

財團法人台灣網路資訊中心因公出國人員報告書

2008年6月5日

報告人姓名	呂愛琴 呂苗令	服務單位及職稱	TWNIC 副執行長 DN 組管理師
出國期間	2008年5月21日至 2008年5月26日止	出國地點	吉隆坡, 馬來西亞
出國事由	報告書內容應包含： 一、出國目的 二、考察、訪問過程 三、考察、訪問心得 四、建議意見 五、其他相關事項或資料 (內容超出一頁時，可由下頁寫起)		
授權聲明欄	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。 授權人： (簽章)		

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. 參加 APTLD (Asia Pacific Top Level Domain Association) 舉辦之「APTLD's Meeting and Workshops」吉隆坡會議。
2. 與.tw registrar-WebCC Ltd.進行海外授權業務交流。

二、 考察、訪問過程

本次 APTLD 會議於馬來西亞吉隆坡，於會議地點 The Ritz Carlton 酒店舉辦「APTLD's Meeting and Workshops」，本次會議計有來自 27 個 ccTLD 之會員代表及 27 個其他網路相關單位參加，總計超過 110 位與會來賓。

本次 APTLD 會議行程自 5 月 18 日起至 5 月 24 日舉辦不同主題之研討會及會員大會，5 月 18 日至 5 月 19 日舉辦 APTLD training workshop，主題為 Attach & Disaster Response Planning(ADRP)，介紹有關電腦攻擊災害之技術與非技術影響，以及有效風險評估計畫之需要議題；5 月 20 日至 5 月 21 日舉辦由 MYNIC 所主辦之 World Cyber Security Seminar，介紹有關網路安全及 DNSSEC 等相關議題；5 月 22 日至 5 月 24 日舉辦「APTLD Member's Meeting」，由於 TWNIC 為 APTLD 會員，此行我們主要是為了參與 5 月 22 日至 5 月 24 日之 Member Meeting 以了解亞太地區各 registry 之運作現況，以及參加 5 月 25 日的 Board Meeting。

(5 月 21 日) 第一天到了吉隆坡，晚上我們即應邀參加.asia 之 member 會議，本次會議主要為確認董事任期，於本次會議中經由各 member 代表票選後決定出董事任期為一年。

(5 月 22 日) 本日為 APTLD Member Meeting 開始第一天議程，本日議程首先由馬來西亞電信主管機關 MCMC 及本次會議主辦單位.my 進行組織介紹及運作現況報告，接著由幾個網際網路相關單位及各會員國進行有關 domain name 相關技術、DNS 安全以及各國 IDN 相關執行狀況等介紹及現況更新。



(5月23日)本日之議程由.jp及ICANN進行目前組織運作報告及現況更新開始，接著由.my報告於會前針對各ccTLD之registry所進行有關網路安全運作相關政策之調查結果統計分析，本項調查主要為整理各registry資訊安全及對於網域名稱註冊人資訊安全等相關議題之作法，目的為協助各registry之資訊交換、分享實際經驗、評估各ccTLD如何與其國家的Cert緊密地合作有關防止與對付網路釣魚事件、評估各ccTLD如何為網域名稱顧客改善安全層級以及評估什麼樣的安全議題是現階段各ccTLD應該重視的，本調查報告十分有意義，透過調查統計可有效協助各registry了解各國實際執行業務上對於網路安全之作法。

本日議程接著由各網路相關單位進行一連串Anycast之實際運作介紹，以及ISOC、GAC、gNSO、ccNSO等等國際網路組織進行目前組織運作狀況更新報告。

(5月24日)本日之議程分為二場次，一場次以ccTLD政策及行銷為主題之議題，一場次以registry解決方案為主題，我們參加的是ccTLD政策及行銷主題的會議。本場次上午由.nz介紹有關ccTLD政策制定之議題，主要為分享有關registry、registrar及registrant間之政策制定規則，以及如何明確且適當的訂定政策以有效管理網域名稱，現場並針對如何保護網域名稱隱私權等相關議題，邀請各國與會代表提供意見。下午則由AusRegistry介紹網域名稱行銷策略及.au行銷經驗之分享議題，AusRegistry以風趣生動的演說，介紹如何以有效之行銷策略達到推廣網域名稱之效益，並搭配.au目前已執行之CF等相關行銷方案提供與會者經驗分享。

(5月25日)本日為APTLD Board Meeting，本會議由APTLD Board Member共同參與，主要為討論APTLD組織於2008年運作之計畫、SWOT分析、目前營運策略及未來方向等。

三、 考察、訪問心得

本次有機會參與APTLD會議，讓我們進一步了解到幾個ccTLD的組織運作狀況及目前執行網域名稱業務之相關政策及技術等，並且也於會議中結識一些國家NIC之夥伴們，這樣的資訊交流有助於DN組於執行網域名稱相關政策及業務運作之參考。

同時我們也抽空與本中心授權之registrar-WebCC Ltd.進行業務交流，WebCC為一家馬來西亞公司，於亞洲地區已為相當知名度之專業網域名稱受理註冊機構，在會議中我們也直接與WebCC進行.tw業務執行狀況討論，由於WebCC於2008年3月已正式轉為.tw直接授權之registrar，亦為APTLD會員，藉由本次參與APTLD吉隆坡會議，我們直接與WebCC進行面對面之.tw授權業務之了解，包括帳務程序及DN相關業務執行狀況之交流等，有效地處理了平時業務運作上可能碰到的一些狀況，也對於雙方業務合作上十分有幫助。

四、 建議意見

目前國際上積極討論有關 DNS 安全及客戶隱私權保護之相關議題，這些議題有助於.tw 業務執行之參考，藉由參加國際會議與其他國家進行資訊交流，可幫助我們認識國際運作趨勢及了解目前其他 ccTLD 之作法，未來中心能積極參與業務相關之國際會議，且實際參與相關議題之討論與經驗分享，藉由吸收國際上各國之經驗，協助.tw 業務之推動。

五、 其他相關事項或資料

- 5月18日至5月19日『APTLD training workshop-Attach & Disaster Response Planning』會議議程

Proposed Course Content
<p>Anatomy of a Disaster</p> <p>Sometimes, things go (terribly) wrong – examining those cases after the dust settles highlights gaps in capability, knowledge, awareness, or preparedness which contribute to cascading failures. This opening series of case studies highlights how the situations could have been handled more effectively if proper planning and preparedness issues were addressed a priori.</p> <p>Includes discussion of technical impact to infrastructure and non-technical impacts to operations.</p>
<p>Philosophy of Preparing for a Disaster or Attack</p> <ul style="list-style-type: none"> ● Presents an approach to preparing for a disaster or attack – based on sound risk assessment, business continuity planning, and threat awareness. <ul style="list-style-type: none"> ✓ Business Continuity Planning Process – describes a process that flows from initial risk assessment to developing mitigation plans; documents processes and procedures to implement in order to ensure critical operations or services survive the threat and are restored to normal operation. ✓ Risk Assessment Process – determine critical assets or operations; determine areas of concern with respect to critical assets (“what keeps you up at night”)—includes business impact assessment; determining threats to critical assets or operations; vulnerabilities of critical operations / assets; risks (value of asset + threat to asset + vulnerability =likelihood); protection strategies and mitigation plans. ● Benefits of formal and informal resources for assistance. ● Necessity of understanding threats as they pertain to critical operations or assets.
<p>Attack and Disaster Response Planning for the ccTLD – the process for assessing risk, developing mitigation strategy & plan, validating and maintaining the plan – presented in the context of ccTLD operations.</p>
<p>Determining Critical Assets and Operations</p> <ul style="list-style-type: none"> ● Presents the concepts of critical operations, assets, services, functions, and relationships in the context of a ccTLD -- things you need to protect for continuity of operations purposes. <ul style="list-style-type: none"> ✓ Presents risk assessment methods the ccTLD manager can use to determine or identify the critical assets using a combination of expert and authoritative sources.

- ✓ Discusses risk measurement criteria – how an organization would measure risk based on what they perceive as “bad” for their business or operations ; draws upon several industry recognized methodologies for risk assessment.
- ✓ Concepts of business impact assessment (BIA).

Identifying Areas of Concern

- Identifying real-world conditions or situations that could affect an information asset or critical operation; emphasis on ccTLD assets and operations.
- Briefly discusses technical, procedural, and environmental vulnerabilities typical of a ccTLD operation.

Proposed Course Content

Threats and Threat Scenarios

- Understanding Threats – natural, physical, input to services (power, comms), political, intentional vs. accidental (human error, criminal, malicious, personal), internal vs. external (authorized user/authorized access vs. authorized user/unauthorized access vs. unauthorized user)
 - ✓ Specific focus and examples from ccTLD operational environment
- Developing threat scenarios – situation in which an information asset can be compromised; identify actor, a motive, a means (access), and an undesired outcome.

Risk Analysis

- Complete the risk equation: Threat (condition) + Impact (consequence) = Risk
- Identify impact value – qualitative value assigned to describe the extent of impact to the ccTLD when a threat scenario and resulting impact is realized; utilize the risk measurement criteria developed earlier.
- Present a “representative” risk matrix for ccTLD operations.

Developing Mitigation and Business Continuity Plans

- Discuss mitigation strategies and the development of procedures and plans as a means of mitigating risks.
- Provide recommended minimum content of (ccTLD) Attack/Disaster Recovery Plans.
- Execution (Response) considerations.
 - ✓ Contractual Commitment, Standards & Regulatory & Legislative Commitments, Budgets, Skills

ccTLD Response Options for Today’s Threats

- Briefly discuss ccTLD best practices in securing and responding to current and emerging threats.
 - ✓ Anycasting, filtering, other diversity and redundancy, etc.
- Provide students with a set of baseline considerations for measures / procedures they can include in their own plans.
- Provide students with formal and informal resources where they can go to find help with technical mitigation measures and industry best practices.

Evaluating & Maintaining Your Plans

- Evaluation techniques: structured plan walk-through, table top exercises, functional/ operational exercises.
 - ✓ General considerations and process for planning, conducting, and assessing an exercise.
 - ✓ Coordination with outside agencies.
- Approaches to (and necessity of) capturing Lessons Learned and updating procedures (plans).

■ 5月20日至5月21日 『World Cyber Security Seminar』 會議議程

Day 1 :: 20th May 2008 ::		
Time	Speakers	Title
		Registration*
02.00 p.m 02.30 p.m		Opening Ceremony
02.30 p.m 03.30 p.m	Steve Crocker Chief Executive Officer Shinkuro	Internet Security Today & Internet Infrastructure Security and Stability
03.30 p.m 04.00 p.m		Coffee Break
04.00 p.m 04.40 p.m	Abu Ubaidah Md Zain Deputy Director Network Security Centre Security Trust and Governance Dept Malaysian Communications and Multimedia Commission	Current Internet Security Enforcement in Malaysia and Future Issues
04.40 p.m 05.20 p.m	Rajnish D. Singh Regional Manager for South and Southeast Asia ISOC	Preserving the User Centric Internet
05.20 p.m 06.00 p.m		Plenary Session and Closing Remarks
Day 2 :: 21st May 2008 ::		
Time	Speakers	Title
08.30 a.m 09.00 a.m		Welcome coffee
09.00 a.m 09.40 a.m	John L. Crain Chief Technology Officer ICANN	Internet Security at the Core
09.40 a.m 10.20 a.m	Ron Atchison President Zytrax	DNS in an Unfriendly World : The role of DNS in protecting National Assets
10.20 a.m 10.40 a.m		Coffee Break
10.40 a.m 11.20 a.m	Bill Manning Project Manager, Routing Arbiter USC/ISI University of Southern California's Information Sciences Institute (ISI)	DNSSEC - an overview of recent protocol changes
11.20 a.m 12.00 a.m	Joao Damas ISC Senior Programme Manager ISC	Strengthen the Internet's Resistance to Attacks on Its Infrastructure
12.00 a.m 12.40 p.m	Norsuzana Harun Senior System Administrator MYNIC	Implementation of Anycast root server in Malaysia
12.40 p.m 01.00 p.m		Q&A

01.00 p.m 02.00 p.m		Lunch
02.00 p.m 02.40 p.m	Kunjai Trivedi Cisco Chartered Engineer (CCIE #3460) Cisco	IPv6 Security Considerations for Current and Future Infrastructure
02.40 p.m 03.10 p.m	Jordi Palet Martinez Director Consulintel	The Security Impact of Business and Residential Broadband Traffic on IPv6 ISP Backbones
03.00 p.m 03.50 p.m	Ryan Connolly Vice President of International Programs Team Cymru	Anatomy of a Network Attack
03.50 p.m 04.10 p.m		Coffee Break
04.10 p.m 05.00 p.m	Jonathan Shea Chief Executive Officer HKIRC / HKDNR	ccTLD Security - the '.hk' Experience
05.00 p.m 05.40 p.m	Raja Azrina Raja Othman Chief Technology Officer CyberSecurity Malaysia	MYCERT's Perspectives on Attackers and User Behaviour
05.40 p.m 06.00 p.m		Q&A and Closing Remarks

■ 5月22日至5月24日『ATPLD Member's Meeting』會議議程

Thursday, 22 May – Room Cobalt 6					
	Start	Duration	Finish	Topic	Presenter
1	9:00	0:05	9:05	Welcome and Introduction to the Day	Chair
2	9:05	0:30	9:35	ICT in Malaysia	Mr. Toh Swee Hoe, Senior Director, Research & Planning Division Malaysian Communications and Multimedia Commission
3	9:35	0:25	10:00	Update on MYNIC	Rahadhiah Halida - .my
4	10:00	0:30	10:30	Report from ICANN	Peter Dengate Thrush - ICANN
5	10:30	0:30	11:00	Morning Tea	
6	11:00	0:20	11:20	The work of the ICANN Security & Stability Advisory Committee	Steve Crocker - SSAC
7	11:20	0:20	11:40	DNSSEC - Consideration in Selection	Lester Kum - .sg
8	11:40	0:20	12:00	Fast Flux & Mitigation Approaches.	Adli Abd Wahid - MYCERT
9	12:00	0:20	12:20	Performance Handling & High Availability	Brent Lee - WebCC
10	12:20	0:20	12:40	Discussion	
11	12:40	1:00	13:40	Lunch	
12	13:40	0:20	14:00	IDNs - Discussion on IDNC Draft Paper	Chris Disspain - .au
13	14:00	0:20	14:20	IDNs - Approaches to Community Consultation	Gihan Dias - .lk
14	14:20	0:20	14:40	IDNs - Update on Regional Activity	Abdulaziz Al-Zoman - .sa

15	14:40	0:20	15:00	IDN - General Discussion	
16	15:00	0:30	15:30	Afternoon Tea	
17	15:30	0:40	16:10	Choosing a Registry Solution	
18	16:10	0:20	16:30	Recent Experiences in Choosing a Solution	Choon Sai Lim - .sg
19	16:30	0:20	16:50	Recent Experiences in Choosing a Solution	Stephen Deerhake - .as
20	16:50	0:10	17:00	DUMBO & The Community's Response to Myanmar	Ching Chiao - .asia
21	18:30			Member's Dinner - Saloma Bistro, Jln Ampang Kuala Lumpur	

Friday, 23 May – Room Cobalt 6

	9:00	0:05	9:05	Welcome and Introduction to the Day	Chair
22	9:05	0:15	9:20	Member's Update - .jp	Toshihiro Sasaki - .jp
23	9:20	0:15	9:35	Member's Update - .bd	Habibur Rahman - .bd
24	9:35	0:20	9:55	Internet Security & ccTLDs - Survey Results	Yee Ling Yeo - .my
25	9:55	0:15	10:10	Anycast - Overview & Introduction	Mark Perkins - .za
26	10:10	0:30	10:40	Morning Tea	
27	10:40	0:20	11:00	Anycast - Afiliias	John Kane
28	11:00	0:20	11:20	Anycast - Autonomica	Nurani Nimpuno
29	11:20	0:20	11:40	Anycast - Community DNS	Bart Mackay
30	11:40	0:20	12:00	Anycast - Neustar	Fernando Espana
31	12:00	0:20	12:20	Anycast - PCH	Bill Woodcock
32	12:20	0:20	12:40	Anycast - VeriSign	June Seo
33	12:40	1:15	13:55	Lunch	
34	13:55	0:20	14:15	Engagement with IGF	Markus Kummer - IGF Secretariat
35	14:15	0:20	14:35	Engagement with Communities	Rinalia Abdul Rahim – GKP
36	14:35	0:20	14:55	Engagement with ISOC	Rajnish Singh – ISOC
37	14:55	0:20	15:15	What's happening in the GAC	Jayantha Fernando – GAC
38	15:15	0:30	15:45	Afternoon Tea	
39	15:45	0:20	16:05	What's happening in the gNSO	TBC
40	16:05	0:20	16:25	Engagement with APRALO	Bilal S. Beirm – APRALO
41	16:25	0:20	16:45	What's happening with the ccNSO	Chris Disspain - .au
42	16:45	0:45	17:30	APTLD General Discussion	

Saturday, 24 May 2008 - Stream A – Room Carlton 5

43	9:00	1:30	10:30	Workshop on ccTLD Policy Development	Debbie Monahan - .nz
44	10:30	0:30	11:00	Morning Tea	
45	11:00	1:30	12:30	Workshop on ccTLD Policy Development	Debbie Monahan - .nz
46	12:30	1:00	13:30	Lunch	
47	13:30	1:30	15:00	Marketing for ccTLDs	Adrian Kinderis - AusRegistry Int'l June Seo - .cc & .tv
48	15:00	0:30	15:30	Afternoon Tea	
49	15:30	1:30	17:00	Marketing for ccTLDs	Adrian Kinderis - AusRegistry Int'l June Seo - .cc & .tv

Saturday, 24 May 2008 - Stream B – Room Carlton 8

50	9:00	0:10	9:10	Introduction & Welcome	
51	9:10	0:45	9:55	Registry Sample Solutions - FRED	Pavel Tuma - .cz
52	9:55	0:45	10:40	Registry Sample Solutions - Cocca	Garth Miller - Cocca

53	10:40	0:30	11:10	Morning Tea	
54	11:10	0:45	11:55	Registry Sample Solutions - Afiliias	John Kane - Afiliias
55	11:55	0:45	12:40	Registry Sample Solutions -Neustar	Fernando Espana - Neustar
56	12:40	1:00	13:40	Lunch	
57	13:40	0:45	14:25	Registry Sample Solutions - NZRS	Nick Griffin - NZRS
58	14:25	0:45	15:10	Registry Sample Solutions -Webcc	TK Tan - Webcc
59	15:10	0:30	15:40	Afternoon Tea	

■ 5月25日 『ATPLD Member's Meeting』 會議議程

Program for APTLD Board Meeting May 25, 2008

Board Meeting

1. Attendance/Apologies
2. Review of Minutes from Last Meeting - Paper
3. The Constitution Review - Paper
4. The banking & tax situation - Paper
5. Future meetings - Paper
6. Financial Sustainability

Strategic Planning Session

1. Welcome Note
2. A quick recap of the 2008 Business Plan
3. Report and discuss results of the strategic direction survey
4. List the context and stakeholders of APTLD
5. Revisit and confirm the mission statement, vision and core values of APTLD
6. SWOT Analysis
7. List and agree on the Strategic Priorities
8. List and agree on the key initiatives of each strategic priority
9. Agree on the Performance Indicators and Targets
10. Discuss and agree on next steps
11. Closing