

行政院及所屬各機關出國報告

(出國類別：會議)

出席美國微軟公司政府資訊領導人高峰會
會議報告

服務機關：行政院研考會

出國人 職 稱：主任委員、處長

姓 名：林嘉誠、施宗英

行政院研考會
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報告日期：91年7月31日

行政院及所屬各機關出國報告提要

出國報告名稱：出席美國微軟公司政府資訊領導人高峰會會議報告

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出國計畫主辦機關/聯絡人/電話：

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關鍵詞：電子化政府

內容摘要：

研討會討論主題包括：電子民主、資訊科技促進經濟發展、構建強健的資訊產業、構建電子化政府藍圖、結合民間資源發展電子化政府入口網、政府政策擬訂與資訊文化塑造、構建安全可靠信任的資訊基礎建設、網際網路隱私保護。

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2. 照片集

壹、目的

就電子化政府相關重要議題進行討論，交換觀念、技術與工作經驗，參與座談會擔任與談人，向國際人士傳達我國電子化政府的推動成效與作法。

貳、過程

四月十五日：歡迎晚宴

四月十六日上午：依序進行如下：

- 一、 微軟公司執行副總 Bob Herbold 及全球行銷副總 Jonathan Murray 開幕致詞。
- 二、 微軟公司執行總裁 Steve Ballmer 專題演講：展現電子化政府的潛能。
- 三、 IDC 公司資深副總 John Gantz 專題演講：運用資訊科技加強推動經濟發展。
- 四、 世界經濟論壇執行長（聯合國秘書長資通訊特別代表、前哥斯大黎加總統）Jose Maria Figueres 專題演講：讓新科技為人類發展服務（由日內瓦透過遠端視訊會議方式進行）。
- 五、 南斯拉夫王子 Aleksander 二世專題演講：運用資訊科技促進民主與經濟發展。

六、 座談討論：電子民主。由線上民主(Democracies Online)的 Steven Clift 擔任主持人，與談人包括：戈巴契夫北美基金會執行主任 Anthony Jones、英國 e 大使 Andrew Pinder、法國 CNIL 總裁 Michel Gentot、社會民主黨資訊委員會主席 Niklas Nordstrom 等人，探討電子民主之可行性、限制、風險與機會，以及如何運用資訊科技促進電子民主的發展等。

七、 午餐會：聽取下列簡報：

1. Accenture 公司報告對全球 23 個國家推動電子化政府的調查評估（不包含台灣）。
2. CGI 公司報告電子化政府單一窗口的推動經驗。
3. Compaq 公司報告善用電子化政府於後 911 經濟時代。

四月十六日下午：依序進行如下：

- 一、案例探討：運用資訊科技促進經濟發展
- 二、政策座談(1)：建構強健的資訊產業，我國立法院江副院長丙坤擔任與談人。
- 三、座談討論：構建電子化政府發展藍圖。由美國麻省

理工學院史龍學院的 Joel Kurtzman 擔任主持人，與談人包括：本會林主任委員嘉誠、加拿大 New Brunswick 省省長（兼廳長負責推動 eNB）Bernard Lord、PCIP 對外關係理事會國際關係專員 Jeff Kaplan、香港政府資訊科技服務主任 Alan Wong、墨西哥總統辦公室電子化政府協調員 Abraham Sotelo 等。首先由美國太平洋國際政策會(Pacific Council on International Policy) Nina Hachigian 簡報「開發中國家的電子化政府發展藍圖--電子化政府領導人應該自問的 10 個問題」，接著進行座談討論。本會林主任委員擔任與談人，針對我國推動電子化政府的經驗，提出內容重點如下：

1. 如何構建電子化政府的藍圖：配合政府再造工作，規劃推動數位台灣六年計畫，推動電子化政府旗艦型計畫。從第一階段的電子化政府基礎建設三年計畫，目前已進入第二階段的電子化政府線上服務與資訊流通整合，未來著眼於建構一個機動式政府(Mobil Government)。
2. 電子化政府的目標與挑戰：政府機關與公務員全面上網，推動 1500 項線上申辦服務，今後仍待

繼續加強建立政府決策階層的共識與支持，加強電子化政府經費投資與資訊人力資源，加強結合民間資源，加強資訊安全與隱私保護。

3. 電子化政府的經費投資與領導：成立國家資訊通信發展推動小組，未來六年數位台灣預計投入新台幣 350 億元。
4. 電子化政府的績效評量指標：針對服務品質與滿意度評量等進行相關調查，並做國際比較。

四月十七日上午：依序進行如下：

- 一、墨西哥總統 Vicente Fox 在墨西哥透過視訊會議與西雅圖連線，向與會人員簡短致詞，之後由墨西哥通訊運輸部長 Pedro Cerisola 在會議現場進行 E-Mexico 專題報告。
- 二、美國預算管理局督導資訊技術與電子化政府的副局長 Mark Forman 專題報告有關布希政府對運用網際網路增進民眾福祉的願景。
- 三、案例研討：入口網站與合作夥伴關係
- 四、公共政策對話(2)：政策如何塑造資訊高速公路
- 五、午餐會：聽取下列簡報：
 1. KPMG 公司簡報.NET 整合政府專屬資訊系統

2. PWC 公司簡報海關自動化

四月十七日下午：依序進行如下：

- 一、案例研討：全球展望
 - 二、公共政策對話(3)：構建安全的資訊基礎建設
 - 三、公共政策對話(4)：網際網路上的隱私議題
 - 四、江副院長丙坤專題演講：台灣資訊工業發展的奇蹟
 - 五、政策議題總結報告
 - 六、Bill Gates 專題演講：Bill Gates 認為成功推動電子化政府的重點包括 1. 人才培育，2. 趕上潮流的科技思維，3. 推廣 Killer Applications，使廣為運用，達到應有的規模，有利於擴充營運及維護。
 - 七、微軟公司執行副總 Bob Herbold 閉幕致詞
- 下午五時三十分 Bill Gates 會見我國代表團，稱許台灣資訊科技與產業發展的成就。

參、相關發現與會議重點

- 一、英國 e 大使(e-Envoy)Andrew Pinder 係內閣辦公室中的 e 大使辦公室負責人，該辦公室負責全般電子商務與電子化政府的推動，其主要任務是要將英國政府服務推上網路，在公元 2005 年達到所有的政府服務電子化，確保民眾和企業可以從知識經濟中獲得最大的好處，中

央機關總共 521 項申辦服務中，2001 年 10 月已有 218 項(42%)服務上網，2002 年底預期可達到 384 項(73%)服務上網。該辦公室目前擁有專業工作人力二百多位，主要工作任務分為 e-Policy、Service Transformation、e-Delivery 以及 e-Communications. 四個領域。英國政府在 2001 年 2 月推出 UK online Citizen Portal，除了提供政府資訊與服務的目錄與檢索外，主要以民眾需求為著眼，提供多種的「生活事件式」(life episodes)服務，2001 年 10 月已提供 9 類服務，包括：犯罪報案、死亡、旅行、生育、學開車、尋人、找工作、搬家、退休養老等。英國政府對於 UK online Citizen Portal 進一步的發展重點包括：提供更多管道的服務，如數位電視、無線行動電話等；提供更人性化的介面服務，如智慧型語言查詢、多語言、語音辨識等；提供個人化服務；整合性線上申辦。推動電子化政府的重要基礎工作，包括：推動跨機關資訊整合交換的 Government Gateway，策訂資訊文件互通標準的 Government Interoperability Framework 和 Metadata Framework 等。同時也訂定各政府機關建置網站的規範指引及手冊。

二、電子化政府是美國聯邦政府當前主要的施政管理重點，布希政府上台後頒布了電子化政府管理方案 (President's Management agenda for E-

Government)，運用數位科技轉化政府作業，改進效能與服務。目前，約有 76%的網路使用者運用網際網路與政府部門互動，根據調查，美國民眾期望電子化政府應著重於：1. 讓政府的資訊與服務更方便使用，2. 讓政府機關間的垂直與橫向聯繫更好，3. 有效協助企業與政府部門打交道，4. 增進民眾參與決策。另外，美國民眾多數認為電子化政府可增進政府的廉能負責 (Accountability)。

三、目前美國聯邦政府 19 個內閣層級的部會係各自獨立推動資訊化，相關表格甚多，民眾難以方便地得到所需的服務或資訊，而業務上的夥伴如地方政府、協力廠商更是作業繁瑣、複雜，難以有效處理業務。美國聯邦政府目前每年投入約 520 億元資訊化預算經費，對於電子化政府推動進度的評量與掌握，係透過彙編 1300 項計畫措施管制清冊來進行，並由相關的 37 個機關定期提報計畫進度與執行情形。2001 年 8 月由預算管理局(OMB) 督導資訊科技與電子化政府副局長 Mark Forman 召集成立「水銀」任務編組(由 40 多個機關 65 位代表組成)，規劃訂定電子化政府的願景，第一階段進行高階政府官員電子化政府訪談，訪談結果計對 250 項計畫提出建議。第二階段則對政府的業務流程進行檢驗。預定在兩年內(2003 年)完成推動 22 項跨機關資訊整合性應用計畫。包括：

(一) 政府便民服務(G2C)

1. USA Service (國民關係管理)
2. 快捷報稅
3. 線上貸款
4. 休閒娛樂單一窗口
5. 線上資格認定

(二) 政府便商服務(G2B)

1. 聯邦資產標售
2. 線上法令制定管理
3. 稅與薪資申報作業整合簡化
4. 健康醫療資訊統一 (先由企業部門開始)
5. 企業服務單一窗口 (資料一次蒐集、各機關分享使用)
6. 國際貿易便捷化 (先由企業部門開始)

(三) 跨機關應用(G2G)

1. 地理空間資訊單一窗口
2. 災難救援 (危機反應)
3. 補助作業 e 化
4. 無線網路標準化
5. 維生作業 e 化(e-Vital)

6. 企業法律案例管理（以企業部門為限）

（四）政府內部效能

1. 教育訓練 e 化
2. 人員招募單一窗口
3. 企業人力資源整合（包括通關、旅遊 e 化）
4. 整合性購置系統（e 化的契約服務）
5. 檔案紀錄管理 e 化

其它方面包括，將儘速推動流程整合，消除重複投資，建立存取控管及互信機制，推動 5600 項機關對機關、機關對企業、及機關對民眾的交易（申辦）工作上網。

此外，聯邦資訊長議會資訊人力委員會協同人事管理署過去兩年來已對聯邦政府資訊人力的結構、法規及薪資結構進行現代化與改善，並委由全國公共行政學會(NAPA)於 2001 年九月提出評估報告。在推動電子化政府入口網方面，2000 年九月完成 FirstGov，提供 2 萬多個聯邦政府網站和 4700 萬個政府網頁的檢索查詢服務，能在 1/4 秒內完成對 5 億份文件的內容搜尋，每日服務數百萬筆的查詢使用。另外也已建置 90 餘個跨機關整合性、特定用途的入口網站。為了使社會各階層均能享受到電子化政府的服務效益，近期內將研提「延伸數位化效益：為眾人工

作的公共事務與服務指引」。在推動電子民主及電子化的公眾意見參與方面，由參議員李伯曼推動制訂「電子化政府法」，推動政府於立法過程中加強運用網際網路，擴大公眾意見的參與。同時也推動電子化政府無線通訊應用；加強推動公鑰基礎建設，建立電子憑證機構相互信賴的機制。

四、Mark Forman 說明美國聯邦政府既往電子化政府的錯誤作為包括：1. 各機關、單位各自為政，發展網站；2. 建置一個入口網站，卻由不相關的人員經營；3. 進行最簡單的網頁運用，而未能採行跨機關整合應用，並將之視為太困難、不可能做到；4. 將現行工作流程及組織架構直接登上網站；5. 在各機關獨立自主的口號下，只鼓勵各機關發展電子化作業，而不鼓勵發展跨機關整合服務；6. 以政府機關為主，而非民眾需求為導向進行 e 化。美國政府未來將提供顧客（民眾、企業）點選即整合的便捷服務，各政府機關必須將供應鏈、內部資源管理及顧客管理充分整合。目前聯邦政府正致力於簡化施政流程，並整合分布在不同機關的資訊系統（即所謂自動化的孤島，Island of Automation），充分發揮新科技的潛能與跨機關整合的效益，並改變作業流程讓使用者更簡單易用。

美國聯邦政府對於電子化政府發展的管制主要透過五

大區塊進行：1. 電子化政府管理政策；2. 策略機會藍圖；3. 業務規劃及設計；4. 高品質發展及建置實務作法；5. 電子化政府或電子業務架構。每一內閣層級機關並按季進行評比，項目為：1. 電子化政府計畫執行情形，包括現代化藍圖、業務計畫、資訊計畫管理及資訊安全；2. 跨機關電子化計畫參與情形。

2002 年聯邦政府推動電子化政府之重要工作為：1. 推進資訊科技成果及提升生產力；2. 強化資訊安全及網路安全；3. 以解決問題為導向，避免重複、零星的資訊投資。未來將進一步 1. 建立電子化政府績效評估系統；2. 變革創新管理；3. 依據顧客需求，統合、簡化資訊作業，進行業務轉型；4. 正視下列問題並加以解決：a. 好的想法，但是缺乏妥適的安全與業務案例；b. 補助部分經費，重複 IT 投資，以便取得全部效益的機會；5. 避免僅集中關注在強化網頁功能上。

五、電子化墨西哥(e-Mexico)標榜周延、務實、親和、創新與產生社會及技術效益，其主要內容為：線上學習、電子化健康醫療、中小企業電子化及電子化政府，其三大目標為：1. 透過網際網路提供在教育、健康、商業及政府等方面創新服務；2. 加速民眾上網取得政府資訊；3. 縮短數位落差。

六、西班牙推動資訊 21 世紀(Info XXI)電子化政府，要求所有政府機關提供線上公共電子行政服務(Public e-

Administration Services)，財政部致力推動 e 化，改善其施政透明度及施政品質，建置新的入口網涵蓋對外網際網路入口網及內部網路，提供政府資訊及線上服務。主要有：土地財產登記局的線上資料互通與存證服務、線上發放土地財產證書；中央採購局的線上訂單處理系統；虛擬圖書館等。

- 七、由於資訊與通信科技長足進步，使得更多的公民得以利用網路參與公共事務，加入民主決策過程，惟各國對於如何達成資訊網路化，迄未有共同模式，尤其對提供資訊的範圍、主題、方法等仍有不同意見，例如在法案立法過程中如何適時公布相關資訊，進行線上徵詢意見，相關的規劃與管理，以及如何提供回饋予參與諮詢的人員，均是值得進一步探討的議題。依據瑞典 Kalix 市對於稅率政策擬訂利用網際網路進行 e-民主實驗的結果，18 歲以上的公民有 52% 參加複決，有 1/3 投票者係透過網路進行。在這項實驗中，民眾可利用網際網路了解政策資訊、討論及投票複決。瑞典亦有政黨透過網路辦理初選，參與者必須使用特殊的個人識別碼(PIN)才能投票，結果產生一些新人，並影響該黨政策路線。
- 八、資訊產業在 90 年代後成長迅速，成為推動經濟成長的主要動力，造就許多高技術、高所得的工作機會，帶動相關就業機會，也為各國創造大量的稅收，同時提升商業競爭力，提高生活水準，其中中國大陸過去 5 年成長

20%以上。資訊產業成長有益於稅收及國家經濟生產力，提高經濟韌性，抵抗經濟不景氣，例如亞洲金融風暴後，馬來西亞和韓國較泰國和印尼中復甦快。未來引領資訊產業成長的領域為：業務整合、無線行動通信、安全，以及地理資訊、互動與頻寬需求等。各國應當機立斷尋求發展資訊產業，要體認資訊產業扮演經濟火車頭的角色，致力保護智慧財產權，投資 IT 教育訓練，鼓勵研發成果商業化，開放電信通信市場，擴大國際貿易及資本市場，建構鼓勵投資稅制及堅持市場導向的管制原則。

九、以可延伸的標示性語言(XML)為基礎的網路服務(Web Services)將開啟資訊產業成長新革命，因為 XML 的技術將是多數網際網路應用與服務多元整合，提供不受使用人數限制的基礎。此項技術係植基於開放標準，已經為業界普遍採用，將加速不同資訊系統互通(Interoperability)，讓有助於提升顧客滿意度的整合服務得以實現。

十、微軟公司所發表的白皮書「開創有活力的資訊業—成長、機會與夥伴」，提及台灣 IT 產業未來 2002 至 2005 年之成長預測，除了 2002 年小幅成長 0.9%外，其餘均有 10%以上之成長，惟資訊產值占 GDP 的比率在過去 1995 年至 2001 年期間均較新加坡、南韓、英國、日本為低，值得吾人關注。例如 2001 年資訊產值占 GDP 的

比率台灣為 1.52%，新加坡、南韓、英國、日本則分別為 3.68%、2.42%、4.18%、2.55%。

十一、 OECD 提出資訊安全九大指導原則草案：

- (一) 普及資訊安全意識。
- (二) 資訊安全是所有資訊系統及網路開發者、管理者及使用者等相關參與人員的責任。
- (三) 人人皆應尊重他人的合法權益。
- (四) 資訊安全應與民主社會的基本價值相容並行，如開放、透明、交換、傳布思想的自由，及尊重個人隱私等。
- (五) 迅速即時進行防制、偵查及回應、處理資訊安全事件。
- (六) 資訊系統及網路參與人員應評估風險。
- (七) 參與規劃設計及營運資訊系統及網路人員應將防護資訊安全及解決方案列入必要工作項目。
- (八) 資訊系統及網路參與人員應採行整體、周延的資訊安全管理措施。
- (九) 應適時檢討並評估資訊系統及網路的安全管理措施。

十二、 美國太平洋國際政策會(Pacific Council on International Policy) 所提「開發中國家的電子化政府發展藍圖--電子化政府領導人應該自問的 10 個問題」包括：

- (一) 為何追求電子化政府？必須了解推動電子化政府不是容易的事，單純的電腦化不等於政府行政改造。
- (二) 有無電子化政府明確的願景和優先順序？節省政府行政成本不應成為驅動電子化政府的願景，電子化政府的願景必須以民眾為中心。
- (三) 準備好了推動何種電子化政府？電子化政府並非僅是政府單方面就可做好的，在政治上也必須做好準備，包括資訊政策、電信基礎建設、資訊人力、財務與政府官員的支持等，都是關鍵的議題。
- (四) 政治上的領導與支持電子化政府推動足夠否？要加強電子化政府的行銷，激發政治領導與支持。
- (五) 是否採行最佳的電子化政府推動方案？要進行相關評估診斷，多聽聽、多看看；要讓計畫切合電子化政府的願景；要從民眾的角度來檢視電子化政府；要有企圖心地思考，但必須一步步落實執行；要徵詢顧客的意見。
- (六) 應如何規劃管理電子化政府計畫？要建立政府內部的電子化政府執行團隊；要確保計畫管理團隊具備足夠的權力；要建立工作團隊執行電子化政府優先計畫。
- (七) 如何克服政府內部的阻力？要了解人員抗拒的原因；要進行充足的溝通與教育訓練，辦理獎勵措施。
- (八) 如何評量與掌握推動進度？如何避免失敗？要訂定

整體績效評量指標，設定衡量計畫進度的基準；建置網站並非電子化政府的績效。

- (九) 與民間部門的關係應當如何？要將民間業界視為夥伴關係；要了解每個人都需要合理的投資收益；要規劃防止政府資訊人力的流失；要創造真正的電子化政府計畫商業模式；要發展正式的委外政策；切記民間部門不可擁有資料。
- (十) 電子化政府如何改善公民參與公共事務？要知道民眾是電子化政府的專家；要讓公眾參與的管道變得容易；透過公眾的參與評估電子化政府。

附錄：

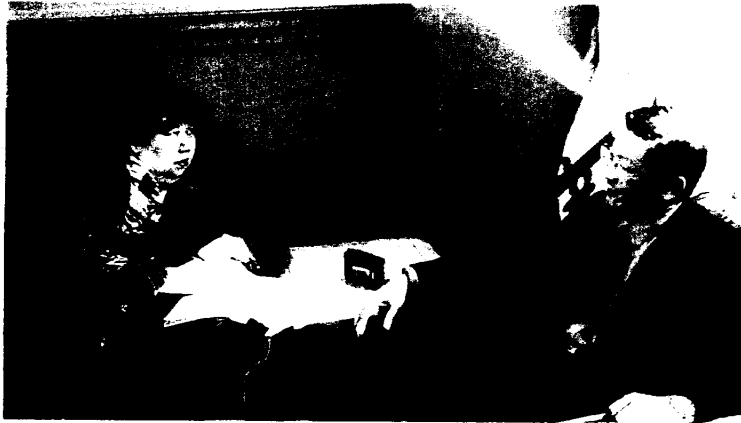
1. 美國微軟公司政府資訊領導人高峰會會議資料
2. 照片集



林主任委員嘉誠(左二)擔任座談討論與談人：構建電子化政府發展藍圖



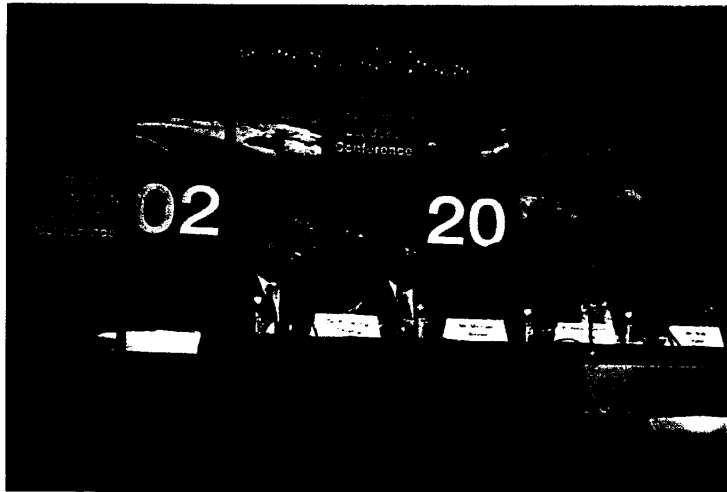
林主任委員嘉誠與微軟公司電子化政府專案經理會談



林主任委員嘉誠接受舊金山世界日報記者採訪



微軟公司總裁Bill Gates會見我國代表團



立法院江副院長炳坤(左一)擔任政策座談與談人：建構強健的資訊產業



林主任委員嘉誠與施處長宗英(左)及西雅圖辦事處江處長國強(右)合影

E-Government Toward a Fair and Equitable Society

--Lessons learned in Taiwan

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I. Foreword

The spread and application of the Internet and mobile communications in recent years has had a tremendous impact on government activities, corporate business management, academic instruction and research, and people's everyday lives. Responding to the coming of the Internet age, Taiwan began implementation of an e-government program in 1999. This program took the form of the extensive interconnection of government networks, the widespread establishment of government websites, and the promotion of online government information and services. Apart from such results as improved administrative efficiency and better decision-making, e-government has spurred a push towards government re-engineering. Taiwan's experience shows that e-government yields three types of benefits: improved administrative efficiency, enhanced governmental effectiveness, and the promotion of a fair and equitable society.

To meet the challenges of the 21st century, it is vital that Taiwan sharply enhance its overall national competitiveness, put its economy on a sound footing, accelerate industrial upgrading, foster full participation in civil life, enrich the cultural substance of democratic society, and establish a just, humane, and culturally progressive society. This is the only way that Taiwan can consolidate its existing socioeconomic progress, realize the national vision of an "economically-sustainable, fair, peaceful, and contented homeland," and respond to the intense global competition of the future.

The following is an overview of the current state of e-government in Taiwan, and an analysis of how e-government has promoted freedom of government information, transparency of administrative procedures, strengthened freedom of speech, expanded public participation in civil affairs, honest and competent government, fair competition in the marketplace, community development, the elimination of the digital divide, and the realization of the ideals of justice and civil participation.

II. Current State of e-Government

With the spread and application of the Internet in the 1990's, the government made the decision to use the open, high-speed online environment to provide the public convenient information and services. This can be seen as an inevitable trend in government informatization. In November 1997 the government accordingly assigned the Research, Development and Evaluation Commission (RDEC) the task of drafting the *Mid-term e-Government Implementation Plan (1997-2000)*. This plan called for

the full-scale deployment of a government backbone network, the development of convenient online public services and administrative applications, the acceleration of government information interchange, and the establishment of electronic certification and network security mechanisms. To further broaden the scope of e-government applications, RDEC issued the *E-government Action Program (2001-2004)* in April 2001 and expects to enhance the depth and breadth of government online applications during the four-year period of this plan. The ultimate goal of the action program is to raise national competitiveness by promoting Internet applications throughout society and industry. The program has the following specific goals:

1. To provide online services to all agencies and civil servants via the Government Service Network. Tasks include providing sufficient network facilities, establishing a secure and anxiety-free Internet environment, and enriching government online information and services, etc.
2. To encourage the government workforce at all organizational levels to take advantage of the Internet to conduct administrative business and provide public service in a more efficient manner.
3. To promote communication and document interchange among agencies at different levels by implementing an electronic document exchange and gateway system.

To improve the convenience and efficiency of government services and extend the spatial and temporal coverage of government services by providing 1,500 Internet-based application services and “one-stop processing services.”

To accelerate application of the Internet at government agencies, improve online service standards, promote the sharing of government information, strengthen government network management, and lower network installation and maintenance costs, RDEC established a dedicated government Internet backbone system—the Government Service Network (GSN)—in 1997 to meet the different needs of various agencies. The GSN system provides government agencies at all levels with a common platform for the development of public service systems.

GSN offers fast, convenient, economical network backbone services. Through the efficient allocation in utilization of network resources, it has been possible to dramatically lower the Internet use threshold of government agencies, speed up the linkage of agency networks with the Internet, and lay a solid foundation for e-government.

To establish a secure and reliable network transaction environment, RDEC established a Government Certificate Authority (GCA) in February 1998. This facility provides online identity authentication services to government agencies and the public. As of November 2001, the GCA had issued 210,000 digital certificates and begun providing certification services in connection with online tax reporting, motor vehicle registration, electronic disbursement, electronic procurement, and electronic official document exchange.

In addition, to enable the government to communicate more effectively, RDEC began implementing an online data transmission and official document exchange system in July 2000. As of December 2001, 8,000 central and local government agencies and schools had joined electronic official document exchange.

Online public services currently being established include tax reporting, motor vehicle registration, disbursement, industry information, health insurance, and utilities services. The government looks forward to providing even more innovative 24-hour service in the near future. To further enhance the usefulness of online public services and provide the public one-stop online government services, RDEC formally inaugurated the “My e-Government—e-Government Portal of Taiwan” in March 2002. The site will offer the public 1,500 online application services within three years. An

“electronic gateway” mechanism will be used to promote information interchange and circulation between different agencies; this mechanism will be extended to inter-agency online queries and searches, reducing paperwork and eliminating need for transcripts and certificates.

III. Toward a Fair and Equitable Society

Fairness and equality are the foundation of a healthy society. The objective of a just, civil society is to achieve a rational social order in which each person is respected and human rights are granted reasonable safeguards.

Not only should the promotion of human rights and pursuit of a fair and equitable society be a main theme of the government’s administrative work, it should also be considered the government’s inescapable duty. Apart from hard work on the political, legislative, economic, judicial, educational, and cultural fronts, the realization of a just society will require the use of modern information technology to strengthen individuals’ ability to apply information, remedy the information asymmetry currently existing between the government and individuals, and tap citizens’ latent energies for progress. Due to the all-pervading boundary-transcending nature of the Internet, the public can look forward to having real-time access, through economical, effective, and innovative means, to large quantities of government, economic, social, cultural, environmental, technological, and medical information. By enabling individuals to better express their views, participate in public affairs, learn new knowledge, and organize social groups, information technology will thus catalyze the development of a just society.

While universal access to information and convenient online services will help foster the establishment of a just society, according to the observations and analysis of Andrew Shapiro, the biggest impact of new technology will be the re-distribution of power. Shapiro’s concept of the “power revolution” asserts that new technology will help individuals seize power from the hands of government, corporations, media operators, and other large organizations. Individuals will increase their autonomy and ultimately exert a new kind of civil authority. If this theory is correct, we can look forward to the day when individuals control public resources, exercise national authority, and take their rights and interests into their own hands.

The following is an account, based on Taiwan’s experience, of how the promotion of e-government can directly and indirectly promote the establishment of a fair and equitable society.

A. Promoting Access to Government Information

The degree to which government information is open and transparent is a major indicator of that nation’s degree of democracy. Open access to government information is the foundation upon which a nation can promote responsible politics, strengthen citizens’ powers, and foster participation in public affairs. Based on the public’s right to know, government agencies should institute free access to government information insofar as this does not violate national secrecy or public privacy laws and regulations.

The Internet’s attributes of high-speed information transmission, large user population, universal reach, and convenient access make it the most inexpensive, convenient, and effective channel for disseminating government information. The full-scale wiring of government, industry, and society will enable the public to freely obtain and utilize a broader, more complete, more balanced, and more diverse range of government information with unprecedented convenience and speed. Besides giving the public a better understanding of government policies, this will also strengthen public oversight of government administration.

To fully implement free access to government information, the e-government portal website established by RDEC will make all public service information, laws, and application documents and forms available within three years, and allow free public queries and downloads. At the same time, RDEC will respond to the public's demand for high-quality information by continuing to promote the establishment of government websites and enrichment of government website content.

The government will use the Internet to make public large quantities of information. This will enable individuals to better understand government policies and laws, allow them to conveniently and effortlessly express their policy positions, opinions, values, and needs to their elected representatives and government decision makers, and give them the means to follow up on the results. This will be a complete break with the situation in the past, when citizens depended entirely upon the professional knowledge of their representatives and civil service personnel in the drafting of public policy, determination of social needs, and distribute public resources.

To further meet the public's right to know by enriching government website content and improving service quality, RDEC conducted a government website evaluation and award activity in May 2001. Fifty-three outstanding government agencies were chosen, and their websites exhibited and recommended to the public. RDEC will continue to hold regular government website evaluation activities in the future, and will include website service quality among its public service assessment items.

B. Making Administrative Procedures Transparent

To safeguard citizens' rights and interests, improve administrative performance, and increase public confidence in the government, government agencies should follow fair, open, and democratic procedures when taking disciplinary action, providing services, concluding administrative agreements, drafting laws, orders, and administrative guidelines, confirming administrative plans, implementing administrative guidance, and resolving complaints. By doing so will safeguard the principle of administration in accordance with law. Establishing a culture of open and transparent governance is thus the sole route to realizing a just society. The implementation of e-government has enabled the government to provide more correct and complete information to the public, invigorate service procedures, and generate complete records of contact and transactions with the public. The people can take advantage of open and transparent government information to gain a deeper understanding of administrative concepts and approaches, enabling them to truly take charge of governance and realizing the ideal of "the people have the power, government has the ability."

Taking the e-government portal website established by RDEC as an example, apart from publishing public service information, laws, and application documents and forms, the site also integrates the information systems of various government agencies and provides the public transparent, inter-agency application services. The public can visit this unified service window at any time and check the status, progress, and expected completion date of applications.

Making administrative procedures transparent, as in these practical examples of e-government, not only improves efficiency and facilitates the establishment of standardized operating procedures, but also reduces corruption and illicit behavior.

C. Empowering Citizens

In the future functioning of e-government, not only will the public be a "recipient" of government administration and services, it will also be a "joint decider"

of government administration and services. Thanks to the power of the Internet, any individual or group can easily use extremely inexpensive e-mail or its own website, or various public or organizational websites, to publicly express and advocate individual or collective views, needs, or values. By providing an "online soapbox" mechanism, the Internet serves as a forum in which individuals can fully exercise their freedom of speech.

By facilitating the expression of public opinion, the ubiquity of the Internet has had an extremely positive catalytic effect on people's understanding of and concern for public affairs, their understanding of government policy, administrative principles, and the nation's future development trajectory, the communication and mutual acknowledgement of public values and views, the achievement of social consensus, and the realization of the ideal that power abides in the people.

D. Expanding Participation in Public Affairs

The essence of contemporary democratic reform is to use the democratic process to bring the people in and adjust the government's role in dealing with public affairs. At the current stage of Taiwanese society, private forces are in the midst of vigorous development, and government functions and roles are undergoing a continuous process of change and adjustment. The government has shifted its role from that of a "leader" or "manager" to that of a "supporter" or "servant." Through e-Government, Taiwan is providing the people extensive and varied information, offering a convenient lifelong learning environment, enhancing public autonomy, and ultimately molding a participatory civil society by promoting diversity of values and thought.

The "dispersion," "decentralization," "diversification," and "individualization" characterizing the spread and development of the Internet can provide the people with an even broader range of choices, and can accordingly help them overcome the information asymmetry, ability asymmetry, and power asymmetry between them and government officials. Some optimistic scholars go so far as to say that the Internet will lead to "direct online democracy." Whether or not this actually comes about, it is a reality that new technology allows the direct expression of public opinion and offers new opportunities for participation in public affairs.

E-government is making an important contribution to a more participatory democracy in Taiwan. For example, RDEC has already begun posting information including government administrative planning data, project implementation status, on-site inspection reports, and the results of public opinion surveys on government webpages. RDEC hopes that this information will help people understand government's major administrative efforts, enabling the public to play a supervisory and consultative role.

E. Making Government More Accountable

Conferring on citizens the power to hold government more accountable is the major benefit of e-Government. As a result of e-government and the widespread establishment of government websites, access to government information is much more open, administrative procedures are more transparent, and rights and interests are more explicit. In the future, the development of online application service mechanisms will allow the Internet to replace government service desks performing mainly manual tasks, and make the Web an important channel of contact between the government and the public. Furthermore, in conjunction with the transparency of administrative procedures, through the institution of automated online review and service procedures, and the transparency of auditing, tracking, and control functions, the public will be able to receive fair treatment and equality of opportunity from the government. This will spur decision-making transparency and will make government

more accountable to the people.

F. Promoting Fair Competition

The establishment of fair, equitable, and open markets promoting free competition is a basic precondition to the creation of a just society. Since the government's annual procurement budget is so huge, it is essential that we institute transparent procurement operating procedures. Such transparent procedures will raise procurement efficiency and quality, lessen improper intervention and interference, promote a free market, and encourage fair competition.

In recent years, the Public Construction Commission (PCC) has installed the "Government Procurement Information Posting System" and established the online "Government Procurement Information Center" to provide contractors government agency bid request information. Besides bid request and bid award announcements, this system also offers a database of unacceptable contractors, openly requests contractors' reference data, and openly solicits proposals or written price quotations. As of November 2001, government agencies had posted more than 720,000 public bid request announcements via the system, an average of 300,000 queries were being made every month, and a cumulative total of 8.4 million queries had been made. Apart from this procurement information announcement system, the PCC has also established an online bidding system and an online vendor catalog and price inquiry/quotation system. These systems are doing much to promote fair competition and put the procurement market on a sound footing.

G. Encouraging Community Development

In recent years Taiwan's private sector has gained in strength and community development has gradually gotten underway, again displaying the tremendous vitality of Taiwanese society and the growing power of private groups and individuals.

Responding to the information needs of community development, RDEC has consistently striven to take government information and services to the grassroots level. RDEC has joined forces with private parties in implementing the "Computers in Every Village, the Internet in Every Neighborhood" plan. This plan, implemented on a trial basis, is promoting online public service points throughout villages and communities, installing community information kiosks, and establishing "village websites." More than 6,500 villages and neighborhoods have completed webpage construction to date. The establishment of community websites on the RDEC's Internet platform allows the public to find out about and share information on community affairs and activities, giving people more opportunities to participate in community affairs. For their part, community leaders can use the websites to communicate community development plans and concepts. This framework will strengthen the public's understanding of, concern for, and desire to participate in community affairs, fostering community consciousness and sense of interdependence.

For example, the establishment of a 921 earthquake (occurred and caused heavy toll in life and property in September 21, 1999 in Taiwan) reconstruction information system and website has aided the implementation of reconstruction work and, by fostering public consciousness in stricken areas, inspired individuals to plan and execute reconstruction work.

H. Bridging the Digital Divide

As the government strives to promote Internet use and establish a fair and equitable society, it must pay serious attention to the issue of whether differences in gender, age, place of residence, rural or urban setting, ethnic affinity, income, or educational level may affect people's equal access to information. To avoid placing

certain groups at a disadvantage in the emerging information society, the government must make sure all persons possess the appropriate, adequate information education and basic application skills they need to enjoy the convenience that information technology brings to people's jobs and lives.

The government pays close attention to shrinking the digital divide. RDEC has recently begun coordinating and overseeing relevant programs implemented by various agencies. RDEC is also planning to use public constructions special funds to implement the Plan to Strengthen Information Education in Elementary and Middle Schools in Remote Areas, Labor Information Education Plan, Farmers' Lifelong Education Plan, and Aborigine Information Education and Training Plan.

By tapping private resources, strengthening the information education infrastructure, establishing channels for lifelong study, increasing government online service items, making the Internet relevant to everyday life, encouraging industry to develop a barrier-free user environment (such as by introducing computers for the blind), widely installing public information kiosks, increasing the number of people going online, and assisting low-income households to go online, it will be possible for us to enhance citizens' information application ability across the board and transform the digital divide into a new digital opportunity. As we work to change Taiwan into a "Green Silicon Island," eliminating the digital divide will enhance Taiwan's core competitiveness and help realize the ideal of a just society.

IV. Conclusions

As the Internet-using population rises above eight million and the first results of e-government are reaped, the expectations of the people of Taiwan with regard to their government are also rising. The implementation of e-government goes far beyond the mere acquisition of new technology; rather, it signifies the transformation of government agencies into a digital nervous system capable of instantly transmitting information, communicating views, and sharing experience and knowledge. It will lead to the transformation and re-engineering of government organizations, making them leaner, more accountable, more flexible, more responsive, more efficient, and transparent. When the government provides services to businesses and individuals via the Internet, it will meet their needs with lightning swiftness, efficiently handle fast-changing new matters, and offer strengthened emergency response capabilities. Even more importantly, e-government represents a break with conventional thinking: Responding to the emergence of a civil society, Taiwan is rethinking the role and functions of government from all-new points of view, transforming and improving the two-way relationship between government and the public, taking the public's needs as a compass, striving to build a fair and equitable society, enriching the content of social life, and enhancing the public's welfare.

林主任委員參加座談討論發言資料

Panel Discussion: "Building an E-Government Roadmap" 15:45—16:15 April 16

Q1: How to create a roadmap for e-government in Taiwan ?

Driving Force for E-Government in Taiwan

- Taiwan is a leader in Networked Readiness in Asia, as reflected by its fifteenth overall ranking in Readiness for the Networked World. (source: The Global Informational Technology Report 2001-2002, Center for International Development at Harvard University) The number of Internet users has reached 7.8 millions with the online penetration rate of 35% as of the end of 2001. More than 27% of the households in Taiwan are connecting to the Internet as of the end of 2001. Among these online households, 40% of them have broadband Internet connections.
- Taiwan was successful to shift industry policy to focus on high-technology products—a policy that successfully transformed Taiwan into one of the largest hardware-exporting nations in the world. This strategy has had a major impact on national strategy in harnessing information and communication technologies for economic development and global competitiveness.
- In February 2002, Premier YU Shi-kun took the post and defined the New Cabinet's common goal and vision as follow:
 1. Implanting the knowledge-based economy to regenerate global competitiveness
 2. Thoroughly re-engineering the government and releasing the vitality of the private sector
 3. Expanding humanitarianism and improving the quality of life.
- As the Chairman of the Research, Development, and Evaluation Commission (RDEC), I was asked by the Premier to formulate a plan for re-engineering the central government agencies and implement it as soon as possible. After numerous meeting and policy debates, we have just finalized a blueprint of brand new organization framework, and E-government has been a high priority for the organization, service and process re-engineering.
- To accelerate the transformation of traditional industries to a knowledge based economy, the Cabinet is planning to implement an e-Taiwan project (2002-2007), which is composed of e-Industry, e-Government, and e-Society projects. There are 7 flagship projects waiting for the Premier's approval, (Paperless trading, Government Services On-line, Government Internal Operation Logistic, Smart Transportation Information System, e-Industry, e-Society and e-Infrastructure.) Among the flagship projects, e-Government will be the major driving force. We followed a top-down model to plan the flagship projects. During the planning process, we tried our best to bring in wide participation from experts and professional from information technology industries, academies and the relevant agencies.

Road Map for Electronic Government in Taiwan

- **Phase 1 --Infrastructure Development and Penetration**
With the spread and application of the Internet in the 1990's, the government made the decision to use the open, high-speed online environment to provide the public convenient information and services. This can be seen as an inevitable trend in government informatization. In November 1997 the government

accordingly assigned RDEC the task of drafting the *Mid-term e-Government Implementation Plan* (1997~2000). This plan called for the full-scale deployment of a government backbone network, the development of convenient online public services and administrative applications, the acceleration of government information interchange, and the establishment of electronic certification and network security mechanisms.

- **Phase II--On-line Services Development and System Integration**

To further broaden the scope of e-government applications, RDEC issued the *E-government Action Program* in April 2001. This program aims to link all government agencies through networking and to provide versatile Internet-based services. It is expected that “e-Government” will improve government operational procedures, promote service efficiency and quality, cut-down service cost, and provides private sectors and individual citizens with many innovative and convenient services.

- **Phase III- the Future--Mobile Government**

Taiwan’s teledensity and mobile penetration are among the highest in Asia. Since 1997, mobile subscriber growth rate has been one of the fastest in the world. As wireless technology becomes more fully developed, as bandwidth increased with the availability of “always on” connectivity, and as the price of mobile components continue to fall, it can no longer be assumed that a citizen is using a traditional computer to access data and application from a government website. To meet the anticipated demand, RDEC is planning to deliver data and applications efficiently across the network regardless of citizen’s devices or connectivity configurations.

- **Progress**

1. 90% of government organizations connected to the Internet today, 55% use broadband connection.
2. The government has established a centralized government portal site “My e-Government: the Entry Point of Taiwan (<http://www.gov.tw>) to integrate all the online government services. 70% of the government organizations have set up websites for providing online information and services today.
3. 83% of the government workforce is online and using basic Internet applications such as e-mail and browsers.
4. PKI has been established, and has 220,000 subscribers as of March 2002..
5. All ministries, local governments, and major agencies have implemented electronic official document exchange; Internet-based tax filing systems, motor vehicle registration services, e-procurement, job vacancies and job applicants has been completed.

Q2: What are the appropriate goals and objectives and what are the challenges?

- **Objectives**

1. Using latest ICT to make government services more useful, convenient, value-added;
2. Fundamentally reshape the way government serves the people and recast the connection between people and government;
3. Streamlining Internal Operation; Creating new channels for citizen participation;
4. Using ICT to promote equal opportunity and a healthy and just society

- **Goals**

1. To provide Government Service Network's Internet services to all agencies and civil servants. The tasks include providing enough network facilities, establishing a secure and fear-free Internet environment, enriching government information and services on Internet, etc.
2. To push the government workforce in all level of organizations to take advantage of Internet to process administration affairs and provide services for citizens more efficiently.
3. To implements electronic official document exchange and gateway system to promote the intercommunication and processing efficiency between each level of organizations.
4. To provide 1500 Internet based application services and "one-stop processing service" to improve the convenience and efficiency of government services and to extend government service time and points.

- **Challenges**

- 1.leadership**

Creative committed leaders at all level and all branched of government are essential to make the vision of e-Government a reality. From top to the President, and extending to the Cabinet, the Congress, Mayors-public sector leaders must embrace e-government as a driving force and strategic tool to transform and improve government and connect it to the people.

- 2.financial and human resource**

The " inability to recruit qualified and well experienced IT personnel " and " lack of financial resources " is mostly recognized as the major obstacles to achieve e-government.

Effective e-government requires a very different type of investment than that currently being directed to IT projects. It needs capital for projects to address common issues of service delivery or program management across agencies as a whole, or provides technological solutions to critical problems, such as security and privacy, and interoperability. Such investment can not be adequately founded by one agency. IT has to be supported by adequate fund. To accelerate the implementation of e-g, we are planning to create a strategic investment fund (public construction) to fully support the flagship programs.

To attract and retain more people, who know best how to apply e-government techniques, the government should offer flexible, entrepreneurial workplaces.

- 3.Collaboration and Outreach**

The Government can not make e-Government into reality alone. Government and industry have to work together on making more government services available on the Internet. Designing, implementing and managing e-government needs unprecedented and non-traditional collaboration between the public, private, and research sectors and within and across every level of government.

- 4.Privacy and Security**

Citizens are concerned about hackers breaking into government computers and networks. To help restore public confidence, it is all the imperative that public concerns with respect to privacy and security are thoroughly examined and addressed in the move to e-government.

Q3.How much will it cost? Who will be in Charge?

- In March 2001, The Executive Yuan decided to set up National Information and Communication Initiative (NICI). NICI is co-chaired by a minister without portfolio, Secretary General of the Cabinet, and Chairman of RDEC. Under the NICI, there is an Advisory Council, chaired by a leading figure and composed of 50 members from private and research communities. The Council is playing the bridge between public and private sector. The purpose of NICI is to help the Cabinet promote the upgrading of IT, telecommunication, e-business and related industries; Increase the efficiency of the government and of its services for the people; Universalize Internet applications; Enhance the overall competitiveness of Taiwan. There are 9 sub-committee under NICI. RDEC is in charge of the e-Government sub-committee and has been taking the major responsibility for planning, coordinating, evaluating, and controlling the development and implementation of e-government through the budget and management processes.
- The government now spends NT\$15 billions (US\$500 million) annually on Information technology, mainly to automate and update old systems. We are planning to add spending within 6 years. It is estimated that e-Taiwan's funding level will close to NT\$35 billions (US\$1 billion).

Q4.What are the appropriate metrics to measure success?

- Measure service Quality -three key priorities for improving satisfaction
 - 1.Speed-Timeliness
 - 2.Simple-Less Red Tape
 - 3.Seamless: Clustered-Single Window Service
- Dimensions to measuring satisfaction]
 - 1.Timeliness/Convenience
 - 2.Staff competence and/or program reliability and integrity
 - 3.Effectiveness of client relationship/care
 - 4.Fairness
 5. Satisfaction with the quality/value of the outcome.
- Methodology
 1. Survey-assessing customer satisfaction on a year over year comparative base against a benchmark.
 2. Benchmarking--assessing Taiwan's status compared to other countries(by examining the breadth and depth of e-services available in Taiwan compared to the leading countries that are similar socially , politically and economically
 3. Internal metrics--assessing efficiency and effectiveness in Taiwan's use of IT.