

財團法人台灣網路資訊中心因公出國人員報告書

101年 6月 22日

報告人 姓名	曾憲雄 呂愛琴 許乃文 蔡更達	服務單位及職稱	董事長 副執行長 技術組組長 IP組工程師
出國期間	101年5月30日 至101年6月03日	出國地點	越南河內
出國事由	<p>報告書內容應包含：</p> <p>一、出國目的</p> <p>二、考察、訪問過程</p> <p>三、考察、訪問心得</p> <p>四、建議意見</p> <p>五、其他相關事項或資料</p> <p>(內容超出一頁時，可由下頁寫起)</p>		
授權 聲明欄	<p>本出國報告書同意貴中心有權重製發行供相關研發目的之公開利用。</p> <p style="text-align: center;">授權人：</p> <p style="text-align: right;">(簽章)</p>		

附一、請以「A4」大小紙張，橫式編排。出國人員有數人者，依會議類別或考察項目，彙整提出報告。
 註二、請於授權聲明欄簽章，授權本中心重製發行公開利用。

一、出國目的

1. IPv6 Event 為亞洲地區的 IPv6 發展之重要活動，本次越南 Vietnam National IPv6 Event 會議為越來第一次舉辦，主辦單位 VNNIC 除邀請亞太地區主要發展 IPv6 國家進行最新發展報告之外，並特別邀請本中心曾憲雄董事長對 Taiwan Government's Initiative to Deploy IPv6 進行 Keynote Speech，並在會議中進行未來 IPv6 發展座談，希望藉此會議活動對，來增進與推動 IPv6 發展。
2. 至 VNCERT 參訪及進行業務交流

二、會議及參訪行程

此次前往越南-河內參加 Vietnam National IPv6 Event 會議，會議於 HOTEL MELIA HANOI 舉行，為期共 2 日(5/31 ~ 6/1)。在會議前一日，VNNIC 並邀請亞太地區 NIR 單位進行交流會議並至 VNCERT 進行參觀，會議首日為大會 Welcome Speech 及專題演講。

第一天詳細議程如下：

DAY 1 (31 MAY 2012)

MORNING: IPv6 APPLICATION IN THE WORLD AND VIETNAM

Time	Topic	ORGANISATION	SPEAKER
08:00-08:45	REGISTRATION AND EXHIBITION TOUR		
08:45-09:00	WELCOME SPEECH	Minister of Information and Communications (MIC)	
09:00-09:15	OVERVIEW AND UPDATES ON IPv6 IN VIETNAM	IPv6TF Vietnam (VNIPv6TF)	Mr Hoang Minh Cuong - Director General of VNNIC - Standing committee for the IPv6TF Vietnam
09:15-09:30	Keynote Speech IPv6 deployment and Trend in Asia – Pacific region and the world.	Asia Pacific IPv6 Taskforce (APIv6TF)	Mr Micheal Baber – Acting chair of APIv6TF
09:30-09:45	Keynote Speech IPv6 Deployment determines the Future of the Internet.	Asia Pacific Network Information Center (APNIC)	Mr Paul Wilson - Director General of APNIC
09:45-10:00	Keynote Speech IPv6 transition strategies - review on pros and cons of different technologies.	Asia Pacific Internet Association (APIA)	Mr Phillip Smith – Chair of APIA
10:00-10:20	IPv6 deployment in local enterprise	Vietnam Post and Telecommunication	

		Group (VNPT)	
10:20-10:40	To get your infrastructure ready to gear up with IPv6 trend	Nippon Telegraph and Telephone Corporation (NTT)	Mr. Theodoric Chan, COO
10:40-11:00	TEA BREAK		
11:00-11:20	IPv6 Deployment strategy	HEWLETT PACKARD (HP)	
11:00-11:20	IPv6 deployment for services and equipment..	VIETTEL GROUP	
11:20-11:40	IPv6 Deployment strategy	CISCO SYSTEMS	Mr Eric Ku Customer Solution Architect
11:40-12:00	World IPv6 Launch	Internet Society (ISOC)	Rajnesh D.Singh Regional Director
12:00-12:15	DISCUSSION		
12:15-13:00	LUNCH		

AFTERNOON: TECHNOLOGY – IPv6 DEPLOYMENT AND MIGRATION SOLUTION

TIME	TOPIC	ORGANISATION	SPEAKER
13:30-13:50	IPv6 deployment HP solution and case study	HEWLETT PACKARD (HP)	
13:50-14:10	Vietnam National IPv6 Testbed Network	Vietnam Internet Network Information Center (VNNIC)	Mr. Nguyen Truong Giang
14:10-14:30	IPv6 deployment for services of ISP without its own transmission infrastructure	Netnam Company	Mr Vu The Binh - CEO
14:30-14:50	NTTCom's IPv6 experiences	Nippon Telegraph and Telephone Corporation (NTT)	Mr Taku Morinobu
14:50-15:10	IPv6 Transition for Broadband Access	CISCO SYSTEMS	Eric Ku Customer Solution Architect
15:10-15:30	IPv6 for Mobile	Ericsson	Fredrik Garneij IPv6 Program Manager

Tea Break			
15:40-16:00	IPv4/v6 co-existence technologies and case studies	JUNIPER NETWORKS	Ms Miya Kohno
16:00-16:20	IPv6 Network Evolution Strategy	Huawei Technologies Co (Huawei)	Mr. Sam Lim Director, IP Product Line of Huawei SEA
16:20-16:40	IPv6 deployment solution for Facebook		
16:40-17:00	Review and Concerns of IPv6 Security	Integralis	Mr. Garry Sidaway. Director of Security Strategy Mr. Chris Doerfler. VP, Commercial
17:00	DISCUSSION		

第二天詳細議程如下：

DAY 2 (01ST-JUN-2012) OPEN DISCUSSION WITH 02 PARALLEL SESSIONS

SESSION1: STRATEGY FOR IPv6 DEVELOPMENT

PANEL LIST: SPEAKERS (MIC, VNNIC, APNIC, APIPV6TF, ..)

TIME	TOPIC	ORGANISATION	SPEAKER
09:00-09:15	IPv6 Deployment in Vietnam – National Action Plan on IPv6	Vietnam Internet Network Information Center (VNNIC)	Mr. Tran Minh Tan – Deputy Director
09:15-09:30	APNIC IPv6 Program	Asia Pacific Network Information Center (APNIC)	Ms Miwa Fujii IPv6 Program Senior
09:30-09:45	APIPV6TF- IPv6 deployment in the region	Asia Pacific IPV6 Taskforce (APIPV6TF)	Mr Micheal Baber – Acting chair of APIPV6TF
09:45-10:00	Taiwan Government's Initiative to Increase IPv6/ Deployment IPv6	Taiwan Network Information Center (TWNIC)	Prof. Shian-Shyong Tseng Chairman of Board
10:00-10:15	The endeavor on the preparation for IPv6 in Japan and lessons learned	Japan Network Information Center (JPNIC)	Mr Maemura Akinori IP Department Director
10:15-10:30	IPv6 deployment in Japan	Japan IPv4 Exhausted Task Force	Mr. Tomohiro Fujisaki
10:30-10:45	The IPv6 experiences in Korea	Korea Network Information	Mr Chanki Park

		Center (KRNIC – KISA)	
10:45-11:00	Tea Break		
11:00	Discussion - Countries and region updates about IPv6 deployment. - Main issues during the deployment of IPv6. - Experience to improve awareness of community about IPv6. - IPv6 topic in training program. - Benefits from IPv6. - International cooperation for IPv6 deployment.	- MIC, VNNIC, Vietnamese governmental agencies. - APNIC, APIPv6TF, TWNIC, KRNIC, JPNIC, Japan IPv4 Exhausted Task Force. - Local ISP. - Local University.	

SESSIONS 2: IPv6 TECHNICAL ISSUES

PANEL LIST: SPEAKERS (VNNIC, APIA, Keynote speakers...)

TIME	TOPIC	ORGANISATION	SPEAKER
09:00-09:20	Experiences in IPv6 Deployment for National DNS	Vietnam Internet Network Information Center (VNNIC)	Mr. Nguyen Truong Thanh
09:20-09:40	IPv6 deployment for IXP in Japan	Internet Multifeed Co (JPNAP)	Mr Katsuyasu Toyama General manager of the technology department of JPNAP
09:40-10:00	Experiences and issues for IPv6 Deployment	Netnam Company	Mr Nguyen Luu Hoang
10:00-10:20	Hurricane Electric's global IPv6 experiences	Hurricane Electric (HE)	Mr Martin J. Levy Director of IPv6 strategy, Hurricane Electric
10:20-10:30	Tea Break		
10:30-10:50	Technical Issues	Vietnam Post and Telecom group (VNPT)	
10:50-11:10	NTTCom – Experiences from IPV6 enabled for services and applications	Nippon Telegraph and Telephone Corporation (NTT)	Mr Nguyen Huu Bach

11:10-11:30	IPv6 transition strategies - review on pros and cons of different technologies (in detail)	Asia Pacific Internet Association (APIA)	Mr Phillip Smith – Chair of APIA
11:30	DISCUSSION - Practical experience for IPv6 deployment. - IPv6 deployment for DNS and IX. - Security and technical issues. -	<ul style="list-style-type: none"> - VNNIC, Vietnamese governmental agencies. - APIA, JPNAP Companies, Firms - Local ISP. 	



曾憲雄董事長受邀專講「Taiwan Government's Initiative to Deploy IPv6」



各國講者專講後，進行 Panel Discussion

三、考察、訪問過程與心得

(一) VNNIC Office Visiting and meeting between invited NIRs (JPNIC, KRNIC and TWNIC)

主辦單位 VNNIC 藉由舉辦此次 IPv6 Event 活動之外，並邀請亞太各國 NIR 等單位於 VNCERT 辦公室進行業務交流，了解各國在域名的發展及推廣策略及 IPv4 位址枯竭現況及因應方式，會後並藉此機會參訪 VNCERT 辦公室。

(二) Vietnam National IPv6 Event

(三) 至 VNCERT 參訪及進行業務交流

越南 VNCERT 於 2005 年 12 月 20 日成立，隸屬於越南 Vietnam Ministry of Posts and Telematics。

VNCERT 的使命是協助越南國內單位處理並減少電腦安全事故的風險，並協助他們在應對此類事件發生，VNCERT 亦處理在越南網路發生的資安事件，不論是由越南國內或是由外國人士或機構進行通報。

VNCERT 藉由加入 APCERT 等國際組織進行國際合作，以因應處理類似 APT 等新興網路攻擊。藉由此次拜訪 VNCERT 了解，越南只有 VNCERT 此一 CERT 組織，但由於越南國土狹長，所以總部設於北部河內，並於中、南部各設立辦公室。

VNCERT 並與 VNNIC 彼此間合作對於域名等資安議題如網路釣魚事件進行處理。

四、建議意見

1. IPv6 的發展代表許多潛在的商機，從網路佈建所需的設備、骨幹與終端設備等設備；上網所需的介接服務，包括有線與無線等不同介接 IPv6 網路的服務；上網後之內容與應用，包括影音視訊或數位家庭的應用；以及 IPv4 過渡到 IPv6 的轉換解決方案等，都有許多國際大廠開始投入與準備，台灣應在此一必然發展的趨勢中積極參與搶得先機。
2. 推動 IPv6 為往後網路發展之必要趨勢，世界幾個先進國家除了 ISP 之外，由政府帶頭推動也是另一個方式與趨勢，台灣目前由行政院於 2011/12/30 日核定通過「國際網路通訊協定升級推動方案」，以「網路服務無縫隙，智慧創新樂生活」為願景，推動政府優先進行 IPv6 網路升級，並政策性推動 IPv6 產業的發展，以帶動民營業界的發展動能，各國對此方案相當感興趣，往後可藉由國際會議提供台灣經驗並與其他國家進行交流。
3. 此次會議中，與會者對於 IPv6 應用於轉移到目前服務所需耗費的成本顯得在意。建置 IPv6 之成本對於新建網路或服務導入 IPv6 的包袱與門檻相對較低，建議國內在 IPv6 的推廣方面可多著力於新興業者或相關新服務上。