國指出將於 TEL 44 報告韓國處理此類，具體以經濟數字呈現之益處之研究與調查經驗。主席表示感謝並於下次 TEL 會議時討論與起草該調查文件。

6. 訓練課程

主席目前仍考量是否於下次 TEL 44 會議舉辦訓練研討會。因下次會議於馬來西亞舉行，馬來西亞之產業，將更有機會參與此訓練研討會。主席將再於下次會議前，送出 email 以確認是否舉辦該訓練研討會。

7. 專案提案

APEC 秘書對 APEC TEL MRA 小組報告提案取得 APEC 經費之程序。若有經濟體欲提案取得相關經費，需依相關流程處理。

8. 區域 MRA 之更新與發展狀況

(1) CITEL：加拿大簡報 CITEL MRA 於 2011/03/01 於秘魯利馬舉行。NAFTA 經濟體，加拿大、美國與墨西哥，於 MRA 取得重要進展。目前 MRA 之條文由各經濟體之法律部門審議中。這三國家將於 2011/04/12 於墨西哥完成 MRA 草案。

(2) ATRC MRA：新加坡報告東南亞 ATRC MRA 聯合委員會於 2010/07/07 於越南河內舉行。針對電磁相容(EMC)與安規(Safety)之相互認可(MRA-SE)文件已完稿且為 ATRC 採用。且於 2010/11 經 ASEAN 電信部長級會議背書通過。

9. MRA 資訊管理資源

APEC 秘書處簡介 www.apec.org 中 MRA 專案小組的網頁資訊。擁有一個網站專區，可提供各個經濟體最新與即時的法規與聯絡資訊，對實施及運作 MRA 非常有幫助。除提供各個經濟體清單外，對提供一些必要性的額外訊息也是很有幫助。

10. 後市場調查

加拿大於 TEL42 提出於 2010/06 舉行之市場抽查活動及其結果，並表達加拿大對制訂後市場管理最佳施行指引(Market Surveillance’s Best Practice Guideline)之興趣。加拿大自願主導此計畫，且於此次會議中提出指引之草案。計畫於下次 APEC TEL 44 會議上再討論。

11. 聯合委員會

無聯合委員會要求之相關議題資訊。

12. 其他事務

無。

13. 待辦事項

(1) 追蹤訓練之需求。

(2) 制訂導入 MRA ETR 之指引。

(3) 制訂後市場管理最佳施行指引。

(4) 制定具體以經濟數字呈現之導入 MRA-CA 之益處調查。

(二) 亞太地區網路安全政策發展研討會

本研討會由大會邀集各會員國產官學代表辦理「亞太地區網路安全政策發展研討會」，會議主要探討 APEC TEL 各會員國 在確保信賴安全與永續發展線上環境(Trusted Secure and Sustainable Online Environment，簡稱 TSSOE)之策略，本策略為 2005 年由 APEC 領袖會議所確認，包含下述七大目標：

1. 發展國內政策之凝聚力（cohesive domestic strategies）以確保 TSSOE ；
2. 透過確保法律及政策架構中永續、符合程序，及可提供多重法律協助（mutual legal assistance）的安排，以指出網路環境中的惡意使用（misuse）、非法使用（malicious use）及犯罪意途（criminal use）所造成的威脅；
3. 發展監測、警告、危機處理及復元能力，以協助避免資安攻擊，將來自意外之傷害及其復元時間減少至最少，並透過互助合作之安排共同努力；
4. 發展政府、產業、研究機構及其他重要組織間伙伴關係，以共同確保 TSSOE 的發展，並包括透過發展、落實及檢視推廣之指標及最佳實務準則；
5. 促使使用者喚醒其網際網路線上環境安全意識，並協助其瞭解並符合其於 TSSOE 所扮演身分及其擔付之責任；
6. 為促使安全的網際網路線上環境，鼓勵致力發展研究以現有及新興技術推廣設計、發展及落實適當有用的安全措施；
7. 支持經濟體間合作努力推廣及落實 TSSOE。

本研討會主要分 4 項主題，分別為資安政策與趨勢、從政府角度談 TSSOE 策略與應用、從業者角度談 TSSOE 策略及分組討論 TSSOE 未來策略及方向，以下就各主題探討內容說明如下：

1. 資安政策與趨勢

本主題安排由賽門鐵克公司新加坡總部黃凱君高級經理發表資安威脅趨勢，包含針對性攻擊、Stuxnet、社交網路系統威脅及行動裝置安全等，另一位是由 OECD 的 Laurent Bernat 先生，介紹 2005 至 2010 年 OECD 所發展之相關資安策略與參考指引等。

2. 從政府角度談 TSSOE 策略與應用

本主題由分別來自澳洲、我國、加拿大、韓國、美國及日本，說明各國政府落實 TSSOE 策略之具體措施，行政院國家資通安全會報技術服務中心吳副主任家祺代表我國以「G-ISAC : The Information Sharing of Public-Private-Partnership Practice」為題分享我國在 G-ISAC 之資安資訊分享經驗。

3. 從業者角度談 TSSOE 策略

本主題分別由來自 Cisco 公司、日本 NTT 電信公司、中國移動公司、微軟公司，提報與 TOSSE 策略有關之業界應用。

4. 分組討論

由與會者分 6 組針對主席所擬議題進行分組討論。

會議在聽取各會員國產官學代表之經驗分享後，獲致結論如下：

1. 資安全的威脅隨資訊科技之快速發展與應用，不斷演變俱增，如近年來智慧型行動化載具之蓬勃發展及社交網絡之風行，雖為使用者帶來便利及娛樂，相對地，同時增加有心人士可作為進行不法之管

道之一，由部分會員國之簡報顯示，行動化載具之資安事件及社交網路詐騙之案件與日俱增，更需受到關注與重視。

2. 資訊安全防護係永無止境的工作，各國所採取之防護策略與措施大致相同，本次會議較值得我國借鏡參考之處為由日本所提之該國G-ISAC 建置成果，其作法除與一般國家同樣透過公私部門、機構進行資訊安全訊息交換分享，建置資安通報預警機制外，另更進一步將所得資訊及情報加以分析後，對入侵攻擊進行主動式防護，達成主動防堵入侵或攻擊之目標，此項作法值得我國參考學習。

(三) 國際行動漫遊進程研討會

2011 年 3 月 27 日下午在杭州黃龍飯店第 3 會議廳舉行之「國際行動漫遊(IMR)進展研討會(Workshop on Progress on International Mobile Roaming)」，係自由化指導分組會議工作計畫續行處理 IMR 相關議題之研討會。此次由香港 OFTA Lawrence Kwan 先生主持會議。本研討會舉辦目的，為瞭解有關行動漫遊費用過高之問題，並分享與會經濟體在解決改善 IMR 相關問題之建議作法。

本研討會歷時半日，議程進行先後分別為自由化指導分組召集人日籍 Mr. Shoji MIHARA 致詞、香港、新加坡成員簡報、INTUG 協會代表報告、會議討論等單元：

1. 首先由分組召集人日籍 Mr. Shoji MIHARA 致詞，歡迎代表團團員並介紹副召集人新加坡籍 Evelyn GOH 小姐，感謝與會代表參加，並對中國主辦本次 APEC TEL 第 43 次會議提供傑出團隊及盛情招待致表謝忱與祝賀之意。副召集人新加坡籍 Evelyn GOH 小姐也表示歡迎代表團團員及感謝中國主辦本次會議，並強調自由化指導分組過去幾次會議已有大幅進展，第 8 次部長會議，各國部長級代表已認知自由化指導分組工作於提升自由化開放資通訊科技市場管制

之重要，部分成果如區域自由貿易協定中電信部門之指導，以及提供國際行動漫遊消費資訊之指導，業於沖繩宣言中強化。

2. 香港 OFTA Lawrence Kwan 先生接手主持研討會，並進行簡報單元，首先由 Lawrence Kwan 先生開始、接着新加坡 Evelyn GOH 小姐簡報、再由 INTUG 協會代表 Jane Smith 小姐報告，共同分享寶貴經驗。香港 OFTA Lawrence Kwan 先生介紹內容為 IMR 各種問題細節及資訊分享，包括市場結構、定價結構、消費者資訊及服務品質等；新加坡 Evelyn GOH 小姐介紹內容為 IMR 服務類型、網路接續及服務費率比較；INTUG 協會代表 Jane Smith 小姐介紹內容係從消費者角度提出 IMR 收費問題、成本比較、實際恐怖帳單案例及歐盟委員會規範措施。以上三位簡報內容經驗分享摘要分述如下：

(1) 香港 OFTA Lawrence Kwan 先生簡報部分：

A. Kwan 氏概述背景為 2010 年 6 月於澳洲布里斯班舉行 APT 之 IMR 研討會，會中詳細討論及資訊分享 IMR 市場結構、定價結構、消費者資訊及服務品質等各種議題，成立工作小組着手 IMR 各種問題並向 APT 提出建議，成員包括澳洲、汶萊、Cook Islands、香港、中國大陸、馬來西亞、巴勒斯坦及泰國。

B. IMR 工作小組任務為：

a. 於下列領域進行 APT 成員 IMR 市場調查報告：

(a) 可取代之技術及服務；

(b) 透明性之措施；

(c) 零售及批發價格和稅額；

(d) 服務品質。

b. 提供可取代之技術及服務資訊。

c. 提供消費者 IMR 資訊規定加強透明性之指導方針，例如：

(a) 經營者及主管機關網站之指導方針；

(b) 漫遊者到達時通知訊息之指導方針；

(c) 提出帳單震撼問題之措施。

d. 分享 IMR 價格管理及建議資訊。

e. 建議服務品質標準。

f. APT 自設包括上述 IMR 指導方針及建議資訊網站。

C. IMR 工作進展：於 2011 年 1 月完成市場調查報告，考量調查報告所收集之資訊，工作小組成員分配執行任務，於 2011 年 6 月香港主辦之 APT IMR 研討會向成員提出指導方針及建議草案，以進一步收集成員意見。

D. 初步見解：

a. IMR 性質：

(a) 管轄問題－IMR 政策需雙邊或多邊區域合作。

(b) IMR 服務通常配售本地語音、簡訊、數據及手機補貼等－IMR 服務對消費者購買決定僅是多種考慮之一。

(c) 多數行動電話使用者不是經常旅遊者－需要服務時價格可能沒有彈性。

b. 在區域基礎上 IMR 定價管理需要立法支持(例如歐聯架構)。

c. IMR 市場難建立有效競爭機制。

E. 初步建議：

a. 加強透明度。

b. 消費者意識到 IMR 價格。

c. 帳單震撼相關處理方法。

d. 公告高 IMR 價格之短中期解決方案。

e. 降低 IMR 價格之雙邊或多邊協議。

f. IMR 替代服務。

g. 高 IMR 價格之長期解決方案。

h. 密切注意 ITU SG3 分組工作結果。

(2) 新加坡 Evelyn GOH 小姐簡報部分：

A. 說明 IMR 服務各種話務類型，以漫遊地區撥打當地、國內及第三地等三種服務類型比較網路架構、網路接續及服務費率。

B. 比較分析所蒐集東協各國 IMR 費率資料，不同業者價格互有高低，偏高費率為共同現象。

C. IMR 價格在合理化之前，建議可加強資訊透明度措施，供消費者查詢參考使用，以避免高額費用爭議。

(3) INTUG 協會代表 Jane Smith 小姐介紹部分：

A. 首先說明漫遊的費率問題：

a. 費率美金 4 元/分之意為每分鐘均美金 4 元而非首分鐘，以因應技術複雜之費用。

b. 費率從美金 3~4 元/分到美金 20 元/Mbps。

c. IMR 費率以 Kbps 表示非以業界常規 Mbps 表示－消費者易混淆。

B. 費用比較：以日本、墨西哥及新加坡撥至澳洲 2009 年 4 月收費為例費用高低差異 3 倍多(美金 5.47 元與 1.55 元)。

C. 歐盟：以 2009 年 7 月於國外發話接費率上限每分鐘(不含稅)分別為歐元 0.43 元與 0.19 元，2010 年 7 月降至歐元 0.39 元與 0.15 元，2011 年 7 月降至歐元 0.35 元與 0.11 元。

D. 實際恐怖帳單案例：

a. 澳洲最近案例為消費者到歐 3 個月，收到 8 萬 8 仟元帳單，事前未有任何警告提醒。

b. 澳洲消費者保護機關表示消費者須要被提醒有關費用。

E. 歐盟主張：

a. 2007 年歐盟管理漫遊收費，採用批發與零售價格上限作法，包含增加透明度措施。

b. 2009 年歐盟修正規管，以降低語音費率，進而訊息及數據服務，引用一種新的設計避免所謂帳單震撼的系統提供數據漫遊服務每月上限 50 歐元。

c. 儘管這些舉措對零售價格尚未急速降至相近規管的批發價格，且有趨於集結最高價格上限附近，正引導至委員會建議市場未大到足以提供消費者最好選擇甚至較好價格。

d. 歐盟於 2015 年消除漫遊與國內資費差異之目標，委員會正考慮進一步規管，以嚐試對於漫遊服務創造競爭市場。

e. 電信公司預告過度管理很可能降低大規模投資，並對未來競爭與創新造成負面影響。

F. 消費者認知：

a. 首要策略是注意改進消費者認知 IMR 收費。

b. 於廣泛帳單震撼後檢討建立行動高資費服務要點規範。

c. 消費者保護包括：

(a) 對於撥打前提供清楚的費用及訊息之廣告原則。

(b) 雙重確認－以確保為所要之服務。

(c) 帳單周期期間花費 30 元告警及停用選擇。

(d) 30 天帳單提醒費用及停用功能。

G. 規管選擇：

a. 主管機關可用工具：

(a) 行動業者須報告主管機關有關價格及退費事例。

(b) 行動業者自動約定使得主管機關可比較價格，以顯示提供服務所收費用反映合理成本。

b. 強制約定：

(a) 價格區間－業者將告訴主管機關對其顧客區間為何。

(b) 歐洲經驗顯示多數業者收取的費用剛好在上限最大值之下。

H. 結論：當行動裝置成長增加，國際漫遊需要解決方案，否則，創新與事業效率將要折衷妥協。

3. 會議討論：隨後與會代表就報告內容相關議題進行討論。

4. 研討會結語：分組召集人日籍 Mr. Shoji MIHARA 致詞感謝大家的參與及報告人分享寶貴經驗。

(四) 基礎設施共享以促進寬頻接取研討會

本研討會係於 TEL41 會議通過之 DSG 及 LSG 聯合計畫，提案經濟體為中國，共同提案經濟包括：香港、越南、菲律賓、加拿大、新加坡、馬來西亞及我國。計畫主持人為庾志成。

研討會分別於 3 月 28 日下午及 3 月 29 日上午舉行，與會者將近 70 位，包含 11 位分別來自 7 個經濟體的講者。

本研討會主要的目的在提供一個平台供各經濟體討論基礎設施共享的相關議題，包括政策制定、實際運作、技術問題、成本效益等等，並分享彼此的經驗。

研討會分為開幕式及二場專題討論議程，並分別由庾志成先生、Eric Tsang 先生以及 Lawrence Kwan 先生擔任主持人。TEL 主席劉子平先生及 DSG 召集人 Sudaporn Vimolseth 女士及 LSG 召集人 Shoji Mihara 先生分別於開幕式致詞。

會議首先由來自 Telecommunication Science & Technology Information Institute 的 ZHANG Yanbin 先生報告本計畫所做的問卷調查結果，共有 9 個經濟體填寫問卷，包括新加坡、香港、我國、加拿大、泰國、汶萊、澳洲、日本及中國。多數經濟體認為基礎設施共享可以節省網路建置及

維護成本，也可以保護環境及避免資源浪費，並加強寬頻接取率、減少數位落差。有些經濟體認為基礎設施共享是解決新進業者瓶頸設施的重要手段。本問卷同時也探討監理政策、基礎設施共享模式、經濟及社會上的利益。

在 28 日下午的會議中，來自中國、新加坡、日本及泰國的專家介紹各自在基礎設施共享及寬頻發展的實際經驗：

1. 中國：電信基礎設施共享主要的目的在環境保護及節省資源，以避免重複建設並加速寬頻網路涵蓋率及接取率。中國並做了許多努力來推動基礎設施共享，例如規定共享的範圍和設備、建立評估機制，以及各種支援方案。目前電信基礎設施共享已取得許多進展，但也仍然存在一些問題，中國會持續推動基礎設施共享並解決面臨的問題。
2. 新加坡：基礎設施共享政策由資通訊發展局(IDA)、都市更新局(URA)，以及運輸局(LTA)所訂定。IDA 規定所有關鍵基礎設施必須共享，而 URA 規定行動通信業者豎立的新發射塔必須共享。新加坡的 iN2015 計畫將建立全國性的資通訊基礎設施並提供互連。
3. 日本：基礎設施共享適用於固網及行動業者。透過光纖、共站、發射塔等設施共享，寬頻基礎建設快速發展，特別是在離島地區。日本還介紹了該國推動的「新寬頻高速公路」，其中基礎設施共享扮演了重要的角色。
4. 泰國：從 1990 年代開始，泰國政府即要求業者共享管線、發射塔、地下傳輸系統到基地臺等設施。業者如果要在建築物設立新的發射天線，必須先和其他業者合組一個團隊並經過協商才能設立。政府並和六個業者簽訂 MOU 來推動基礎設施共享。

在 29 日上午的議程，則有來自香港、馬來西亞、越南及中國的專家共同討論基礎設施共享的技術議題及政策挑戰：

1. 香港：講者介紹香港的基礎設施共享政策，例如二類互連(即 LLU)、建築物內電信系統、整合廣播系統、廣播站，以及首次展示的基礎設施共享設備。講者同時說明這些政策的優、缺點。
2. 馬來西亞：基礎設施共享政策包括發射塔、數位串流 LLU、高速寬頻開放接取等。目前面臨的問題包括投資獎勵、市場結構、訂價、容量及技術可行性等。基礎設施共享將持續改進。
3. 越南：TRAN 先生說明越南面臨匯流趨勢的挑戰，包括寬頻網路及服務所需的龐大投資以及環保議題。政府和業者正研究相關的政策和理論，並發展基礎設施共享的法規系統和方法。
4. 中國：來自 BUPT 的馬揚教授介紹中國的一些基礎設施共享案例，並分析其機會與挑戰。他建議改進相關的法規及政策，以建立科學及合理的共享及爭端解決機制模式，來獲取更多的案例及經驗，俾能對相關議題在經濟、安全及適應力的平衡上多所考量。

在講者簡報之後，與會者熱烈討論相關議題。其中我國代表江技士易道向中國的馬教授提出有關北京市政府成立公營的基礎建設公司相關議題，惟馬教授並未正面回答。

最後，計畫主持人庾志成為研討會做總結，並感謝所有會議主持人、講者及與會者，研討會於 29 日中午結束。

(五) 產業圓桌會議

產業圓桌會議於 3 月 29 日上午舉行，分兩個議程並分別由 INTUG 協會的 Policy advisor Ms. Jane Smith 及 CATR(中國工信部電信研究院)的 Ms. Gong Xian 擔任主持人，約有 100 多位來自各經濟體代表參加。本次會議主題為「雲端運算(Cloud Computing)」，主要探討雲端運算的發展與

應用，技術與安全。總計有來自中國 Alibaba、法國 Alcatel-Lucent、日本 NRI、我國中華電信、美國 ISOC、香港 KPMG、中國華為、中國移動、NSI 中國分公司以及中國 Silk Road Telcom 等單位的專家學者，發表共 10 篇雲端運算相關研究報告。

中國 Alibaba 公司 Mr. Wang Jian 以「Cloud computing at aliyun.com」為題，強調該公司除了在目前 B2C 及 C2C 電子商務的發展外，對雲端運算新服務也非常重視，已成立新的事業部門積極拓展雲端創新服務。

法國 Alcatel-Lucent 中國分公司 Mr Michael Tadault 以「Telco cloud - communications providers and the cloud」為題，說明雲端運算技術及服務對於運營商的重要性。運營商可運用雲端技術，將原來以 connectivity 為主的服務擴展為全方位的雲端服務；從原來提供資料中心為主的 SLA，擴展為端對端的 SLA；運用網路資產優勢提供分散式雲服務以降低成本及提升對客戶的服務體驗。

日本 NRI 公司的 Dr. Makoto YOKOZAWA 以「Social and Economic Impact and Applications of Cloud Computing in Japan」為題，談到雲端運算的應用將會改變 ICT 產業的服務發展、社會經濟及 ICT 的產業結構。綠色雲端運算、安全雲端運算及雲端運算在日本 SME 及災難管理應用經驗等都涵蓋在其報告中。

我國中華電信鍾福貴先生以「How CHT Promotes Cloud Computing」為題，闡述台灣政府及產業在雲端運算產業的推動政策及實務。中華電信對於雲端服務的推動策略，提出發展四中心一平台的策略。目前提供服務包括 CRM、 CaaS、 Stass 等服務及未來一年內將提供之 Cloudbox、Cloud Antivirus 等等服務也都有概略的陳述。

美國 ISOC 組織 Rajneesh Singh 以「Building Confidence in the Cloud」為題，說明雲端運算是正快速演進的平台，不論是已開發國家或是開發中國家都表示宣稱要大力推動。他也提到雲端運算的一些問題例如資訊安全，政策訂定者應扮演的角色及如何建立發展信心。

KPMG 香港分公司 Mr. Edge Zarrella 針對「The State of the Nation - Cloud Computing in China」主題提出報告，主要強調雲端運算的趨勢及在中國的未來發展。其重點包括：

1. 美國 NIST 已對雲端運算提出定義，此定義雖未經標準正式核准，但卻為一般大眾所接受。
2. 中國的 IT 花費佔全世界 6.7%，許多雲端運算主要業者都已在中國積極推動雲端運算解決方案。
3. 採用雲端運算技術及解決方案目前仍有風險及阻礙, 但是主要問題已經有解決方案不斷被提出。
4. 雲端運算不只是策略或方法論，它是一種工具，企業在建置前需要做好相關評估。
5. 雲端運算與傳統委外服務各具有不同功能，客戶應了解其特性差異，依需求評估選擇最佳建置方案。

中國移動 Mr. Sun Shaoling 針對「China Mobile’s Big Cloud Project」主題，陳述行動互聯網發展快速，近年來每年成長超過 40%，雲端運算的大量運算、儲存能力、資源分享及較低能源消耗等特性，可有效解決行動互聯網所面臨的問題。中國移動的「Big Cloud」推動策略及實務也都概略描述。

華為公司的 Mr. Ron Raffensberger 針對 Building a Carrier-grade Cloud 主題提出報告。電信運營商對於雲端運算的主要定位是利用此技術提供新服務以增裕營收。但是如何在目前的電信網路上選擇適當的雲端運算

架構，能滿足可靠、彈性及開放等特性是重要的議題。本文對於電信運營商擬利用雲端運算技術提供新服務，提出幾個評估的參考準則。

Nokia-Siemens Networks 的 Mr. Daniel Tsen 針對「Telecom Cloud Computing-business grow opportunity」主題提出報告。強調雲端運算可為運營商帶來許多效益及新商機。包括經由雲端運算可有效降低電信服務的 OpEx 及 CapEx；雲端運算帶來許多新的服務可增加營收；經由私密、安全及品質保證的服務以提供差異化服務。另外運營商扮演 CSP(Cloud Service Provider)角色,亦可有效降低目前 Over the top 服務被 Bypass 的問題。

中國 SILK ROAD TELECOMMUNICATION 公司的 Mr. Justin Mallen 針對「Mobile Apps and mobile Cloud Corporate Solutions」提出報告。強調 mobile cloud 已成為趨勢。主要原因包括：1、在雲端相較於手機端具有更佳處理能力；2、 HTML5 提供資料快取功能降低下載需求；3、行動雲端運算提供 24 小時多點協同合作，增加企業的移動功能。未來行動雲端通信將提供企業更具生產力及協同合作功能。並強調該公司已開發出雲端運算技術為基礎的 unified services communication platform 可提供企業更強大且便宜的解決方案。

參、心得及建議

一、 我國刻正進行之「數位匯流發展方案」及「數位轉換」政策，應可賡續就政策執行現況及階段性目標之完成度，與其他經濟體交流分享，並伺機汲取美加日澳等先進國家發展經驗作為我施政參考。

二、 由於日本頃於 2011 年 3 月發生大地震，隨之而來的海嘯亦引發核能發電廠輻射汙染，更突顯全球性防災意識。因此，災害防治相關議題將是未來 TEL 重點推動工作。

三、 由於下屆 TEL 44 有舉辦有關網路犯罪執法方面之研討會，建議我國相關業管單位能積極參與，以吸取相關經驗。

四、 建議我國各相關單位參考國內發展情況與「TEL 發展策略」所揭櫫之 APEC 區域 2011-2015 年發展重點，積極參與 TEL 各項活動及提案。

五、 本次會議係於中國大陸杭州市舉辦，當地海關人員曾要求我國代表團以不同於兩岸官員赴對方出席 APEC 會議之出入境慣例方式入境。建議外交部嗣後與中國大陸 APEC 資深官員窗口連絡我國代表團入境事宜時，應請對方充分確認其海關人員已充分瞭解該慣例。

肆、附件

我國及其他重要國家之國情報告。

APEC TEL 43
Regulatory and Policy Update
Chinese Taipei

March 2011

I. Market Status: The penetration of mobile service reaches 120% with substantial growth. The number of mobile internet access subscriber plateaus at 19.49 million, accounting for 70% of the total number of mobile communication service subscribers.

Year on year, the number of mobile telephone service subscribers in Chinese Taipei in 2010 increased by 880,000 attaining a peak of 27.84 million. The penetration of mobile communications reached the 120% mark, which means there are 120 cell phone numbers for every 100 people, more than the 117 of the year previously. On top of that, 3G subscribers make up 67 percent of the total number of subscribers. The total number of subscribers capable of accessing the Internet through mobile service reached 19.49 million, accounting for 70% of the subscribers of mobile service. Evidently, Internet access via mobile service has become a part of daily life.

As telecommunication service providers actively promote 3G service, the penetration of mobile communications continues to climb to new heights, especially after the rearrangement of mobile telephone number distribution. Penetration already reached 110% in 2008, expanded to 117% in 2009, and swelled further to 120% in 2010. Incidentally, statistics of the ITU indicate that the number of economies with a penetration of greater than 100% grew from 65 in 2008 to 81 in 2009, clearly suggesting a booming global mobile service market.

With the rapid growth of 3G, the total number of subscribers of mobile Internet access service (including WAP, GPRS, PHS and 3G) reached 19.49 million, which equates to 70% of the total number of mobile communication service subscribers, a rise from the 67.5% in 2009. 2010

also saw more than 6.5 billion text messages (SMS) sent, 800 million more than 2009, averaging at 19.4 messages per mobile phone number per month. Looking at the percentage of Internet access via mobile service in the total revenue of mobile services shows an increase from 6.6% in 2008 to 8.0% in 2009, finally reaching 18.6% in 2010. This is indicative of the rapid growth of Internet access via mobile service.

II. New Services

1. The first two months of WIN e-Portal

Just like the real world, different competent authorities are responsible for handling issues in their jurisdiction. However, a unified competent authority for Internet management has yet to be developed. When in doubt of the safety of contents online, people usually do not know who to talk to or may go to the wrong authority. To help the public deal with Internet safety issues, NCC established the WIN e-Portal on August 2, 2010 to receive complaints. When people come across contents online involving pornography, violence, or other content harmful to children, the WIN e-Portal (http://www.win.org.tw) is ready to receive, evaluate, and verify complaints. In its first two months of operation, the portal received 729 complaints: 305 in August and 424 in September.

On October 8, 2010, the National Communications Commission (NCC) published its first performance report of the WIN e-Portal two months after its establishment. The report showed that online contents that drew the most concerns and complaints from the public were about pornography and crime. Since the aim of the WIN e-Portal is to receive and efficiently deal with complaints about inappropriate contents on the Internet, most cases are responded to or processed completely within 7 days, and as a result surveys indicate that the public is 95 percent satisfied with the service the portal has provided.

The portal provides a valuable means to understand what kinds of inappropriate content the public is most concerned about as they explore online. Most complaints were about pornography, accounting for 54% of all cases, far more than that of crime (19%), inappropriate commercials on Internet TV (15%), and others.

When a complaint is received, the WIN e-Portal first screens the case and notifies the competent authority and the service provider. There were 243 cases of inappropriate contents being removed or applicable protection provided, accounting for 33% of all cases. Evidently, the Portal has efficiently been achieving its objectives.

Turning to the efficiency of WIN e-Portal in handling complaints, the performance report showed that approximately 93% of cases were responded to or processed completely within 7 days with an average of 2.5 days of processing. The satisfaction survey carried out on people who have submitted a complaint via WIN e-Portal shows that 55% of these people filled out the survey questionnaire and 95% of those were happy about the service provided.

To ensure that public concerns about the safety of Internet content are responded to as soon as possible, the status of processing is published at regular intervals; also the NCC will continue to actively promote the WIN e-Portal. In addition to gaining more support from other government agencies for the operation of this portal, NCC aims to reach out to more people and explain how this portal works and how to take advantage of the service in order to establish a safer and healthier online environment.

2. **The "1991 safety voice message hotline" was established to allow people to leave and listen to voice messages declaring their safety and redirect the communication demands to disaster areas.**

On September 1, 2010, NCC approved the special service number "1991 safety voice message hotline" established by the National Fire Agency, Ministry of the Interior. The National Fire Agency (NFA) discovered that when a major disaster strikes, a tsunami wave of incoming phone calls comes, most of which are people trying to make contact with their loved ones in the disaster areas, often creating a gridlock of communications network.

The hotline has been designed to give interactive voice directions in both Chinese and English to help people leave and listen to their messages, a service completely different from that of "110" and "119"(Emergency Telephone). When a disaster occurs, the people in disaster areas may dial "1991" and leave a message of safety through Fixed Telecommunications, mobile phone or Public Pay-phone, and those who have relatives or friends living in any of the disaster areas may listen to the messages exactly in the same manner, which is an effective way to redirect communications demands to the disaster areas. Currently, the hotline requires a service charge.

III. Amendments to Regulations

1. On October 20 2010, NCC promulgated the "Regulations for the Management of Establishment of the Base Stations for the Mobile Communication Network" ("Base Station Regulations" for short); the management of base stations in Chinese Taipei enters a new era.

In light of the latest technical development of base stations and the demands for base station type management, NCC has been actively looking to improve the framework of base station management by proposing the "Regulations for the Management of Establishment of the Base Stations for the Mobile Communication Network." These regulations are different than their previous counterparts in three ways: (1) existing base stations are categorized into indoor and outdoor stations, and a new type of Femtocell access point has been

added. With this new categorization, the management of base stations will be able to handle current and future needs; (2) permission to establish Femtocell access points has been specified to accelerate widespread establishment of this domestic low-power wireless access equipment; and (3) service providers are required to submit the application package for the permit of establishing new outdoor base stations to NCC and concurrently to have a copy being sent to inform the local governments.

Previous base station management specified requirements based on different types of mobile service. The new base station regulations not only incorporate the management principle of the predecessors, but also aim to improve administration performance by taking care of practical needs and responding to advances in technical development. Furthermore, the regulations encourage service providers to beautify and integrate base stations with their surroundings, creating a better perception of base stations for the public and creating a wireless environment that has "no blind spot for communications and no obstacle visually."

2. Amendments made to telecommunications-related acts and regulations to prevent telephone fraud.

To protect the public and prevent telephone fraud (from telecommunications systems), NCC resolved five draft amendments on November 3 2010: Article 32-1 of the "Regulations for Administration Fixed Network Telecommunications Businesses," Article 38 of the "Administrative Regulations governing 1900MHz Digital Low-Tier Cordless Telephone Business," Article 57 of the "Regulations Governing Mobile Telecommunications Business," Article 41 of the "Regulations Governing the Third Generation Mobile Telecommunications Service," and Article 39 of "Regulations on Wireless Broadband Access Services."

Supervision and administration of inspection of the telecommunications network has been intensified for more effective control of fraud. With the amendment of the above mentioned regulations, the NCC is empowered to announces the items and the date of inspection, and service providers are required to re-apply for inspection. If failed, the provider may be asked to improve within a given deadline or restrict its use in order to protect communications security.

IV. ADOC 2.0

With the collaboration of Chunghwa Telecom and Tamkang University, Chinese Taipei established the ADOC 2.0 - APEC Digital Opportunity Center, the remote working center for the Visually Impaired, in June, 2009. This center makes use of the computer-aided system developed by Chunghwa Telecom to help the visually impaired engage in telephone interview work. This center responds to Chinese Taipei's governmental policy of increasing the proportion of disabled workers employment and providing new employment opportunities for the visually impaired.

Developed to the standards of an export model, Chinese Taipei has been able to share this model with other economies. In October, 2009, the first overseas ADOC 2.0 Digital Opportunity Center for the Visually Impaired was officially launched in Quezon, the Philippines with all the software, hardware, educational training and manpower engagement setup in place at once. It was highly praised by local officials and media. In addition, the establishment of the Beijing Digital Opportunity Center for the Visually Impaired was completed in October, 2010. The aim is that these centers will create more job opportunities for the visually impaired in the future.

V. E-Governance

In October 2010, Chinese Taipei finalized the plan of the 4th Stage E-Government Program. Succeeding the 3rd Stage E-Government Program (2008 ~ 2011), the new program will be implemented from 2012

to 2016. The vision - “service beyond boundaries and quality above the living standard” - has the following three major goals:

- Civil Equality: offering the best practices
- Operation Efficiency: utilizing green technology
- Policy Equity: facilitating public participation

To achieve these goals, Chinese Taipei will initiate six flagship projects: Pro-active e-Services, Portable e-Government, Database Expansion, Public Cloud Service, Participating Social Network, and Last Neighborhood e-Service Delivery.

In addition, Chinese Taipei has actively promoted the Port Automatic Management System. Currently, Kaohsiung Port Authority has completed “Automatic Gate Control System” of Terminals 1-6, which includes "Image Recognition System" as well as "RFID Driver & Vehicle Data Retrieving System". Those systems have so far operated very well. Statistics of December 2010, showed that approximately 25,000 vehicles daily were passing through the automatic gates, the passing time has decreased from 3-5 minutes down to 10 seconds, which in turn substantially improves vehicle inspection and reduces traffic congestion at access gates.

VI. PKI and E-Authentication Advancement

Chinese Taipei has been committed to promoting Public Key Infrastructure since 2003, which has resulted in abundant accomplishments. Until now, around 1 million business digital certificates have been issued by the government, and over 230 million G2B transactions and 18 million B2B transactions have been made. Also 2.15 million citizen digital certificates have been issued, 1,903 service items, 157 online e-government applications have been created to serve the public, and there have been more than 68 million transactions. In addition, with PKI, more than 1.4 million internet banking and e-stock users are now securely trading in Chinese Taipei.

As the computing power and advances of cryptanalysis technique increase rapidly, the strength of the currently-used RSA with 1024-bit key length and SHA-1 hash algorithm may become insufficient. Chinese Taipei government and certificate service providers have made ongoing efforts to increase key length of certificate subscribers of its Government PKI (GPKI) and began assessing replacements with more secure hash algorithms. Among the five subordinate Certification Authorities (CAs), MOEACA, GCA, and XCA began to issue RSA IC cards with 2048-bit key length to their certificate subscribers in 2010 and stopped issuing 1024-bit certificates, while MOICA and HCA plan to begin issuing RSA IC cards with 2048-bit key length to their certificate subscribers on January 1, 2011. As for the migration to a more secure hash algorithm, due to the high ratio of operating systems and browsers not supporting SHA-2 series hash algorithms and while the strength of SHA-1 hash algorithm is still acceptable, Chinese Taipei government GPKI plans to migrate to SHA-2 series hash algorithms or AHS hash algorithm between 2013 to 2015.

Policy and Regulatory Update Japan

30 March, 2011

Ministry of Internal Affairs
and
Communications

1

Ministry of Internal Affairs and Communications (MIC), JAPAN

Progress schedule of New Broadband Super Highway – HIKARI NO MICHI

Ultra High Speed Internet Access all around the Japan

Three pillars for promotion

① Promoting the development of infrastructure in the non service areas

② Telecom market competition

Six sub pillars

- Open to Access network for new operators
- Review of interconnection charges of optical fiver network
- Open for back-borne net work
- Review of Universal Services
- Adaption to the changing market environment

③ Regulation reform for use of ICT

Action

GOAL !!

Establishing new Law, Act.

The Year 2015

Wireless broadband

Next Generation Network

Restructuring and consolidation for Telecom business

Providing a universal service for IP telephone and realization of Universal Broadband Access

New market based regulation

Studying a blocking regulations of ICT usage

The basic policy of the 'New Broadband Super Highway' initiative (14 Dec, 2010)

1. The issues pointed out in the final report at the joint subcommittee will be dealt with as follows:

a. Regarding implementation of the functional separation, measures against the integrated management with the subsidiaries, etc. and making the scope of activities flexible, the specifications shall be clarified immediately and amendment of the related bill will be proposed to the next ordinary session of the Diet. - Partial amendment of the Telecommunications Business Act and the NTT Law.

b. The specific discussion of the review of the calculation methods for the interconnection charge for optical subscriber lines starting FY2011 shall be starting immediately in order to come out with a definite plan this fiscal year. This process will be conducted with the Ministry of Internal Affairs and Communications and NTT to lower the charge.

c. To set up a definite plan within the next year, an arrangement shall be made immediately for the Ministry of Internal Affairs and Communications, telecommunications carriers and internet service providers, etc. to discuss issues related to unbundled functions/services of the Next Generation Network (NGN) and migration to the IP networks which should include implementation methods and responsibility for the cost.

The basic policy of the 'New Broadband Super Highway' initiative (14 Dec, 2010)

c. Regarding the transfer cost for the current spectrum users contributed by the wireless broadband operators, amendment of the related bill will be proposed to the next ordinary session of the Diet in order to establish the system with an idea of the auction. - Partial amendment of the Radio Law.

d. Regarding the new wireless system such as 4G (the fourth generation of cellular wireless systems), we need to arrange a discussion immediately about an auction system, which is used in foreign countries (try to get a conclusion to make amendment of the related bill in time before the transfer to the new wireless system begins).

The basic policy of the 'New Broadband Super Highway' initiative (14 Dec, 2010)

2. We will have comprehensive evaluations regarding effectiveness/appropriateness of the measures contained in the final report at the joint subcommittee as well as continuous annual checks, in terms of the following points of view, within the first 3 years of the implementation of the system:
   - ・Status of compliance with regulations at NTT EAST/WEST
   - ・Tendency of low price or market share, etc.
   - ・Status of effort regarding the 'New Broadband Super Highway' initiative, etc.

3. We need to discuss measures further for the 'New Broadband Super Highway' initiative if the initiative seems to not be progressing as judged by comprehensive evaluations. In particular, when the environment for fair competition is not ensured sufficiently, we need to discuss measures such as further openness of bottlenecked facilities, and strengthening firewall regulations including structural separation/separation of equity links to create the fair competition environment.

ıe goal of "New Broadband Super Highway Initiative" expected to be achieved by 2015!!

Japan would be achieving next generation high speed broadband access, before the goal of TELMIN8 declaration by 2020.

New Broadband Super Highway will promote

1. Develop ICT to promote new growth
2. Enhance socio-economic activities through the use of ICT
3. Promote a Safe and trusted ICT environment
4. Promote regional Economic Integration
5. Strengthen Cooperation in the ICT field

APEC TEL 43
Update[1] on Regulatory and Policy Developments
Hong Kong, China
(Position as at 30 March 2011)

A. Providing Spectrum for Enhancing Mobile Services

The Telecommunications Authority (TA) has just conducted an auction of radio spectrum in the 850 MHz, 900 MHz, and 2GHz bands in which 29.7 MHz of spectrum was made available for provision of public mobile telecommunications services. Five mobile network operators and one fixed network operator took part in the auction which lasted from 28 February to 3 March 2011. Upon completion of the auction, two operators have successfully bid for a total of 20 MHz of radio spectrum in the 850 MHz and 900 MHz bands respectively, at a total spectrum utilization fee (SUF) of HK$1.952 billion (US$250 million).

The TA has also announced his decision in March 2011 to release 90 MHz of spectrum in the 2.3 GHz band for provision of broadband wireless access services. The auction is expected to be held in the second half of 2011.

B. Broadcast-type Mobile TV Services

The Government promulgated a revised implementation framework for the deployment of broadcast-type mobile TV services in Hong Kong on 11 February 2010. Accordingly, one frequency multiplex of 8 MHz (678MHz – 686MHz, also known as Channel No. 47) in UHF Band would be released for the provision of broadcast-type mobile TV services. On the other hand, two frequency multiplexes of 1.5 MHz (216.160MHz – 217.696MHz and 217.872MHz – 219.408MHz) in Band III previously proposed for such services would be reserved for DAB development. The revised implementation framework is available at http://www.cedb.gov.hk/ctb/eng/legco/pdf/framework.pdf.

In June 2010, the Telecommunications Authority ("TA") assigned the

[1] The web sites of the Communications and Technology Branch of Commerce and Economic Development Bureau (CEDB) and the Office of the Telecommunications Authority (OFTA) provide more information on all the subjects covered in this Update. Their web addresses are www.cedb.gov.hk/ctb and www.ofta.gov.hk respectively.

frequency multiplex in the 678-686 MHz by way of auction at a bid price of HK$175 million. The successful bidder was granted a unified carrier licence with a term of 15 years in August 2010 for provision of the broadcast-type mobile TV service. The successful bidder should use at least 75% of its transmission capacity for delivery of mobile TV services. In addition, the successful bidder is required to roll out its network within 18 months from the grant of licence to cover at least 50% of the Hong Kong population. Transmitting stations will be set up on the hilltop broadcasting sites and facilities of existing terrestrial television broadcasters. The government will facilitate the site and facility sharing as necessary.

Regarding the regulation of mobile TV programming, the content of mobile TV should be subject to regulation by general laws but not the Broadcasting Ordinance (Cap. 562). To enable self-regulation, the industry is developing a code of practice on provision of mobile TV services. The code should include, among others, the requirement of conditional access with a view to protecting public morals and children.

As to the technical standards, the government will adopt a market-led and technology-neutral approach. The broadcast-type mobile TV operator will deploy the services based on the technical standard of its choice.

C. Industry Code of Practice for Telecommunications Service Contracts

With a view to protecting consumers' interest and addressing consumer complaints on contractual matters for communications services, OFTA issued a voluntary Code of Practice on the subject in February 2010. It aims to provide the industry with guidelines on drawing up of communications service contracts on a voluntary compliance basis.

The Communications Association of Hong Kong ("CAHK"), which is an industry association representing the telecommunications operators and other stakeholders of the telecommunications sector, has made reference to OFTA's Code of Practice and promulgated a self-regulatory Industry Code of Practice in December 2010 for telecommunications operators to follow. All the major fixed and mobile network operators and one major external telecommunications services operator (11 in total) have agreed to follow

the Industry Code and will implement the necessary measures from March to June 2011 for all new contracts in future.

The Industry Code has incorporated the key features of OFTA's Code of Practice and taken into account the actual business operating environment in the telecommunications sector. It represents an important step forward of the Hong Kong telecommunications industry to meet the needs and expectations of consumers and to address the complaints and disputes in relation to contractual matters.

D. Measures Implemented by Mobile Operators to Prevent Mobile Bill Shock

The emergence and increasing popularity of smart phones and advance mobile devices have boosted the demand for mobile data services. In tandem, the upsurge in the number of bill shock complaints related to mobile services has become a common problem in many economies, and Hong Kong is no exception. The term "mobile bill shock" refers to the shock customers experience when they receive unexpectedly high mobile bill charges.

Concerned with the increasing number of complaints relating to mobile bill shock, some caused by unintentional or inadvertent use of mobile data services, OFTA has in May 2010 written to urge all mobile operators to adopt various measures to address the problem. These measures include allowing customers to opt-out of individual services; setting a charge ceiling; setting a usage cap for all kinds of usage-based mobile services; and alerting customers through short messages as their pre-determined usage threshold is reached.

OFTA is encouraged to note that majority of the mobile operators have already implemented to differing degrees a combination of the above measures to prevent bill shock.

To increase the transparency of service information and to enhance consumer awareness of mobile data usage, OFTA has published for public information on its website the measures adopted by individual operators to address mobile bill shock. The information will be updated periodically upon advice by mobile operators on new or enhanced initiatives they have

taken on board. OFTA trusts that the information may help consumers make more informed choices on services that best suit their needs.

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Telwg43
PLEN/E

Agenda item: Plenary

Submitted by:

Australia

Australia's Regulatory Update

APEC Telecommunications and Information Working Group
43rd Meeting | March to 1 April 2011 Hangzhou, China

Please note: This document is not an official APEC document until approved by the Telecommunications and Information Working Group. This version is a draft provided for discussion purposes only.

APEC TEL 43 Working Group

27 March to April 2011 Hangzhou, China

CONTRIBUTION FROM AUSTRALIA

Plenary

Australia's Regulatory Update

Please find attached Australia's Regulatory Update.

Recommendation

It is recommended that the TEL note the Regulatory Update.

Contact: Mr Richard Brown

HIGHLIGHTS

National Broadband Network – Regulatory Issues

The Australian Government introduced legislation to govern the National Broadband Network company. It will introduce legislation to facilitate the deployment of fibre in new developments.

Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010

The Australian Government has legislated a package of fundamental reforms to existing telecommunications regulations in the interests of Australian consumers and businesses.

The Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010, passed in November 2010, aimed at enhancing competitive outcomes in the Australian telecommunications industry and strengthening consumer safeguards

The Act has three primary parts: addressing Telstra's vertical and horizontal integration; streamlining the access and anti-competitive conduct regimes; and strengthening consumer safeguard measures such as the Universal Service Obligation, the Customer Service Guarantee and the Priority Assistance arrangements for customers with life threatening conditions.

Digital Television Switchover

The Australian Government has announced a progressive, region-by-region switch to digital free-to-air television by 31 December 2013. Switchover occurred in Mildura/Sunraysia on 30 June 2010 and Regional South Australia on 15 December 2010. Switchover will occur in Regional Victoria in the first half of 2011 and in Regional Queensland in the second half of 2011. Regions in New South Wales will progressively switchover during the course of 2012. State capitals such as Sydney, Melbourne, and Adelaide will switch during 2013.

Survey results show that nationally, 6 in 10 Australian households are now converted to digital free-to-air television. In Mildura/Sunraysia, the number of households receiving free-to-air digital channels has reached 79%. In regional South Australia, the reported conversion level is 64%.

Other switchover measures to drive the transition to digital TV are as follows:

- The Government is funding a **new satellite digital television service** to provide the full range of digital free-to-air television channels to remote, regional and metropolitan viewers who are unable to receive adequate reception from the local digital terrestrial transmission facility;

- **Accreditation schemes and quality assurance audits** involving suppliers and retailers of digital TV equipment and antenna installers—to assist consumers make informed choices on switchover products and related services;
- **Household Assistance Scheme** - eligible households, such as recipients of full rate pensions, will receive a high definition set top box (including installation and demonstration services) and any necessary antenna and cabling work, if required.
- **A National and Localised information and communication campaign** to improve household awareness and understanding of switchover.

Cyber Security Awareness Raising

The Department of Broadband, Communications and the Digital Economy continues to implement its package of awareness initiatives to help home users, school students and small businesses strengthen their computer defences and improve their online behaviour. The annual National Cyber Security Awareness Week aims to help Australians understand cyber security risks and educate home and small business users about the simple steps they can take to protect themselves, their families and their businesses online.

National Cyber Security Awareness Week 2011 will be held from 30 May to 11 June. The Department, along with its partner Government agencies, industry and community organisations is planning a range of activities to be held around the country during the Week.

Digital Dividend

In June 2010, the Minister for Broadband, Communications and the Digital Economy announced the Australian Government's decision to release 126 megahertz of broadcasting spectrum as Australia's digital dividend. The government expects an auction of the spectrum to take place in late 2012, and for the spectrum to be available to successful bidders as soon as possible after the switch-off of analog television services is completed.

Radiocommunications Amendment Bill 2010

The Australian Government announced on 26 November 2010 important amendments to the *Radiocommunications Act 1992* to improve Australia's spectrum efficiency and management, while providing necessary investment certainty to industry. The amendments:

- Provided increased flexibility for the Australian Communications and Media Authority (ACMA) to when it may initiate renewal processes for expiring spectrum licences;
- Authorised the ACMA to allow for the co-existence of spectrum and class licences in the same spectrum allocation subject to public interest and interference mitigation provisions; and
- Streamlined the treatment of Ministerial determinations and directions for the renewal of spectrum licences.

DEVELOPMENTS DURING 2010-2011

National Broadband Network

A key element of the Australian Government's telecommunications policy is the rollout of a new high-speed National Broadband Network. The Australian Government recognises that access to high-speed broadband services is critical to Australia's future social and economic prosperity.
The new network will:

- provide all Australians with access to affordable high-speed broadband either via fibre-to-the-premises or next generation wireless and satellite technologies;
- be the Australian Government's largest infrastructure project;
- provide fibre optic transmission links connecting cities, major regional centres and rural towns;
- be Australia's first national wholesale-only, open access broadband network; and
- be built and operated on a commercial basis by a company established at arm's length from Government

Progress so far

NBN Co Corporate Plan
NBN CoLimited (NBN Co), the company established to build and operate the NBN, released its Corporate Plan on 20 December 2010. The Corporate Plan indicates that the total capital expenditure for the NBN is expected to be AU$35.9 billion, with the Australian Government expected to contribute AU$27.5 billion in equity for the rollout.

NBN Co expects to pass 1.7 million premises with its fibre, wireless and satellite networks by June 2013. It is estimated that 13 million premises will be covered by the end of the rollout (of which 8.5 million are forecast to have an active service).

NBN Co will offer a range of wholesale products and pricing providing retailers with maximum flexibility. NBN Co pricing plans include a wholesale access price for an entry level service of 12 megabits per second downstream/1 megabit per second upstream for AU$24 across all technologies. NBN Co will offer a uniform national wholesale price for services across its network.

Rollout in Tasmania
In August 2010, the first NBN services were officially launched in three Stage 1 communities in Tasmania. Stage 2 construction in another seven communities will start in the first half of 2011. Under Stage 3 another 90,000 premises will be connected across four communities. Regional Backbone Black Spots Program
The Government has engaged Nextgen Networks to roll out almost 6,000 kilometres of new fibre-optic backbone transmission links under the $250 million Regional Backbone Blackspots Program. This Program will improve the supply of backbone transmission links to regional centres where there is a lack of competitive backbone infrastructure. The six priority locations were identified following a public consultation process.

The backhaul links represent the first building blocks of the NBN on mainland Australia and are expected to benefit about 400,000 people in 100 regional locations and provide more than 1000 jobs.

As at end of February 2011 more than 4,000 kilometres of fibre optic backhaul links had been deployed across all routes.

First and second release sites
Construction of the fibre network is well advanced on the Australian mainland across five first release sites is four States.

Advanced planning is underway on the second mainland release sites, and construction will begin in the first half of 2011. The second release sites include 14 new locations, as well as extensions to the coverage footprints of the five initial sites.

The first and second release sites will test network design and construction methods and will provide crucial information to assist the NBN rollout.

Rural and regional prioritisation
On 7 September 2010 , in its 'Commitment to Regional Australia' document, the Government agreed to build the fibre network in regional areas as a priority, and to fast-track the introduction of wireless and satellite services so that regional Australia can get access to better broadband as soon as possible.

NBN Co announced on 17 February 2011 that it had acquired spectrum licences to enable the rollout of the fixed wireless network in regional and rural Australia, providing peak speeds of at least 12 megabits per second. NBN Co indicated in its Corporate Plan that it will commence construction of its fixed wireless network in December 2011 and services are to be available from mid-2012. NBN Co expects to have satellites in orbit from 2015, but intends on offering an interim satellite service from mid-2011.

Universal Service Obligation
A wholly government owned entity, provisionally referred to as USO Co, will be established to take responsibility for delivering most Universal Service Obligations (USO) relating to delivery of standard telephone services, payphones and emergency call handling from 1 July 2012. This will ensure that essential communications services are protected and assist the structural reform of the telecommunications industry. The existing USO arrangements will apply in the meantime.

Regulatory Issues

Fibre in New Developments

The Australian Government intends to introduce a Fibre Deployment Bill to amend the *Telecommunications Act 1997* to support the provision of future infrastructure in new developments. Its key objective is to have developers install fibre-ready passive infrastructure (pit and pipe) in new developments.

Other objectives are to enable carriers to access passive infrastructure owned by non-carriers and enable the Australian Communications and Media Authority (ACMA) to

make standards for customer premises equipment and customer cabling for use in connection with optical fibre and other superfast networks.

Regulatory framework for the National Broadband Network

On 25 November 2010, the Government introduced two bills into the Parliament to provide the regulatory framework for the NBN.

- The National Broadband Network Companies Bill 2010 (NBN Companies Bill) enshrines NBN Co's wholesale-only obligation, provides mechanisms for the eventual sale of NBN Co and its ownership, reporting and governance arrangements
- The Telecommunications Legislation Amendment (National Broadband Network—Access Arrangements) Bill 2010 (NBN Access Bill) provides for NBN Co's access arrangements, including transparency and non-discrimination requirements

Under the regulatory framework, NBN Co Limited will be subject to the existing telecommunications regulatory regime, as well as further obligations to ensure it stays true to its wholesale-only, open and equivalent access mandate, both now and into the future.

The NBN Access Bill also includes provisions to require other superfast access networks to offer a wholesale Layer 2 service on and open access basis. The Government has also announced that, from 1 January 2011, new optical fibre networks built for residential and small business purposes must be wholesale-only.

Regulatory Reforms to facilitate the roll-out of the National Broadband Network

In consultation with the NBN Co, industry and community, the Government is exploring practical legislative options that support the NBN rollout and give adequate weight to industry and community sensitivities and that consider 'on the ground' experience.

Regulatory reform

In November 2010, the Government achieved passage of the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Bill Act 2010* through Parliament to address the need for telecommunications regulatory reform and to promote the long term interests of end-users, without imposing unnecessary burdens on business.

Specifically, the legislation will:

- address Telstra's high level of integration to promote greater competition and consumer benefits;
- streamline the arrangements through which telecommunications providers access wholesale level services (declared services) under Part XIC of the *Competition and Consumer Act 2010* (CCA) (formerly the *Trade Practices Act 1974*;
- reform the arrangements in Part XIB of the TPA CCA so that the regulator can better address breaches of competition law; and

- protect consumers during the transition to the National Broadband Network by strengthening the enforcement of telecommunications consumer safeguards.

Details of the policy reform process are available at *www.dbcde.gov.au/nationalbroadbandnetwork*.

International Mobile Phone Roaming

The Department of Broadband, Communications and the Digital Economy is continuing to explore appropriate options to reduce international mobile roaming costs for consumers in a number of international fora including APEC TEL, ITU, OECD, APT and the WTO.

On 26 May 2010, the Australian and New Zealand Governments released a joint discussion paper on international mobile roaming between the two countries. The discussion paper made the preliminary conclusions that the transparency of roaming prices appears inadequate and roaming prices offered to consumers seem high.

The results of an ITU questionnaire on international mobile roaming were considered at an ITU meeting in Seoul in May 2010. The results of the questionnaire, which had significant Australian input, indicated that there were large variations in prices which were not consistent with competitive markets.

Regulation of mobile premium services

Mobile premium services are services which are used to pay for goods and services via a phone bill with common examples including ringtones, games, sporting results, music clips, chat services, reverse charge calling services and making donations to charities.

Mobile Premium Services Code review

Industry developed a Code with rules to regulate the advertising, costs, terms and conditions upon which premium SMS and MMS services could be made available to the public. The Code includes a number of safeguards including procedures for dealing with complaints involving minors, banning advertising direct to children and requiring a customer to provide two confirmations prior to purchase. Additionally, all content suppliers and aggregators (a party which facilitates the provision of content between a content supplier and carriage supplier) are required to include their name and contact details on a register. The ACMA registered the Code on 14 May 2009 allowing it to enforce the rules. The Code came into force on 1 July 2009.
The Code is being reviewed by a working group comprising industry and consumer representatives and will be released for public comment before being registered by the ACMA in mid 2011.

Premium SMS and MMS barring

On 5 March 2010 the ACMA made a service provider determination requiring all mobile carriage suppliers to provide information to their customers about barring and to be able to offer premium SMS and MMS barring to all of their customers from 1 July 2010. The Determination allows parents to prevent their child's mobile phone

from receiving such services and employers are able to prevent their staff from accessing such services on their work mobile phones.

Do not contract and do not bill determination

On 28 July 2010 the ACMA made another service provider determination requiring all mobile carriage suppliers and aggregators not to contract with content suppliers not included on the industry register. This requirement which commenced on 5 August 2010 supports a rule in the industry code requiring all content suppliers to be included on an industry register before providing services to the public.

The determination also provides for the ACMA from 4 November 2010 to issue an interim do not bill order to stop content suppliers from charging customers for a period of 60 days while it investigates a service. Such an order would be issued in circumstances where disadvantaged or vulnerable customers may suffer significant detriment or a substantial number of customers may suffer immediate financial detriment.

Where after an investigation a content supplier has been found to have breached the industry code and acted in a way that is significantly detrimental to the interests of customers, the ACMA may issue a do not bill order for a period up to three years.

Review of Management and Protection of Submarine Cables

In 2010, the Australian Communications and Media Authority (ACMA) completed a review of the operation of the submarine cable protection regime established under Schedule 3A to the Telecommunications Act 1997 (Schedule 3A). The Report on the operation of the submarine cable protection regime (the Report) was submitted to the Minister for Broadband, Communications and the Digital Economy Senator Stephen Conroy on 20 September 2010 and tabled in both houses of Parliament on 18 November as required by clause 89 of Schedule 3A.

Schedule 3A provides for the ACMA to declare submarine cable protection zones over cables of national significance and to grant permits to install submarine cables in protection zones in Australian waters. Certain activities are restricted or prohibited in these zones.

The report concludes that the regime is working efficiently and has met its policy objectives. The Report also identified several improvements that could be made to the operation of Schedule 3A. Six recommendations were made to improve the regime including compliance monitoring in protection zones, better alignment of Schedule 3A with the UN Convention on the Law of the Sea, and possibly extending the regime to cover submarine cables that are entirely within Australian waters. Some of these recommendations require legislative amendments. The report is being considered by Government and will consult with stakeholders on next steps.

The report can be viewed at:
http://www.acma.gov.au/WEB/STANDARD/pc=PC_311993

The Report of on it was tabled in Parliament on 18 November 2010.

Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010

The Australian Government has legislated fundamental reforms to existing telecommunications regulations in the interests of Australian consumers and businesses. These reforms are aimed at driving future growth, productivity and innovation across all sectors of the economy. *Addressing Telstra's vertical and horizontal integration*

The reforms facilitate Telstra voluntarily to submitting an enforceable undertaking to the Australian Competition and Consumer Commission to structurally separate. If Telstra chooses not to structurally separate, the legislation provides for the Government to impose a strong functional separation framework on Telstra The legislation The reforms promote competition across telecommunications platforms while allowing Telstra the flexibility to choose its future path. The Act also provides a mechanism for the Minister, by legislative instrument, to prevent Telstra from acquiring specified bands of spectrum which could be used for advanced wireless broadband services.

Such an instrument would not apply if Telstra's structural separation arrangements are in place and Telstra has divested its interest in cable networks and subscription broadcasting licenses or the Minister has exempted Telstra from the requirement to make such divestments.

Reforms to the Competition Regime

The legislation reforms streamline the arrangements in Part XIC of the Competition and Consumer Act 2010 (CCA) which allow parties to access regulated services. This does away with the negotiate-arbitrate model which was clearly ineffective. Instead the ACCC will determine up-front terms and conditions for a three to five year period, following consultation with industry;

- the ACCC can determine principles to apply for longer periods; and
- the ACCC can make binding rules of conduct to immediately address problems with the supply of regulated wholesale services

The legislation reforms the arrangements in Part XIB of the TPA so that the ACCC can address breaches of competition law and conduct damaging to the market. The ACCC will no longer have to consult with a party before issuing a competition notice; a process previously prone to delay and obstruction.

Strengthening consumer safeguards

The regulatory reforms will allow Australia to strengthen consumer protection measures such as the Universal Service Obligation (USO) for voice and payphones, the Consumer Service Guarantee (CSG) and provide enhanced enforcement powers to the regulator, the ACMA. This will ensure that the consumer safeguards framework is robust, current service quality is maintained, and consumer access to basic voice services is protected as the industry adjusts to the development of the National Broadband Network.

The Government will also establish a new entity to take over the provision of universal service of a standard telephone service from Telstra, which is currently the primary universal service provider. More details can be found at: www.dbcde.gov.au/broadband/national_broadband_network/universal_service_policy.

Removal of Unnecessary Red Tape

In 2010, the ACMA took the first step in reducing red tape by reducing Telstra's record keeping and reporting requirements for PA.

The legislation includes measures to repeal unnecessary accounting and operational separation requirements once functional separation is in place or Telstra has submitted an enforceable undertaking to structurally separate that is acceptable to the ACCC.

Telstra Retail Price Control Review

Retail price controls apply only to Telstra fixed-line services, including connection fees, line rentals, local calls, trunk and international calls. They also impose various other pricing requirements on Telstra, such as the capping of untimed local call charges and uniform pricing of a basic line rental product throughout Australia.

The price controls have been extended to 30 June 2012. The Government has announced that a review of the controls will be conducted during 2011.

ACCC Access Pricing

In March 2011 the ACCC issued Interim Access Determinations covering price and non-price terms for fixed-line services using the new powers conferred on it by the *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010*.

The Commission has set an average price of $AU16 per month for unconditioned local loop services across the three most populous geographic areas or bands, which previously ranged between $AU6.60 and $AU31.30. This foreshadows the move to nationally averaged prices under the NBN.

Wholesale line rental pricing falls from $AU25.57 per month for residential customers to $AU22.10, while the line sharing service has gone from $AU2.50 to $AU1.80. Local call tariffs fall from 17 cents to 9.1 cents per call.

The Interim Determinations are backdated to 1 January 2011 and will continue for 12 months, during which time the ACCC will conduct a public consultation before issuing its Final Access Determinations.

Emergency Call Service

New Emergency Call Service Determination

In December 2009, the ACMA made a new Emergency Call Service Determination, which governs how telecommunications providers receive, handle and transfer emergency calls. While core obligations from the previous 2002 Determination largely remain, the new Determination introduces a number of important improvements that take into account technological change, especially from increasing IP-based telephony.

The key changes in the new Determination include:

- New obligations on the providers of Voice over Internet Protocol (VoIP) 'Out Only' services requiring them either to provide access to the primary emergency number, Triple Zero (000), or, if they are unable to do so, to clearly inform their customers that such access is not available.
- Revised customer information provisions to align obligations on mobile communication providers with those that already exist for other types of service providers.
- Additional requirements aimed at minimising the number of non-genuine calls to Triple Zero from mobile phones, which take into account recent industry initiatives.
- Making the call answering standards for the text (TTY) emergency call service number, 106, compatible with the standards for voice calls.

The new Determination follows an extensive review of the existing regulatory arrangements, which was initiated in 2008. The ACMA consulted with representatives from the telecommunications industry, emergency service organisations and consumers in developing the revised Determination.

A copy of the *Telecommunications (Emergency Call Service) Determination 2009* (http://www.comlaw.gov.au/ComLaw/Legislation/LegislativeInstrument1.nsf/all/search/015C1C68253945BECA25769400061B5C) is available on the Commonwealth of Australia Law website.

ACMA study into improved mobile location information for the emergency call service

The ACMA has recently completed a study into whether there is an appropriate and consistent mobile location solution for Australia's emergency call service that can cost effectively meet demonstrated needs. The study focused on identifying solutions that would improve outcomes for citizens who are unable to communicate their location accurately when calling the emergency call service from a mobile phone.

Recognising carrier innovation in mobile location-based functionality, the study found that:

- the accuracy of mobile location information available to emergency service organisations could be significantly improved; and
- action should be taken by the ACMA to exploit these developments for the benefit of the emergency call service.

The ACMA will be publically consulting on the development of new regulatory requirements to give effect to the outcomes of the study in 2010.

The ACMA's 2010 *Mobile location information - Location assisted response alternatives* report is available on the ACMA's website at www.acma.gov.au.

New rules for locating mobile calls to Triple Zero

In January 2011, the Australian Communications and Media Authority (ACMA) introduced new rules requiring mobile carriers to provide emergency service organisations (ESOs) with the most precise mobile phone location information available for emergency calls made in situations where a Triple Zero caller is unable to verbally report their location.

Mobile phones now account for around 63 per cent of calls made to Triple Zero. Unlike fixed landline phones, emergency calls from mobile phones do not automatically give ESOs accurate details about a caller's whereabouts.

This is not an issue for the vast majority of mobile calls made to Triple Zero because, in most cases, the caller can tell the emergency operator where they are located, including where the emergency is at the subscriber's address. But there are times—estimated at less than one percent of calls—when people are too distressed or unfamiliar with their environment to report their location. In these cases access to enhanced location information will assist emergency services organisations to locate callers.

The new Determination requires mobile carriers to:

- provide the most precise location information they have available on request from an emergency service organisation
- resolve emergency call location queries with the highest possible priority
- ensure emergency service organisations are provided with a designated contact point and telephone number for location queries, or have a dedicated process for location queries
- assist an emergency service organisation to identify the relevant mobile network carrying the emergency call.

The *Telecommunications (Emergency Call Service) Amendment Determination 2011 (No. 1)* will commence on 20 April 2011. This will allow carriers time to trial their systems before making the enhanced capability available to all emergency service organisations.

The new rules were made after consultation with mobile carriers, the Emergency Call Person (Telstra) and ESOs, and have the support of all groups as an important step in

improving the delivery of mobile location information to enhance the emergency call service.

In addition, the ACMA is continuing to explore with industry and ESOs the potential automatic provision of enhanced mobile location with every emergency call.

Voice Over Internet Protocol (VoIP)

Over the course of 2010 the ACMA intends to examine a range of emerging numbering issues to inform the ACMA's approach to the allocation of telephone numbers under the Numbering Plan and regulation of numbering administrative arrangements.

Numbering Work Program

Over the course of 2010-11the ACMA is examining a range of aspects of Australia's telephone numbering arrangements. The first consultation paper in the numbering work program Structure of Australia's Numbering Plan, was released in October 2010. The paper set out the role that numbers have, and are likely to have for the foreseeable future within communication networks. It outlined the evolution of the Numbering Plan and provided an overview of some of the technology, service and user pressures on the structure of the plan. Both papers and the submissions received are available on the ACMA's website http://www.acma.gov.au/WEB/STANDARD/pc=PC_312339.

The second consultation paper, Customer location information and numbering data was released in January 2011. The paper examined the different attributes of numbers and how the information they convey is currently used by communication users, service providers and other organisations. The final two consultation papers are intended to examine the role that numbers have in industry taxation and charging information and the information in numbers utilised by end users. These are both expected to be released in early 2011.

At the conclusion of the consultations, the ACMA will publish a directions paper that examines the issues raised and identifies changes that may be needed to improve the efficiency and effectiveness of the Numbering Plan and related numbering arrangements.

Cyber Security

The Australian Government has put in place a range of initiatives to raise the cyber security awareness of home and small business users. The Government recognises that the security of home users and small business is not only important in protecting their personal and financial information online, it is also a key line of defence in securing critical infrastructure and government networks.

Australian Government has developed strong partnerships with industry and community groups for its cyber security awareness efforts. The Government's key initiatives are:

Annual National Cyber Security Awareness Week

The annual National Cyber Security Awareness Week aims to help Australians understand the risks and to educate home users and small businesses about the simple steps they can take to protect themselves, their families and businesses online. The 2010 National Cyber Security Awareness Week was held from 6 to 11 June2010. The Australian Government partnered with around 150 public and private sector organisations to hold numerous events around the country. The overall theme of the week was: 'Protect Yourself Online', which focussed on the growing number of devices Australians use to access the Internet and the need to exercise continual vigilance in protecting personal and financial information in this environment. The Week also involved the launch of the iCode, a voluntary security code of practice for ISPs which took effect from 1 December 2010. Planning for the 2011 National Cyber Security Awareness Week (to be held from June 5-10) is underway.

During the 2010 National Cyber Security Awareness Week, the ACMA launched a computer security themed episode of the animated cybersafety education series, *Hector's World*. It is anticipated that during the 2011 Week the ACMA will launch *NetBasics*, a series of animations designed to educate children on the fundamentals of computer security.

Stay Smart Online website

The Stay Smart Online website (www.staysmartonline.gov.au) is a key element of the Australian Government's Cyber Security awareness raising initiatives. The website provides information for online users on security issues and the simple measures they can adopt to use the internet in a secure and confident manner. Resources on the website include a small business self assessment tool, quizzes and videos.

Stay Smart Online Alert Service

The Stay Smart Online Alert Service provides information in plain language on the latest security threats and vulnerabilities and possible solutions to address them. This free subscription based service is delivered through the Government's Stay Smart Online website.

Education Package

The Australian Government has developed an Education Package, which aims to provide children with the skills and knowledge necessary to protect themselves online. The package consists of separate modules for students in years three and nine. The modules are interactive and self learning available from the Stay Smart Online website or via CD Rom.

Internet Service Provider voluntary Code of Practice

The Australian Government recognises the need for greater engagement with internet service providers (ISPs) to help create a "security culture" amongst Australian internet users. The Department of Broadband, Communications and the Digital Economy (DBCDE) is working with the Internet Industry Association (IIA) to

develop an ISP voluntary Code of Practice (the Code). The aim of the Code is to provide a consistent approach for Australian ISPs to help inform, educate and protect their clients in relation to cyber security issues.

The draft Code has four main elements:

1. Detection of malicious activity/Compromised computers – ISPs can identify malicious activity or compromised computers by active monitoring as part of normal network management or through notification from trusted third parties.

2. Actions to be taken for compromised computers – once a compromised computer is detected ISPs should take action to identify the end user and remedy the problem. The code identifies a range of measures from notifying the customer directly for first time cases through to suspension of service in extreme cases or where a customer continually fails to take remedial action.

3. Educating customers – providing information on how to secure their computers and raise awareness about cyber security issues, and advice on how to fix their compromised system in the event of a notification.

4. Reporting malicious activity – a reporting function for alerts relating to serious scale threats, such as those that may threaten national security. ISPs should report compromises to relevant Government agencies where they feel the nature of the compromise is of sufficient severity to do so.

The IIA released the draft Code in September 2009 for public comment. A revised version was released in March 2010 for further comment. It is anticipated the Code will be in effect by mid 2010. The Code will be reviewed after 18 months. Under Australian legislation, there is also potential to register the Code with the ACMA, which would enable the ACMA to direct ISPs to comply with actions set out in the Code.

Australian Internet Security Initiative

The ACMA developed the Australian Internet Security Initiative (AISI) to help address the problem of compromised computers (sometimes referred to as ‘zombies’, ‘bots’, or ‘drones’). Computers can become compromised though the surreptitious installation of malicious software (malware) that enables the computer to be controlled remotely for illegal and harmful activities without the computer user’s knowledge.

Compromised computers are often aggregated into large groups known as ‘botnets’. Among other things they are used for the mass distribution of spam and spyware, the hosting of ‘phishing’ sites and distributed denial of services (DDOS) attacks on websites.

The AISI collects data from various sources on computers exhibiting 'bot' behaviour on the Australian Internet. Using this data, the ACMA provides daily reports to ISPs identifying IP addresses on their networks that have been reported in the previous 24-

hour period. ISPs can then inform their customer that their computer appears to be compromised and provide advice on how they can fix it.

The ACMA currently reports an average of approximately 15,000 compromises to ISPs per day.

There are currently 100 ISPs participating in the AISI. It is estimated that over 90% of Australian residential customers of Internet services are covered by these ISPs. Participants include most major and mid-level ISPs who supply services to the majority of Australian Internet customers.

To improve the reach and effectiveness of the AISI, the ACMA continually canvasses opportunities for increasing data feeds and other means of identifying compromised computer activity.

Anti-spam initiatives

In June 2010, as part of National Cybersecurity Awareness Week, the ACMA launched its Spam SMS service for the public to quickly and easily report spam by SMS. Spam SMS is a dedicated number – 0429 999 888 – that the public can use to forward spam SMS messages directly to the ACMA. At 31 January 2011, over 3,207 Spam SMS reports had been received,.

In December 2010, the ACMA was successful in obtaining penalties, declarations and injunctions against the eighth respondent in the ACMA's first Federal Court action involving SMS spam. The total penalties awarded in the case were $24.25 million.

Cybersafety Education Activities

The ACMA offers a suite of cybersafety activities specifically aimed at parents, teachers, students and other key stakeholders.

To inform and assist teachers, children and parents about Internet safety, the ACMA offers Cybersafety Outreach—a program of cyber-safety professional development and presentations in metropolitan and regional centres throughout Australia. These presentations and workshops provide valuable information on the risks confronting children online, as well as giving appropriate tools and strategies to help make Internet experiences safe and positive. All programs and resources are free.

A trainee teacher program on Cybersafety was launched last year at Melbourne's Deakin University with national roll out commencing in 2011. Thirteen universities are already registered. This program consists of a lecture and tutorial on key cybersafety issues such as cyber bullying, sexting and identity theft. This interactive program will equip teachers in their final year at university with the skills, knowledge and resources to educate their future students about cybersafety.

Complementing the Professional Development for Educators program will be a set of eLearning modules which will help to increase access to the program, especially for those in remote and regional areas. It is anticipated that the eLearning modules will be launched early 2011.

The Cybersafety Help Button

The Government launched the Cybersafety Help Button in December 2010. The Help Button provides internet users, particularly children and young people, easy online access to a wide range of cybersafety and security resources to help with cyberbullying, unwanted contact, scams and fraud, and offensive or inappropriate material.

The Help Button was developed in response to a recommendation by the Government's Youth Advisory Group on Cybersafety who sought a 'one-stop-shop' for coordinated cybersafety information and assistance. The Help Button can be downloaded free of charge from the Department's website at www.dbcde.gov.au/helpbutton.

Australian Children's Cybersafey and E-security Project

In 2009, the Government commissioned a repeatable survey instrument and methodology for data collection on the changes in awareness and behaviour over time in relation to cybersafety, and relevant e-security, risks.

The first component of this project is a survey of parents and carers on children's cybersafety and e-security issues. The results of the parents' survey were released in February 2011 and provide valuable information to assist in understanding the nature and prevalence of risks facing children using the internet.

The key findings included:

- the majority of parents had implemented preventative measures to reduce the risks to their children when online and had spoken to their children about the risks involved;
- almost one in two parents felt that that they were well-informed about cybersafety issues; and
- one in three parents was very concerned about the safety risks of their children when online.

The results of the second component of this project, which collected information from teachers on children's cybersafety experiences, are currently being finalised.

Cybersmart Website

The ACMA launched its Cybersmart website (www.cybersmart.gov.au) on 13 July 2009.

The Cybersmart website provides cyber-safety education and awareness for children, young people and parents. It also provides comprehensive training and resources for teachers, available through the Schools Gateway, and cyber-safety resources for library staff.

The Cybersmart website offers:

- information and advice for parents on online safety, emerging cyber-safety issues and new technologies;
- tips and advice for young kids, kids and teens;
- games and activities, quizzes, videos and animations that reinforce cybersmart safety messages to children of all ages;
- a wide range of accessible and engaging resources for schools, including lesson plans, learning pathways, videos and classroom activities and resources, through the School's Gateway; and
- online registration for cyber-safety presentations and programs, including Cybersmart Detectives.

The site also contains the Cybersmart Online Helpline service – a free, confidential counselling service for young people who have had negative experiences (such as cyber bullying) while online.

The Cybersmart Schools Gateway teaching resources will be supplemented with a number of new resources including a new video for teens. The resource will encourage teens to think about the consequences of posting inappropriate information online. Teaching materials will also be adapted to the needs of children with a disability, there will be new lesson plans for senior students on the issue of sexting, and guidance for teachers and schools on identifying and responding to incidents of cyberbullying.

Spectrum Management

Five year Spectrum Outlook

In March 2011, the ACMA released its Five-year Spectrum Outlook for 2010-2014 (the Outlook). It is the third edition of the Outlook, which is an annual update of the different types of radiocommunications services available in Australia, the issues affecting those services (including demand for spectrum) and the ACMA proposed strategic approach to addressing these potential issues over the next five years.

The inaugural Outlook was released in March 2009 to address the challenges of radiofrequency planning in a constantly evolving radiocommunications environment and to invite submissions for future updates. The 2011-2015 Outlook was developed in light of the constructive input and new issues as identified by the ACMA, including through consultation on the 2010-2014 Outlook.
The Outlook facilitates meaningful discussions with stakeholders about emerging pressures for change to spectrum access arrangements. The Outlook fulfils the ACMA's commitment to:

- provide a useful summary of important spectrum management policies and priorities;
- provide greater insight and transparency for industry stakeholders; and
- facilitate fora for discussion between the ACMA and stakeholders.

Expiry of 15 year spectrum licences

On 3 March 2010, the Minister for Broadband, Communications and the Digital Economy announced the Australian Government's approach to the re-issue of certain 15 year spectrum licences. The licences, expiring from 2013-2017, are primarily used by telecommunications carriers to provide 2G and 3G mobile phone and wireless access services.

The minister indicated that spectrum licence re-issue may be offered to those telecommunications incumbents who are already using their spectrum licences to provide services to significant numbers of Australian consumers, or who have in place networks capable of providing services to significant numbers of consumers, provided they also meet the following public interest criteria.

- promoting the highest value use for spectrum;
- investment and innovation;
- competition;
- consumer convenience; and
- determining an appropriate rate of return to the community.

Spectrum licences that are not being offered re-issue will be considered directly by the Australian Communications and Media Authority (ACMA) in accordance with provisions of the *Radiocommunications Act 1992*, including replanning in the 1800 MHz band. In December 2010 the *Radiocommunications Amendment Bill 2010*

On 26 November *Act 2010*, the Government announced that commenced; this Act amends the *Radiocommunications* Amendment Bill 2010 (the Bill) received passage through the Parliament.

The Bill amended the *Radiocommunications Act 1992* (the Act) to implement the Government's policies in order to ensure an efficient spectrum management framework. The amendments include:

- to provide the Australian Communications and Media Authority (ACMA) with a more flexible timeframe for the commencement of the spectrum licence reissue processes;

to allow the ACMA to:

- issue class licences in the same radiofrequency spectrum as expired or re-issued spectrum licence allocations, as well as spectrum in which a spectrum licence is not currently in force; and
- commence processes for re-issue or re-allocation of spectrum licences where it is in the public interest to do so and conditional upon adequate interference safeguards; and more than two years before licence expiry.
- to streamline the treatment of Ministerial determinations and directions to the ACMA.

Review of spectrum licensing technical frameworks

The ACMA is reviewing the processes it undertakes in the development of technical frameworks that apply to spectrum licences. The objective of the review is to ensure that the ACMA is consistently applying appropriate spectrum management methodologies to current technical frameworks, with a view to improving the processes in the development of technical frameworks into the future.

In April 2009 the ACMA released a discussion paper analysing the current operation of technical frameworks, and identifying possible improvements to future frameworks. Any changes resulting from the review would not be implemented with respect to any existing technical frameworks. Rather, changes would be implemented in the development of future spectrum licensing technical frameworks, including current spectrum licences, if and as renewed.

The ACMA is currently considering submissions received in response to the discussion paper.

Future management of the 400 MHz spectrum band

The ACMA released a final response to its series of discussion papers on this issue in December 2010; outlining the timeframes and implementation plans for future arrangements for the radiofrequency spectrum in the range of 403-520 MHz Changes include technical changes to reduce congestion in the band, and the introduction of a harmonised government band within the 400 MHz band.

Proposed release of the 3.6 GHz band for in regional and remote areas of Australia

In April 2009 the ACMA released a discussion paper providing context for the proposed release of the frequency range 3575-3700 MHz (the 3.6 GHz band) for the deployment of wireless access services (WAS) in regional and remote areas of Australia. The band is intended to provide a short to medium term solution for the demand for broadband wireless access services in these areas. The discussion paper proposed that major city areas would be excluded from the initial assignment and allocation processes in order to preserve future planning options in those areas, and to facilitate a faster release of spectrum in regional and remote areas. The ACMA further proposed that it would develop coordination criteria between WAS and existing services in the band in order to facilitate coexistence and ongoing use of the band by incumbent services. The ACMA is currently considering submissions received in response to the discussion paper.

Review of the 2.5 GHz band and long-term arrangements for Electronic News Gathering.

The 2.5 GHz band (2500-2690 MHz) is currently used primarily by free-to-air broadcasters for electronic news gathering (ENG). The band was identified internationally for broadband wireless access services in 2000. In January 2010 the ACMA released a discussion paper seeking comment on a range of options for the future pricing, planning and licensing arrangements for the 2.5 GHz band; and on the

suitability of several other bands to provide long-term spectrum arrangements for ENG.

During the 2010 election campaign the Treasurer, the Hon Wayne Swan MP, announced the Government's commitment to auction the 2.5GHz band in 2012/13.

In October 2010, the ACMA published its *Review* following consideration of *the 2.5GHz band and long-term arrangements for ENG – response to* submissions report. The received to the discussion paper, the ACMA released a Response to Submissions Paper. In this Response Paper the ACMA indicated its intention to re-allocate a portion affirmed its preliminary view that part of the 2.5GHz5 GHz band (2 x 702500-2570 MHz blocks) for and 2620-2690 MHz) should be re-planned to enable it to move to a new use such as wireless access services, separated by a 'mid-band gap' (50 MHz), which will be and the balance retained by the current licensees for ENG. In addition, a range of other bands will be made available for ENG use services to ensure provision of service delivery equivalent to that currently provided has indicated that its planned timing of the allocation encompasses the Government's commitment.

Mobile phone jammers review

Mobile phone jammers

The *Mobile Phone Jammer* In February 2011, the ACMA made *Radiocommunications (Prohibition of PMTS Jamming Devices) Declaration 2009* (the Prohibition) is made*2011* under section 190 of the *Radiocommunications Act 1992.* The Prohibition declaration prohibits the operation, use or supply or possession of mobile phone of jammers that deliberately interfere with public mobile telecommunication devices.

The ACMA released a revised draft Prohibition in November 2010 for public comment. Submissions on the draft Prohibition closed on 20 December 2010. If made law, the revised Prohibition would exempt fixed wireless telephone services (including WiFi) and satellite phone services. These devices would continue to be subject to interference management offences in Part 4.2 of the *Radiocommunications Act 1992*.

Mobile jammers on Aircraft

Devices that are designed to facilitate a mobile phone service on board PMTS). The prohibition replaces an aircraft are explicitly excluded from the Prohibition. In June 2010 earlier jammer prohibition made by the ACMA finalised radiocommunications licensing arrangements which are compatible with aviation safety regulations and also protect terrestrial communication networks from interference.

Bomb Disposal

On 25 March 2010, the ACMA made the *Radiocommunications (Prohibited Devices) (Use of Electronic Counter Measures for Bomb Disposal Activities) Exemption Determination 2010.* The Determination enables Australian police forces and third parties to operate Electronic Counter Measures devices in specified circumstances.

The making of the Determination followed extensive in 1999, and follows public consultation with the National Counter-Terrorism Committee, law enforcement agencies, telecommunications carriers and other spectrum users.

Jammers in Prison

Following public consultation, the ACMA made the *Radiocommunications (Bench Testing by Corrective Services NSW of Mobile Telephone Jamming Device) Exemption Determination 2010 (the Determination)* in September 2010. The Determination provides for bench testing of jamming devices in a shielded room owned by the Telstra Corporation. The purpose of the bench testing is to identify the devices that are suitable for deployment in a proposed field trial at Lithgow Correctional Centre in New South Wales.

The new prohibition does not vary the ACMA's power to exempt jammers from licensing and interference provisions of the Radiocommunications Act. These exemptions can be made in favour of a limited range of law enforcement, crime and emergency services organisations and support a range of public benefit uses of jammers. In late 2010 an exemption was made to enable a bench trial of jammers in a prison, which took place in early 2011.

Anti-siphoning

The Government is currently conducting a review of the anti-siphoning scheme, which was established in 1994 with the objective of ensuring that Australians are able to enjoy events of national importance and cultural significance on free-to-air television. The scheme does this by preventing pay television broadcasters from buying the rights to televise events on the anti-siphoning list before free-to-air television broadcasters have the opportunity to purchase the rights.

For events not on the anti-siphoning list, free-to-air and pay television broadcasters can purchase the rights to televise those events based on their own commercial interests. Events on the anti-siphoning list are automatically de-listed (removed) 12 weeks before they commence.

The current anti-siphoning list expires on 31 December 2010 and includes the Olympic Games, Commonwealth Games and national and international events involving 10 different sports.

On 20 August 2009, the Government released a public discussion paper – *Sport on Television: A review of the anti-siphoning scheme in the contemporary digital environment* – to stimulate public debate about the scheme and seek comments from interested parties about its operation and effectiveness. The submission period closed on 16 October 2009.

Children's Television Standards

Following the release of the Children's Television Standards 2009 (CTS 2009) the ACMA released the *Guide to the Children's Television Standards 2009* (the Guide), which provides guidance for stakeholders on the application of the new CTS 2009.

Following the first year of operation of the CTS 2009, the ACMA has proposed a number of amendments to the Guide, which provide industry and the community with greater clarity about its application. The ACMA released these proposed amendments to industry for comment and anticipates finalising the changes to the Guide in the first half of 2011.

Food and beverage advertising was also a key component of the review of the CTS, particularly in light of community concern about the issue. The food and grocery and fast food industries recently introduced initiatives to restrict advertisements to children in children's free-to-air television viewing times to those that promote healthy dietary choices. The ACMA undertook to monitor these industry initiatives to gauge their effectiveness in addressing community concerns. The ACMA anticipates releasing its report on the effectiveness of these initiatives in mid-2011, following the first 12 months of their operation.

Parental lock technical standard

On 28 July 2010 the ACMA determined a technical standard to make parental lock a required feature of specified digital television receivers sold in Australia. The standard takes effect from 4 February 2011. The development of the standard was pursuant to a Direction issued by the Minister for Broadband, Communications and the Digital Economy to the ACMA to, following public consultation; develop a technical standard which would require a mandatory parental lock function be included in digital set top boxes and television receivers

Parental lock is a feature of digital television receivers which allows controlled access to programs based on their classification for example, G, PG, M or MA. These ratings are described in the relevant codes of practice[1] for the respective broadcasters.

The technical standard requires the parental lock feature be available in new domestic reception equipment, such as integrated digital televisions, set-top boxes and personal video recorders first supplied to the Australian market on or after 04 February 2011.

The determination of the technical standard follows a consultation process undertaken by the ACMA during the first half of 2010 in which members of industry and the wider public were invited to comment on issues concerning the standard.

The ACMA standard for parental lock is mandatory and though referenced in the current version of the Australian Standard for domestic digital receivers - *AS 4933.1-2010*
Digital television - Requirements for receivers - VHF/UHF DVB-T television broadcasts can only be obtained from the ACMA website at http://www.acma.gov.au/WEB/STANDARD/pc=PC_312228.

Digital Television Switchover

[1] Information on the relevant codes of practice for Australian broadcasters is available on the ACMA website at: http://www.acma.gov.au/WEB/STANDARD/pc=PC_91792;

The Australian Government has set 31 December 2013 for the completion of analog television switch off across the country through a phased, region-by-region process. The Digital Switchover Taskforce in the Department of Broadband, Communications and the Digital Economy is working with broadcasters, retailers, suppliers of TV equipment, community groups and other stakeholders in coordinating Australia's transition to digital television.

The Digital Switchover Program includes the following components:

Digital Tracker Survey

The Government is monitoring switchover progress through the Digital Tracker—a quarterly survey measuring household awareness, understanding, attitude, intention to convert, conversion, and satisfaction with digital TV. Around 10,000 households, with a working TV set used in the last 6 months and living in private dwellings, are interviewed every quarter.

By December 2009, Digital Tracker results show that the national conversion figure has reached 61% (6 in 10 households are able to receive free-to-air digital TV service)—up by 14 percentage points from early 2009. Four quarterly reports have been published and are publicly available at *www.digitalready.gov.au.*

New satellite television service

The Australian Government is funding a new satellite service to bring digital television services to Australians who are unable to receive adequate reception from digital terrestrial transmission facilities. Around 250,000 households are expected to benefit from the new satellite service. Details of how the service will be delivered are being finalised with the regional broadcasters.

The Government has also reached an agreement with the broadcasters in Australia to upgrade a number of analog 'self-help' transmission facilities—usually operated by local councils or community—to operate in digital.

Accreditation schemes and quality assurance audits

a. Retailers of electronic equipment

Under the retailer scheme, around 1000 Digital Advisors from participating retail outlets have been trained through the *Online Training and Assessment Package*. Digital Advisors provide consumers with timely, accurate, and reliable advice on switchover products and related services.

To monitor and improve retailers' compliance and performance under the scheme, the Retail Compliance Program (using mystery shopping techniques) will be implemented to audit whether labelled products and services are being promoted correctly; and that retail staff are properly advising Australian consumers.

b. Suppliers of digital TV equipment

As part of the supplier labelling scheme, over 450 models of television, set top boxes and digital TV recorders can now bear the appropriate Australian Government label for digital-ready products. A label provides confidence to consumers that the product will work throughout Australia's switch to digital TV. Thirty three suppliers of digital TV equipment have signed licence agreements with the Government.

The Government will implement an Equipment Compliance Audit to ensure that suppliers comply with the scheme's technical requirements for testing, certifying, and labelling digital TV equipment. The audit involves testing a random sample of digital-ready products as declared by participating suppliers.

c. Antenna Installer Endorsement Scheme

The scheme has been established to ensure consumers, in getting ready for digital TV, have access to skilled and endorsed antenna installers.

Digital Switchover - Household Assistance Scheme

The Digital Switchover Taskforce is also responsible for the *Household Assistance Scheme* (the Scheme). The Scheme was established to provide technical and practical in-home assistance to those households expected to experience the most difficulty in switching over to digital TV.

As part of the 2009-10 Budget, the Australian Government approved $69.3 million to rollout the Scheme to approximately 250,000 households in the regional South Australia, regional Victoria and regional Queensland TV licence areas.

Households may be eligible for assistance where they own a functioning TV, do not already have access to digital TV and at least one resident is in receipt of a maximum rate Age Pension, Disability Support Pension, Carer Payment, Department of Veterans' Affairs (DVA) service pension or the DVA income support supplement payment. The Scheme will, at no cost to eligible households, supply, install and demonstrate a high definition set-top box and conduct any necessary external cabling and antenna work if eligible.

The Scheme commenced on 18 January 2010 with the dispatch of letters to approximately 7,100 households in the Mildura TV licence area. To date, over 2,000 households have opted into the Scheme, and approximately 1,600 households have already been switched over to digital TV.

Localised information and communication campaign

a. Digital Switchover Liaison Officer

Residents who are less mobile, or who find technology challenging, may find it difficult to switch to digital TV. A newly appointed Digital Switchover Liaison Officer in Mildura/Sunraysia is currently working with communities, local councils, and public institutions, ensuring that switchover information and assistance is

provided to residents who need it. Digital Switchover Liaison Officers will be appointed in other regions as switchover approaches.

b. Communications Campaign

The Government has developed a communications campaign—online, print, radio and television—which aims to inform Australians about the switch to digital TV, the options for switching to digital and the switchover dates in certain areas of Australia.

c. Switchover call centre and website

Since late 2009, the *Digital Ready Information Line* has received more than 21,000 individual telephone calls on topics such as when to switch and what needs to be done to be digitally-ready. Email inquiries received directly by email or through the enquiry form from *www.digitalready.gov.au* are continuously managed.

Inquiries include set top box scams—where door-to-door salespeople offer conversion equipment and falsely claim to represent the Government. This prompted the Government to issue warnings and encourage people to report any unscrupulous activity immediately to the appropriate consumer protection regulatory agency in their state or territory.

Legislative provisions

On 2 November 2009 and 26 February 2010 the Minister determined by legislative instrument the switchover dates for the five regions scheduled to switch to digital-only television transmissions in 2010 and the five metropolitan areas, which are scheduled to switch in 2013.

On 18 March 2010, the Government introduced the Broadcasting Legislation Amendment (Digital Television) Bill 2010 into parliament which establishes a legislative framework for the commercial broadcasting digital television services that will be delivered as part of the new satellite service.

Commercial Television Industry Code of Practice

Under a co-regulatory scheme established by the *Broadcasting Services Act 1992*, the commercial radio industry develops the Commercial Television Industry Code of Practice, which is then registered by the independent regulator ACMA. The Code covers matters relating to program content that are of concern to the community such as program classifications, accuracy and fairness in news, commercials placement and complaints handling.

The Commercial Television Industry Code of Practice was reviewed in 2009 and registered with the ACMA on 18 December 2009. The Code, which took effect from 1 January 2010, places a number of additional requirements on commercial broadcasters, including:

- Electronic submission of complaints from 1 March 2010;

- Better protections for participants in reality television programs;
- Strengthened consumer advice requirements for Mature Audience (MA) 15+ programs.

Commercial Radio Codes of Practice

Under a co-regulatory scheme established by the *Broadcasting Services Act 1992*, the commercial radio industry develops the Commercial Radio Codes of Practice, which are then registered by the independent regulator ACMA. The Codes covers matters relating to program content that are of concern to the community such as content taste and decency, accuracy and fairness in news and current affairs, advertising, Australian music, broadcasts of emergency information and a formal complaints handling process.

ACMA formally registered new Commercial Radio Codes of Practice on 19 February 2010, except for Code 4 – Australian Content. The main amendment to the Codes is the acceptance of online electronic complaints (where the licensee has the technological capacity). Code 4 was registered by the ACMA on 10 June 2010.

Digital Radio

In October 2008, the *Broadcasting Legislation Amendment (Digital Radio) Act 2008* amended the *Broadcasting Services Act 1992* and the *Radiocommunications Act 1992* to:

(i) extend the deadline for broadcasters to commence digital radio services in the mainland state capital cities by six months to 1 July 2009. This was necessary because the radio industry was experiencing difficulties in meeting the 1 January 2009 deadline due to, amongst others, the limited availability of transmission equipment installers;

(ii) remove the requirement for digital radio services to commence in Hobart, the least populated state capital, by the extended deadline of 1 July 2009. As a result, broadcasters in Hobart will have the opportunity to commence digital radio services at the same time as other markets of comparable size; and

(iii) provide a further opportunity for the community sector in the five mainland capital cities to take up the option of participating in the ownership and management of the digital radio transmission infrastructure that would jointly provide commercial and community services. Community broadcasters did not subscribe to the share offer in joint venture companies but have sought to become access seekers.

Digital radio services officially commenced in the five mainland state capital cities (Sydney, Melbourne, Brisbane, Perth and Adelaide) on 1 July 2009. All commercial AM and FM, ABC AM and FM and SBS FM services are simulcast on digital radio. Additional digital-only services (10 in Sydney, Melbourne, Brisbane and Adelaide, 9 in Perth) are also being provided.

The legislation for digital radio is premised on it being a supplement to existing analog radio services in Australia, rather than as a replacement technology. The rollout of digital radio in metropolitan areas is based on Digital Audio Broadcasting technology enhanced with Advanced Audio Coding (DAB+). Additional legislation may be required if alternative technologies are identified as being more appropriate for regional Australia. As a result, the legislation provides for a review by 2011 into digital radio technologies most appropriate for regional areas.

Digital Television Standards

Technical standards, industry codes and industry standards for digital television

The ACMA has powers under Parts 9A and 9B of the Broadcasting Services Act 1992 (the BSA) to determine technical standards for domestic digital reception equipment and to register industry-developed codes and determine industry standards in relation to industry activities related to digital television and digital radio.

On 28 July 2010 the ACMA exercised its powers under Part 9A of the BSA to determine the Broadcasting and Datacasting Services (Parental Lock) Technical Standard 2010 (the parental lock standard).

This standard took effect from 4 February 2011 and makes parental lock (i.e. a capability to restrict a person from viewing a television program of a particular classification unless the correct personal identification number is entered first) a required feature of specified digital television receivers sold in Australia.

This is the second standard that the ACMA has determined the first occasion being the determination of the *Broadcasting Services (Digital Television Format — Audio Component — Transmissions in SDTV Digital Mode) Technical Standard 2007* which established minimum format requirements for the audio component of television and datacasting transmissions in digital standard definition television.

In light of current high levels of conformity with the voluntary Australian Standards for digital receivers (*AS 4933.1-2010 Digital television - Requirements for receivers - VHF/UHF DVB-T television broadcasts*), the ACMA does not presently consider it necessary to introduce any other mandatory standards at this time but will continue to monitor industry activity closely to assess whether any such intervention may be appropriate in the future.

The Australian standards for digital television transmission and reception are developed by Standards Australia committees that have representation from across the sector and include representatives from both Government and the Community. The Australian Standards for both reception and transmission are based on the DVB specifications and related ETSI, IEC/ISO and ITU-R documents utilizing a range of operational choices specific to the Australian environment.

The Australian standard for transmitters and receivers respectively are:

- AS 4599.1-2007-Digital television - Terrestrial broadcasting - Characteristics of digital terrestrial television transmissions: and

- AS 4933.1 2010_ Digital television - Requirements for receivers - VHF/UHF DVB-T television broadcasts.

The ACMA through its strong working relationship with Standards Australia continues, in support of effective self and co-regulatory arrangements, to participate in the development of the current industry standards and supports industry endeavours to develop an effective robust set of standards for Australia.

One further area where the ACMA is actively working with industry to ensure good outcomes is in the provision of Electronic Program Guides (EPG). The ACMA expects value-adding features of digital television such as EPG will provide significant benefits to the viewers of free to air broadcasts.

In response to community and industry concerns in relation to EPG provision the ACMA promulgated Electronic Program Guide Principles on 2 June 2009. These EPG Principles were developed following considerable consultation with industry and provide a performance benchmark against which industry performance can be assessed prior to consideration of regulatory intervention.

Though not a regulatory instrument the EPG Principles work in conjunction with industry developed technical Operating Procedures developed by the association representing the free to air broadcasters (FreeTV Australia). The EPG Principles and the guidelines specify performance in much the same way that a code would and indicate that the industry self regulatory model is working effectively. Since the development of the EPG Principles and the update of the industry Operating Practices documents there has been a significant shift in the free to air EPG offering largely through industry recognition of the value this service brings to its digital television offering.

The ACMA's intention is to ensure that the implementation of EPG remains effective and to the benefit of the community as a whole. The ACMA will continue to monitor EPG provision and participate in discussions and developments regarding the industry model.

Anti-terrorism Standards

The ACMA undertakes compliance activities pursuant to two program standards for narrowcasting television services, referred to as the 'anti-terrorism standards', by investigating matters as they arise.

In February 2010 the ACMA announced an investigation into Al-Manar TV program content to ascertain its compliance with regulatory obligations relating to terrorist-related content, as well as racial vilification and hate speech. It is anticipated the investigation will be concluded by mid 2010.

Technical Regulation

The ACMA has responsibility for the regulation of telecommunications customer equipment, customer cabling and specified devices in Australia under the *Telecommunications Act 1997* and the *Radiocommunications Act 1992*. These regimes cover aspects of devices related to the telecommunications, radiocommunications, electromagnetic energy and electromagnetic compatibility and are regulated via four Labelling Notices.

The ACMA's Labelling Notices are:

- the Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2008;
- the Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2003;
- the Radiocommunications Devices (Compliance Labelling) Notice 2003; and

the Telecommunications Labelling (Customer Equipment and Customer Cabling) Notice 2001

Proposed change: regulatory compliance marks

The ACMA's Labelling Notices require suppliers to apply a label (regulatory compliance mark) to specified devices to illustrate compliance with the requirements of the relevant Notice. There are currently three compliance marks—C-Tick, A-Tick and Regulatory Compliance Mark (RCM) — that can be applied in respect of the identified technical regulatory requirements.

The ACMA intends to consolidate these compliance marks into a single regulatory compliance mark (the RCM) covering telecommunications, radiocommunications, EMC, EME. The A-tick and C-tick will be phased out over time. The RCM also indicates compliance with electrical equipment safety requirements under Australian State and Territory legislation.

The implementation of a consolidated compliance mark will lessen industry administrative burdens by reducing the complexity of regulatory arrangements and consequently the time required by industry to comprehend and abide by those arrangements.

The ACMA has consulted on the implementation issues and will undertake further public consultation on the proposed amendments to the Labelling Notices. The ACMA currently intends that the new arrangements will commence on 1 July 2011, with a transition period of 2 years.

Commercial Radio Standards

The ACMA undertakes compliance activities pursuant to three program standards for commercial radio licensees, referred to as the 'commercial radio standards', by investigating matters as they arise and receiving notifications.

In December 2009 the ACMA published an investigation report into The John MacKenzie Show on Easy Mix 846 (4EL), which found a breach of the Broadcasting

Services (Commercial Radio Advertising) Standard 2000. As at March 2010, further investigations are in progress.

In February 2010 the ACMA released the issues paper for public consultation in the review the commercial radio standards. The ACMA is reviewing the standards to ensure that any regulation is appropriate, efficient and effective, in line with community attitudes and in accordance with the objects and regulatory policy of the Broadcasting Services Act 1992. The focus of the review is on the provision of news and current affairs programs, including talkback, seeking to ensure that providers of commercial radio broadcasting services remain responsive to the need to treat advertising and other sponsored content in a way that does not lead listeners to believe that it is editorial comment, free from commercial influence. The review will seek to be evidence-based, incorporating a program of research and up to three rounds of public consultation. Consultation in the review is expected to be concluded in 2010.

ACMA released an issues paper on 23 February 2010 for public comment by 16 April 2010.

Monitoring and Reporting on Industry Performance

Under the existing telecommunications consumer safeguards regime in Australia, the ACMA publishes quarterly data on the performance of fixed-line telecommunications service providers. In addition, the ACMA releases detailed analysis and commentary on fixed-line telecommunications service providers in a standalone annual report—the Telecommunications Performance Bulletin.

The *Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010*, which received Royal Assent on 15 December 2010, contains provisions enabling significant changes to the consumer safeguards regime for fixed-line telephone services in Australia. The ACMA anticipates substantial change to its reporting arrangements (including an increased focus on compliance), new benchmarks and standards, and changes to the regulatory responses available to it—for example, additional infringement notice powers—in cases of unsatisfactory performance. In light of these changes, the ACMA is reviewing, among other things, its existing reporting arrangements.

ACMA Communications Report 2009-10

In December 2010 the *ACMA Communications Report 2009-10* was released. The report provides a comprehensive overview of developments in the Australian telecommunications industry for 2009-10 and also covers many aspects of the broadcasting and radiocommunications industries. The report demonstrates the increasing importance of the digital economy to Australian consumers and industry through access to and use of digital networks and information and communications technologies. The report also discusses telecommunications industry performance against a range of regulatory obligations, from carrier compliance with the Customer Service Guarantee to the provision of emergency services to Australians. Broadcasting industry performance in meeting regulatory obligations (such as Australian content standards and media ownership) is also discussed. The report can

be found on the ACMA website at:
http://www.acma.gov.au/WEB/STANDARD/pc=PC_312368

The report can be found on the ACMA website at:
www.acma.gov.au/WEB/STANDARD/pc=PC_312368312368As part of the 2009-10 reporting program the ACMA also developed a suite of targeted reports which complement the statutory report. These are aimed at the broader community and are designed to inform Australians about convergence and the digital economy and their impacts on communication and media services. These reports include:

- Report 1—*Australia in the digital economy: The shift to the online environment*
- Report 2—*Take-up and use of voice services by Australian consumers*
- Report 3—*Australian consumer satisfaction with communication services*
- Report 4—*Changing business models in the Australian communication and media sectors: Challenges and response strategies.*

These reports can be found on the ACMA website at:
http://www.acma.gov.au/WEB/STANDARD/pc=PC_312356

Other reports

During 2010 the ACMA also released other reports relating to developments in the communications market and the use of digital communications including:

- *Mobile Network Broadband*
- *Australia in the digital economy – Consumer engagement with e-commerce*
- *Mobile capped plans – Consumer attitudes and behaviours*
- *IPTV and internet video delivery models: Video content services over IP in Australia.*

These reports can be found on the ACMA website at:
http://www.acma.gov.au/WEB/STANDARD/pc=PC_311301

National Relay Service

The National Relay Service (NRS) provides people who are deaf, or who have a hearing or speech impairment, with access to a telephone service. Statistics from the NRS indicate that up to 8,000 people may use the NRS each month, and more than 3,000,000 call minutes are generated each year.

In recent years the NRS has developed and grown with the availability of digital technologies. Internet Relay calls was introduced in September 2007 and has grown rapidly to account for more than 40 per cent of all calls to the NRS today. One of the advantages of using Internet Relay calls is greater mobility for users as calls can be made via a desktop computer in any location, a laptop or some internet-enabled

mobile phones. User satisfaction with the NRS is high, with 93 per cent of users indicating they are satisfied with the NRS.

Specific details on the growth of the internet relay service can be found in the ACMA's National Relay Service Performance Reports which are available at http://www.acma.gov.au/WEB/STANDARD/pc=PC_2023 .

ISP Filtering and the National Classification Scheme

In December 2009, the Australian Government announced that it will introduce legislative amendments to the *Broadcasting Services Act 1992* that will require all Australian internet service providers (ISPs) to block overseas hosted online material that has been classified Refused Classification (RC by the national Classification Board.

RC material includes child sexual abuse imagery, bestiality, sexual violence, detailed instruction in crime, violence or drug use and/or material that advocates the doing of a terrorist act.

To ensure the Australian public's confidence in the list of URLs to be filtered (the RC Content list) the Minister for Broadband, Communications the Digital Economy, Senator Stephen Conroy, announced on 9 July 2010 a review of the RC category. The review will examine the current scope of the RC category to determine whether it adequately reflects current community standards. This review, now part of the broader National Classification Scheme review, was referred to the Australian Law Reform Commission in December 2010. The Commission is to report by the end of 2011.

Any legal obligation to commence mandatory ISP filtering will not be imposed until the review is completed.

Schedule 7 Review

Schedule 7 to the Broadcasting Services Act 1992 (the BSA) sets out the scheme that allows the Australian Communications and Media Authority (the ACMA) to deal with complaints regarding prohibited online content hosted within Australia based upon the National Classification Scheme. Subclause 118(1) of Schedule 7 stipulates that within three years following commencement of the Schedule, the Minister must cause to be conducted a review of the operation of the Schedule (the Review).

The Review of Schedule 7 will be undertaken as part of the broader Convergence Review, which the Minister announced on 14 December 2010.

The Review will follow the timing of the broader Convergence Review, which is expected to take approximately 12 months to complete.

Online Gambling and Regulation

The Productivity Commission's Inquiry Report on Gambling was tabled on 23 June 2010. The Report contains 48 recommendations, including a recommendation

to liberalise online poker. The Report is available at the Productivity Commission's website at www.pc.gov.au./projects/inquiring/gambling-2009.

In response to the Productivity Commission's Report the Government has stated that it does not support the liberalisation of interactive gambling, including online poker. The government is examining the regulatory approaches taken by other countries in relation to interactive gambling.

RELEVANT WEBSITES

Department of Broadband, Communications and the Digital Economy (DBCDE):

www.dbcde.gov.au

www.digitalbusiness.gov.au

www.digitalready.gov.au

Attorney-General's Department: *www.ag.gov.au/www/agd/agd.nsf/Page/e-commerce%20*

Australian Communications and Media Authority (ACMA):
www.acma.gov.au

Australian Competition and Consumer Commission (ACCC):
www.accc.gov.au

Australian Government Information Management Office (AGIMO):
www.agimo.gov.au

Office of the Privacy Commissioner: *www.privacy.gov.au*

Digital Television System Installation Handbooks: *www.abcb.gov.au*

Do Not Call Register: *www.donotcall.gov.au*

National Broadband Network: *www.dbcde.gov.au/nationalbroadbandnetwork*

Telecommunications Legislation Amendment (Competition and Consumer Safeguards) Act 2010:
www.dbcde.gov.au/communications/telecommunications_regulatory_reform Bill 2009: *www.dbcde.gov.au/communications/telecommunications_regulatory_reform*

Stay Smart Online:

www.acmastaysmartonline.gov.auwww.acma.gov.au/WEB/STANDARD/pc=PC_9058

Telecommunications today: research report series:
www.acma.gov.au/WEB/STANDARD/pc=PC_9058

Tel: Info: *www.telinfo.gov.au* (includes specific information about telecommunications services and entitlements for people in regional Australia).

Universal Service Obligation:
*www.dbcde.gov.au/broadband/national_broadband_network/universal_service_policy*Digital Regions Initiative::
www.dbcde.gov.au/regionaltel

Online and Communications Council:
*www.occ.gov.au*Australian Communications Consumer Action Network:
www.accan.org.au

PHILIPPINES:
Economy Policy and Regulatory Update (TEL43)

This report provides updates on the report of the Philippines presented in APECTEL 42 and highlights the policy and regulatory initiatives and programs recently and continuingly undertaken by the Philippines to promote the use of information and communication technology (ICT) for national development.

I. ICT POLICIES AND REGULATIONS

1.1 DIGITAL INFRASTRUCTURE

The nationwide digital infrastructure continued to expand and registered increases in the number of subscribers, as of end December 2009, as follows:

	2008	**2009**	**2010**
Fixed Telephone Service:	3,744,947	3,850,000	4,042,500(est)
Cellular Mobile Service:	68,101,809	77,043,460	83,150,138
Broadband Service:	1,141,990	3,600,000	5,500,000(est)

1.2 ENHANCING COMPETITION IN THE TELECOMMUNICATIONS SECTOR

RULES PROMULGATED FROM JUNE 2010 TO FEBRUARY 2011:

MEMORANDUM ORDER ON INTERNET ACCESS THROUGH MOBILE PHONES

Protects consumers from being charged service fees for unknowingly being connected to the internet. The Order requires mobile phone service providers to inform consumers/users that the consumers/users are about to be connected to the internet and the connection requires payment of service fees.

PROPOSED RULES (Undergoing Public Consultations and Hearings)

MEMORANDUM ORDER ON THE MINIMUM BROADBAND CONNECTION SPEED

Requires broadband service providers to inform consumers/users of the minimum broadband connection speed and the corresponding service fees. The present practice by the broadband service providers is to advertise the maximum broadband connection speed which most if not all of the time cannot be achieved.

IMPLEMENTING RULES ON THE MIGRATION TO DIGITAL TERRESTRIAL TELEVISION

Ensures the smooth migration to digital terrestrial television broadcast.

1.3 PROMOTING INTERNET-BASED INFRASTRUCTURE, APPLICATIONS AND SERVICES

EXECUTIVE ORDER AND ITS IMPLEMNETING RULES AND REGULATIONS PROMOTING THE DEPLOYMENT AND USE OF INTERNET PROTOCOL VERSION 6 (IPV6)

The government issued Executive Order (E.O.) No. 893 directing, among others all government agencies to purchase only equipment and devices that are IPv6 ready. The EO created a technical working group composed by representatives from the government and the private sector to oversee the transition to IPv6.

On January 21, 2010, the Commission on Information and Communications Technology (CICT) has issued an Implementing Rules and Regulations (IRR) of E.O. No. 893, which took effect on March 3, 2011.

II. CYBERSECURITY

2.1 CYBERSECURITY AND DEVELOPMENT

There were several incidents of hacking and hate mailing incidents that affect government websites. Coordination between and among affected agencies and the Cybersecurity Coordinator were undertaken to assess the impact of such incidents and discuss actions to protect the websites against similar attacks.

The Commission on Information and Communications Technology (CICT), and the House of Representatives of the Philippines has organized a forum entitled "Forum on Cybercrime Prevention" on 09 February 2011. The forum was primarily organized to provide the legislators an overview and deeper understanding of Cybercrime vis-à-vis the passage of the Cybercrime Bill. Law-enforcement agencies, i.e., NBI and PNP and public

prosecutors from the Department of Justice who would be primarily involved in the implementation of the proposed legislative measure likewise actively participated in the forum. The Bill seeks to harmonize the country's law with that of the Convention on Cybercrime adopted in Budapest in 2001 to facilitate international cooperation on the prevention of crimes.

III. CYBERSERVICES

The Philippine Cyber Corridor is an ICT channel capable of supporting broadband communication, fiber optic backbone and digital network, to provide numerous cyberservice providers that supply expert services in various fields of ICT, otherwise known as the Business Process Outsourcing-Information Technology (BPO-IT) industry.

The government in partnership with the industry has been successful in encouraging ICT and ICT-enabled investments in many cities of the country. One of the key factors is the establishment of ICT Hubs that requires the presence of a strong, organized ICT Council in the area. The government also helped in the formation of the National ICT Confederation of the Philippines (NICP), the umbrella organization of the ICT Councils. There are now thirty-eight Council-members of the NICP.

Jobs Created from ICT-related services had a total revenue of 9.1 USD (as of end 2010) and a Workforce of 560,000 employed (as of end 2010) in operation sites located in various parts of the country.

The Philippines is considered one of the world's top outsourcing destinations, having achieved revenues of US$5.7 Billion in pure voice-based services in 2010.

The Global Locations Trends 2010 Report of the IBM Global Business Services highlights that the Philippines is now the world leader in terms of jobs for Shared Services and BPO Services. For the 3rd time since 2007, the Philippines is awarded the 2010 Offshoring Destination of the Year by the National Outsourcing Association of U.K. The 2010 Top 100 Cities in the World for Outsourcing Report by Tholons highlights the six (6) Philippine cities among the Top 100.

IV. ICT FOR DEVELOPMENT

3.1 ICT LITERACY

One of the most important ICT initiatives is ensuring all public high schools in the country have broadband Internet access, so that high school students will be exposed to computers and Internet by the time they go to college or seek employment. This was a big task, given the number of public high schools in the country (6,650) and the archipelagic geography of the Philippines that limit the availability of Internet access.

The country's response to the directive is the iSchools project, which provides computer laboratories with Internet access to public high schools. In addition to computer hardware and Internet connectivity, the CICT also provides training programs in ICT Literary, Laboratory Management and Sustainability Planning that differentiate the CICT's programs with that of the Department of Education.

The iSchools Project was able to train 1,430 personnel from its recipient public high schools since July 2010. Due to its successful implementation, the Project was declared as Honorable Mention from the 2010 UNESCO King Hamad bin Isa Al Khalifa Prize for the Use of ICT in Education. For the period of September to October 29, 2010, there were 320 iSchools Wireless Internet Learning Laboratories (iWILL) that have been deployed to the project's recipient public high schools.

Another education-related project of the CICT is the eSkwela project, which provides a computerized learning environment for out-of-school youths by digitizing the content of the Department of Education's Bureau of Alternative Learning System.

The eSkwela Project was able to train 386 personnel from State Universities and Colleges to conduct field training for the 4th quarter of 2010; 349 field implementers, 229 Learning Facilitators, and 44 Network Administrators.

There were 31 identified new eSkwela Centers cum Community E-Centers (CeCs) to be supported with equipment package in coordination with the CICT and Department of Education eSkwela team.

The CICT acting as project overseer of the Digital Bridges Program, APEC Digital Opportunity Center (ADOC) Centers outside the CICT premises has trained 499

participants on basic ICT Literacy. Participants were a mix of students, streetchildren, out-of-school youth, elderly, persons with disabilities (PWDs), women, and urban poor. Seven (7) eCenters participated in BLOG Competition (ADOC Taiwan); ADOC project was nominated to AGFund Prize (sponsored by DFA)

3.2 COMMUNITY E-CENTER PROGRAM

The Community e-Center Program was launched to intensify the efforts from the different sectors in the Philippines such as agriculture, local government, health and education into one integrated delivery mechanism to enable local government units to deliver services more efficiently, while providing their respective constituents with access to the Internet & other ICTs.

3.3 E-GOVERNMENT

Based on Waseda University Institute of e-Government for 2011, the Philippines ranked no. 25 out of 50 economies that were surveyed in relation to e-government strategies and implementation.

3.4 ICT COMPETENCY AMONG NATIONAL WORKFORCE

The Government of the Philippines, through the National Computer Institute (NCI) in partnership with the United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development (UN-APCICT/ESCAP) has launched the "*Academy of ICT Essentials for Government Leader's Programme"* (Academy), to introduce APCICT's Academy programme to over 150 officials from national government agencies, local government districts, state universities and colleges, and private universities. The Academy is designed to equip government officials with the skills needed to fully leverage ICT for socio-economic development.

The government has likewise administered ICT Proficiency Exam, which can be used as a substitute for or equivalent of eligibility required for holding career civil service positions and/or highly technical ICT positions. For the period September-December 2010, there were 3 ICT Proficiency Exams that have been administered to evaluate the competence of an individual to perform programming or systems analysis and design functions. Moreover, the government has offered International Computer Driving License (ICDL) certification programmes.

P	Thailand's Policy and Regulatory Update	Doc no: Telwg43/ PLEN/5

Agenda item:	Plenary	Submitted by: Thailand

Thailand's Policy and Regulatory Update

APEC Telecommunications and Information Working Group
43rd Meeting | 27 March to 1 April 2011| Republic of China

Please note: This document is not an official APEC document until approved by the Telecommunications and Information Working Group. This version is a draft provided for discussion purposes only.

Thailand's Policy and Regulatory Update

(Activities from August 2010 – March 2011)

I. Policy Development

- **Information and Communication Technology Policy Framework 2011-2020 (ICT 2020)**

On 17th September 2010, the National Information and Communication Technology Committee chaired by the Prime Minister agreed in principle on the draft Information and Communication Technology Policy Framework 2011-2020 (ICT 2020), which were jointly developed by the Ministry of Information and Communication Technology (MICT) and the National Electronics and Computer Technology (NECTEC) under the Ministry of Science and Technology.

The ICT 2020 Framework has been approved by the cabinet on 22nd March 2011. The cabinet assigned MICT to be the main body in managing the ICT policies in the framework and developing two 5-year Master Plans covering the 10 years period of the framework with the mid-term evaluation in 2015. The cabinet agreed that other Ministries and agencies should take the roles and responsibilities as being specified in the framework in order to ensure the integration of the ICT development of the country. The cabinet also assigned the government agencies relating to the allocation of resources (i.e., the Budget Bureau, the Civil Service Commission, etc) to take into account the ICT 2020 Framework when considering the resource allocation for the ICT development during the period of 2011-2020.

The ICT 2020 framework aims to establish the directions in which ICT will develop in Thailand from 2011 to 2020 with "**Smart Thailand 2020**" concept and goal. It set out to create strategies that would ensure the continued development of ICT to support and enhance the quality of life for all Thai people and also create opportunities to access knowledge and information via broadband access by ensuring "last mile" access around the country.

The vision for Smart Thailand 2020 is: ICT is a key driving force in:

- Leading Thai people towards knowledge and wisdom.
- Leading Thai Economy towards sustainable growth, and
- Leading Thai Society towards equality

It is aimed that in 2020, Thailand will have smart development, with a knowledge- and wisdom-based economy and society and every people will have equal opportunity in taking part in the development process, which will lead to balanced and sustainable growth.

There are seven strategies of the framework:

Strategy 1: To develop ICT infrastructure through a high-speed Internet or other form of broadband communication that will be up-to-date, universal, secure and meet the needs of various sectors.

Strategy 2: To develop people who are capable and creative in using information efficiently, with good judgment and smartness, and develop knowledgeable, capable ICT Professional who meet international standards.

Strategy 3: To enhance competitiveness of the ICT industry in order to create economic value and revenue by taking advantage of economic integration, free trade and the ASEAN community.

Strategy 4: To use ICT to create innovations in government service for people and businesses with efficiency, security and good governance.

Strategy 5: To develop and apply ICT to strengthen the production sector to become self-reliant and internationally competitive. Special attention should be paid to the production sectors in which Thailand has an advantage, namely the agriculture and service sectors. The trend is moving towards "smart agriculture" and "smart service".

Strategy 6: To develop and apply ICT to reduce socio-economic inequality by creating equal opportunities in accessing public resources and services for all people, especially basic services for good standard of living, namely education and health care. It will drive towards "smart learning" and "smart health".

Strategy 7: To develop and apply ICT for economic and social development that is environmentally-friendly. The main aim of the strategy is to make ICT an important driving force in green economic and social development.

- **National Broadband Policy**

The government is aware of the role and significance of developing broadband service within the scope of the ICT 2020 Policy Framework as part of the country's development, in terms of the economic and social dimensions, public services, environmental protection and also safety and security for people's lives and Broadband service will contribute to the continuous expansion of Thailand's Gross Domestic Product (GDP).

On 17th September 2010, the National Information and Communication Technology Committee chaired by the Prime Minister agreed in principle the draft "National Broadband Policy" and set up a Sub-Committee chaired by the Minister of Information and Communication Technology to review the draft National Broadband Policy to be the framework for developing the national broadband.

On 9th November 2010, the cabinet approved the National Broadband Policy. The National Broadband Policy serves as a framework for implementing and driving the development of broadband service which will make use of diverse technologies, be advanced and up-to-date, and in tune with the context and situation of Thailand. In addition, it will also answer the needs of all sectors, with the government setting the policy and supporting the creation and use of broadband in a comprehensive and equitable manner. Furthermore, it will also promote the participation of the private sector and people in successful implementation. An independent supervising body, in accordance with the law, will oversee the operation of enterprises to ensure free and fair competition.

Important targets of the National Broadband Policy include providing access to at least 80 percent of the population by 2015 and to 95 percent by 2020, ensuring standard quality of service and reasonable service fees. In addition, cities that are economic and regional hubs should have high-speed fiber-optic cable broadband with a minimum speed of 100 Mbps by 2020.

While developing broadband infrastructure and service, there is also a need to support the extensive use of broadband in order to expand the market and the user base, by promoting the development of diverse applications and content, which can be used in work and daily life.

II. Organizational Development

According to the enactment of the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and the Telecommunication Service B.E. 2553 (2010) on 20th December 2010, the Office of the National Telecommunications Commission (NTC) and its staff have become the Office of the National Broadcasting and Telecommunications Commission (NBTC) and the NBTC staff, accordingly.

Pursuant to provisions of the Act, the NBTC is composed of 11 Commissioners, selected by the Senate from a pool of suitable candidates. The NBTC is mainly responsible for regulating both telecommunication and broadcasting services. The scrutinizing process of the 11 new NBTC Commissioners shall be completed within 180 days as from the date of announcement. It is expected that the NBTC will take office by mid-2011.

In the interim, the NTC Commissioners, acting as NBTC Commissioners, are preparing drafts of the most important plans: the Spectrum Management Master Plan, the Telecommunication Master Plan, and the Broadcasting Master Plan in order to support fair competition, reduce entry barriers as well as encourage public interest. The drafting of the Telecommunication Master Plan and the Broadcasting Master Plan must be aligned with the Spectrum Management Master Plan. The essence of these drafts, according to the Act, is shown below:

1. The Spectrum Management Master Plan focuses on the details of Table of Frequency Allocations for Thailand's benefit, guidelines on the implementation of frequency allocations at the international level, details of band-plan allocation to provide telecommunication and broadcasting services, and spectrum refarming, as well as the transitional period to the adoption of digital television.

2. The Telecommunication Master Plan has highlighted the expansion of broadband infrastructure, the expansion of basic telecommunication services, the provision of affordable telecommunication services, and consumer protection.

3. The Broadcasting Master Plan focuses on five areas, namely: 1) licensing and spectrum allocations for broadcasting services, 2) content regulation, 3) encouragement of creative program production, media education, freedom of communication, and privacy considerations, 4) Consumer protection, complaints, and quality of service standards, and 5) the migration to digital television, technology development for people with disabilities and senior citizens.

III. Regulatory Development

During the past six months, the National Telecommunications Commission (NTC) has announced the following important Notifications in the Royal Gazette:

1. The NTC Notification regarding the Criteria on Mergers and Acquisitions in Telecommunication services

2. The NTC Order regarding the identification of licensees who have Significant Market Power (SMP) in the Telecommunication market

3. The NTC Notification regarding the Criteria for Mobile Number Portability No.2

4. The NTC Notification regarding the Criteria and Procedures for Local Loop Unbundling Services

- **Telecommunication Business Licensees**

As of December 2010, the NTC has granted telecommunication business licenses to Type I, Type II, and Type III operators (106, 17, and 19 respectively).

In terms of the Internet licenses, the NTC has granted 86 licenses to Type I operators, 15 licenses to Type II operators, and 3 licenses to Type III operators.

IV. Bridging the Digital Divide

- **Project: the WiMAX network system for the IT Valley**

"WiMAX IT Valley Project" is collaboration among the National Electronics and Computer Technology Center (NECTEC), the Japan International Cooperation Agency (JICA) of Japan, the National Telecommunication Commission (NTC) of Thailand, and Mae Hong Son Province. This collaborative project involves the installation of the WiMAX network system at 45 sites in the three main districts of Mae Hong Son province: Muang district, Mae Sa Riang district, and Pai district. JICA has provided the WiMAX equipment and arranged for the technology transfer to NECTEC, aiming to support rural development in Thailand by using wireless communication technology.

Update on activities from August 2010 – present

1. WiMAX Implementation and Commissioning

The WiMAX base stations and 45 Site WiMAX terminals were successfully installed in the three districts (Pai, Muang, and Mae Sa Riang) in Mae Hong Son Province and WiMAX services were officially launched in September 2010. All 45 sites are connected through WiMAX, creating the Mae Hong Son Intranet. School sites can use the services for e-Learning and video-conferences: the Live Classroom. Community and government sites can also use the services for video-conferences: Live Meeting and other e-Government and local activities.

2. Capacity Building: Training

Since the launch of services in September 2010, NECTEC, with support from JICA, has been providing ten classes on WiMAX training to Mae

Hong Son schools and government agencies. The training focuses on two areas, the Network System for System Administrators and e-Learning Content Development for teachers and students. The Network System training is aimed at the Mae Hong Son system site administrators to increase their network administration capabilities and to be able to handle the WiMAX system over the long term. The e-Learning Content Development is aimed at teachers and students to help them develop their own local content using the provided equipment and system.

V. Accessibility

- **TOT 3G**

The TOT Public Company Limited (TOT), a government enterprise, continues its 3G mobile broadband project by allowing bidders to supply a network in selected areas by April and to complete the nationwide network within 365 days of the contract signing. Currently, TOT offers a limited 3G wireless broadband service via mobile virtual network operator (MVNO) basis agreements with five companies: Samart I-Mobile, Loxley, IEC, 365 Communication, and M consult. The MVNO trial service contracts will expire at the end of this year. Under its current MVNO business model, TOT as positioned itself as a network provider. Operators who held licenses from the soon-to-be-defunct National Telecommunications Commission, but who lacked their own networks, can rent the network for TOT to provide services.

- **The National Broadband Service (ThaiNet)**

TOT is overhauling its broadband business unit to expand its core revenue stream in an effort to offset shrinking income from its fixed-line service. It has already launched an inexpensive high-speed Internet service under the brand "ThaiNet", following an announcement by the Thai National Broadband Policy that was earlier approved by the Cabinet. TOT will pioneer the service and expect to provide a 2Mbps ADSL service for 199 baht/month (around $US6) in selected provinces in the south, north, and northeast areas of Thailand by the end of this year.

- **The Gulf of Thailand Submarine Cable Project**

The CAT Telecom Company Limited (CAT), a government enterprise in the telecommunication business, plans to install a new submarine optical cable in the Gulf of Thailand to support more types of services ranging from regular broadband internet connection to advanced multimedia and content. The new submarine cable system using DWDM technology links Chonburi province to Songkhla province via the Gulf of Thailand with the aim to facilitate domestic and international connectivity.

VI. Others

- **Center of Excellence for Climate Change Knowledge Management (CCKM)**

Since the launch of the Center of Excellence for Climate Change Knowledge Management (CCKM), a collaborative project between NECTEC and Chulalongkorn University, the CCKM and its partners organized two sessions of brain exercises in “Solar Storm: Disaster Preparedness?” on September 30, 2010 and “Agriculture Adaptation against the Global Warming and the launch of Thai Climate Adaptation Network: Thai CAN” on December 7, 2010. The main purposes were to increase citizen knowledge and awareness of natural phenomena and create cooperative networks between government and private agencies.

From February 4-12, 2011, the CCKM, with the Ministry of Science and Technology, the Netherlands Embassy, and the Thailand Environment Institute, organized a workshop on “Identification Mission Delta, Coastal Zones, and Gulf of Thailand”, aiming to discuss and establish guidelines for innovative solutions to flooding in Thailand.

REGULATORY AND POLICY UPDATE

SOCIALIST REPUBLIC OF VIET NAM

Strategic Plan
on Development of ICT Sector

Strategic Objectives

1. Development of human resources in ICT Sector;
2. Building up an Information Technology industry, especially focusing on the software, digital contents and services, for significantly contributing to GDP and GDP growth as well.
3. Deploying a nation-wide broadband infrastruture.
4. Efficiently apply information technology in all aspects of socio-economy, socio-security and defense.
5. Contributing to the sustainable development, enhancing the transparency of the government agencies.

For the development of human resources in ICT Sector:

- 80% of students of ICT graduated from universities qualified both english and professional skills to join international labor market.
- Total number of people working in ICT industry reaches 1 million including domestic and international markets.
- 70% population using the Internet.

For the building up an Information Technology industry:

- Formed research institutions - to develop a strong ICT.
- Vietnam is among 10 leading countries providing outsourcing services and digital content.
- The software industry and IT-based services become the industry's fastest growing industries in the economic - technical high proportion of GDP.

For the deploying nation-wide broadband infrastructure:

- Broadband network to almost of the villages throughout the country;
- Mobile broadband coverage to 95% of the population;
- Vietnam ranks 55 or higher in the rankings of the ITU (ranking in the 1st group of one-third leading countries).

For the information universalising:

- Most households have telephones.
- 50-60% of households across the country have computers and broadband internet access.
- Most households have television capable of watching digital chanels in different ways.

For the ICT usage:

- Vietnam is in the group of one third leading countries in the ranking of the United Nations about e-government readiness.
- Most basic public services are provided online to citizens and business at the intergrated level (online payment, online results...

For the ICT business and market development:

- Improving the performance of Vietnamese ICT enterprises and corporations like VNPT, Viettel, VTC, FPT, CMC ... on both service and manufacturing sectors.
- Vietnamese ICT business operate at ASEAN and world scale, of wich some having total revenues up to $ 15 billion.

Strategic Solutions

1. Enhancing information dissemination and raising awareness about the master plan.
2. Encouraging the social investment in ICT, particularly for the development of broadband infrastructure.
3. Breakthrough investment with focal points
4. Completing and improving the legal framework for ICT development.
5. Having some priority mechanism and breakthrough policies.
6. Promoing international cooperations.

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INDONESIA'S RECENT REGULATORY AND POLICY DEVELOPMENTS

Agenda item: **Plenary** **Submitted by: INDONESIA**

INDONESIA'S RECENT REGULATORY AND POLICY DEVELOPMENTS

APEC Telecommunications and Information Technology Working Group
43rd Meeting | 27 March - 1 April 2011 | Hangzhou, China

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APEC Telecommunications & Information Working Group (TEL WG)

Hangzhou, China, 27 March - 1 April 2011

1. TELECOMMUNICATIONS STATISTICS

Until the first Quarter (Q1) 2010 the status of telecommunication as follows:

- Fixed line subscribers consisting Fixed Wireless Access (27.481.564) and Fixed line (8.429.180)
- Mobile subscribers are 171.432.531 (72.78 % penetration)
- Internet users are 45 Millions
- Broadband subscribers: 4.000.000 (consisting ADSL, FTTH, 3G and HSDPA)

2. REGULATION UPDATE

a. Government Regulation No. 76/2010 on Government Non Tax Income that include new regime in spectrum fee from TRX based to bandwidth based.
b. Ministerial Decree no. 17/PER/M.KOMINFO/10/2010 on New Structure and Organization of the Ministry of Communication and Information Technology
c. Ministerial Decree no. 1 / PER/M.KOMINFO / 1 / 2010 on Telecommunication Network
d. Ministerial Decree no. 3 / PER/M.KOMINFO / 02 / 2010 on Telecommunication Service Obligation.
e. Ministerial Decree no. 12 / PER/M.KOMINFO / 07 / 2010 on Guidelines for Preparation of Standard Operating Procedure
f. Ministerial Decree no. 13 / PER/M.KOMINFO / 08 / 2010 on Radio Frequency Master plan for Radio Broadcasting Frequency Modulation
g. Ministerial Decree no. 16 / PER/M.KOMINFO / 10 / 2010 on Security Use of Internet Protocol Based on Telecommunications Network
h. Ministerial Decree No 18/PER/M.KOMINFO/11/2010 on the organization and scope of of the USO Implementing Agency.

3. POLICY DEVELOPMENTS

a. Universal Service Obligation (USO)

The Government has established a special implementing agency to implement Universal Service Obligation. All the license telecommunication operators

contribute 1.25% of their gross revenue to finance the USO. Since 2008, the method of awarding the USO programme is using lowest subsidy bidder at the national level. Such least-cost subsidy was awarded to the lowest bidder willing to offer public telecommunications and internet services of a given quality of services and costs over a fixed period (5-year long).

USO programme implemented under this schemes are :

(1) Provision of public phones in 33,259 villages .
(2) Provision of internet kiosks for every sub-districts
(3) Provision of 2000 mobile internet kiosks districts

b. Palapa Ring Program

In order to promote broadband in the country, the Government facilitated the development of broadband fiber optic backbone to connect all the provinces capital and the districts capital. The first stage covers the eastern part of Indonesia.

The Broadband Backbone will consists :

1) Mataram – Kupang
2) Kupang – Sorong
3) Sorong – Manokwari – Biak – Jayapura .
4) Sorong _ Fak-Fak – Timika – Merauke
5) Extension to remaining Kabupaten : Sumatera – Kalimantan – South Sulawesi
6) Extension to Kabupaten in Eastern Indonesia .

This programme will be implemented in 5 years , some by the operators, and the remaining which at present is not feasible economically will be carried out using “subsidy” from the ICT fund , with least subsidy selection.

c. Conversion of Spectrum fee based on number of TRX into based on bandwidth allocated.

Since 2006, allocation of spectrum frequency for exclusive used , such as for cellular mobile and BWA carried over through auction of certain bandwidth. The frequency that has been allocated previously and the spectrum fee is based on the number of TRX built. Through a series of discussions among the operators, workshop and public consultation, Government issued Ministerial regulation no 76 year 2010 that the spectrum fee will be converted based on the bandwidth allocated.

The advantage of spectrum fee based on bandwidth over based on TRX are the spectrum will be used more efficiently, the monitoring of the use of the frequency easily, simple payment, technology neutral, More fair and will speed up the deployment.

The Government allow transition period from the fee paid currently to reach

the final fee in five years. This to help small operators to give reasonable time to adjust

d. Security

Ministerial Decree of Communication and Information Technology regarding Security on IP Based Telecommunication Network led to the establishment Indonesia Security Incident Readiness Team on Internet Infrastructure (ID-SIRTII) as the national Computer Emergency Response Team (CERT). ID-SIRTII serves as the coordination center for the security system of critical infrastructures and also as a single contact point with overseas CERTs. Fundamental duties of ID-SIRTII also include providing early monitoring, detection and warning of security threats to the national telecommunication network, maintaining public awareness of the latest information on security and supporting technical aspects of digital forensics and research on security. ID-SIRTII has recently been admitted as full member of APCERT and FISRT.

e. Implementation of Internet Protocol version 6 (IPv6)

With the exhaustion of Internet Protocol version 4 (IPv4) approaches, Indonesia IPv6 Task Force was officially formed in 2010 through Ministerial Decree of Communication and Information Technology. Activities and campaigns for IPv6 implementation have started in the previous years with large involvement of major Internet Service Providers (ISPs), Universities and Ministry of Communication and Information Technology. Only in mid 2010 that the Minister of Communication and Information Technology, Association of ISPs and among other Internet stakeholders signed the Declaration of IPv6 Indonesia, which signaled the intent to accelerate the IPv6 implementation. Indonesia IPv6 Task Force is currently stepping up the effort to encourage IPv6 readiness in Government Institutions.