世界資訊科技大會（WCIT）出國報告

報告人： 何全德、蘇俊榮

中華民國 95 年 8 月 4 日

公務出國報告提要

出國報告名稱：世界資訊科技大會（WCIT）出國報告 頁數:63　含附件:是	
出國計畫主辦機關/聯絡人/電話：行政院研究發展考核委員會/蘇俊榮/23926784	
出國人員姓名/服務機關/單位/職稱/電話： 何全德/行政院研究發展考核委員會/資訊管理處/處長/23951948 蘇俊榮/行政院研究發展考核委員會/資訊管理處/高級分析師/23926784	
出國類別：□1 考察其他□2 進修□3 研究□4 實習■5 其他參加國際會議	
出國期間： 民國 95 年 4 月 30 日至 5 月 7 日 報告日期： 民國 95 年 8 月 4 日	出國地區：美國德州奧斯汀
關鍵詞：世界資訊科技大會、資訊技術、WCIT、WITSA、OMB、德州、奧斯汀	

本文電子檔已上傳至出國報告資訊網（http://open.nat.gov.tw/reportwork）

目　錄

頁數

第一章 前言……..…5

第二章 2006 年世界資訊科技大會介紹……7

第一節　世界資訊科技大會背景說明..……..…7

第二節　2006 年世界資訊科技大會介紹……..…..…8

第三節　2006 年世界資訊科技大會議程……..10

第三章 世界資訊科技大會會議內容摘要……14

第一節　Welcome Keynote – The honorable Rick Perry
– Governor, State of Texas…….……14

第二節　Featured Keynote – Dr. Hector Ruiz
– Chairman of the Board and CEO, AMD……..……15

第三節　Featured Keynote –Joseph W. McGrath
– Chief Executive Officer, Unisys……...18

第四節　Featured Keynote – Steve Ballmer
– CEO, Microsoft Corporation ……..19

第五節　Featured Keynote – Paul Otellini
– President and CEO, Intel Corporation. ……20

第六節　Featured Keynote – Michael Dell
– Chairman of the Board, Dell Inc ……..……24

第七節　Featured Keynote – Anne Mulcahy
– Chairman of the Board and CEO, Xerox Corporation ……...25

第四章 參加世界資訊科技大會心得與建議……..…27

第一節　會議成果..…….…… 27

第二節　結論與心得…….30

第三節　建議…….31

參考資料

附錄一 CIO COUNCIL……..……33

附錄二 U.S. Health Information Technology Agenda……..35

附錄三 CIO Council Implementation of HSPD-12 Austin, Texas…40

附錄四 Information Dissemination — a Key Component of E-Government (and a Government Obligation)……..…..…47

附錄五 USA Services & FirstGov.gov……..……50

附錄六 FEDERAL CIO ROADMAP……..…...59

第一章 前言

世界資訊科技大會(World Congress on Information Technology, WCIT) 為全球資訊和通訊科技的高峰會議，這項會議素有「資訊科技界的奧林匹克大會」之稱，因此本年亦吸引來自全球 80 個國家的 2,000 多位產業、政府與學術領袖參與。主要以資訊安全、普及數位化及 IT 應用健康照護為三大主要議題，包括探討改善人類對科技的應用程度，如在健康照護方面的落實；提高全球社會（特別是開發中國家）的 IT 使用能力（目前全球在文字的文盲比率為 25%，電腦使用文盲則高達 85%），如麻省理工學院的 media lab.將做未來低價電腦的普及實驗計畫展示；再來就是資訊安全的議題，探討其對國家境內、跨國界的安全影響。

由於德州在世界科技舞台上具舉足輕重地位，如位於達拉斯 Fort Worth 的通訊走廊、San Antonio 做為生物及資訊安全科技的中心、能源樞紐的休士頓、奧斯汀是半導體與軟體產業的重鎮，及 El Paso 與 Lower Rio Grande Valley 為主要的 Call Centers。因此，WCIT 2006 選在號稱「Lone Star」州（美國第二大高科技州）的德州舉行，聚集來自全球科技領先與許多公、私部門相關投資及完善基礎建設德州，將以科技創新（innovation）引導參與 WCIT 的單位，強化與全球科技

商業合作的關係。

中華民國台灣由行政院林政務委員逢慶率領 70 人代表團於 5 月 3 日中午在大會展場為台灣館舉行揭幕儀式。藉由中華民國台灣代表團的參加，相信將有助於台灣與全球各國在此一 IT 政策與社會及產業發展的最重要平台上進行對話與合作，讓台灣的 IT 產業和科技實力，能對全球社會做出積極貢獻，並開發未來的可觀商機。台灣代表團成員包括東元集團董事長兼中華民國工商協進會理事長黃茂雄、工業技術研究院李院長鍾熙、中華電信公司賀陳董事長旦、中華民國資訊軟體協會王理事長忠正等。

目前政府積極推動電子化政府，行政院研究發展考核委員會在政府 E 化中扮演非常重要的推手角色。隨著台灣在電子化政府基礎建設的建置已臻成熟，隨之而來的是資訊科技的有效應用及其所引發的一些社會議題，包含隱私權的問題、資訊安全性的考量，實為目前所需重視的問題。因此，為瞭解目前世界各國資訊議題內容及最新發展的趨勢，以汲取新觀念及技術應用於政府相關業務，乃奉派參加本次國際會議。

第二章 2006 年世界資訊科技大會介紹

第一節　世界資訊科技大會背景說明

世界資訊科技大會（WCIT）每兩年在不同的國家或地區舉辦一次，是世界資訊科技和服務聯盟(WITSA)的主要論壇，WITSA 是代表著佔據世界 90% 的 IT 市場總額的 65 個資訊科技工業協會的聯盟組織。

世界資訊科技大會聚集全球最有影響的商業精英、研究人員和決策者一起籌劃 IT 的未來。全球 2000 名傑出的精英來探索發展人類潛能的新機遇，討論當今最迫切的 IT 技術發展和政策問題，確立未來創新的方向，並形成有價值的新聯盟。WCIT 的代表都是其所在國的商業、學術、政府的尖端人才，大會的影響是深刻和長遠的。

自從 WCIT 於 1978 年在西班牙巴塞隆納首次召開，它已經成為世界上首要的資訊科技聚會。數年來，世界資訊科技大會（WCIT）已經創造了無數的新合作，帶來新的交易、商業關係和研究機遇。詳列各次大會主辦國家及地點如下：

◆ 美國德州奧斯汀：2006 年

- 希臘雅典：2004 年
- 澳大利亞阿德萊德：2002 年
- 中華民國台北：2000 年
- 美國維吉尼亞州費爾法克斯：1998 年
- 西班牙畢爾巴鄂：1996 年
- 日本橫濱：1994 年
- 英國倫敦：1992 年
- 美國華盛頓：1990 年
- 法國巴黎：1988 年
- 加拿大多倫多：1986 年
- 日本東京：1984 年
- 丹麥哥本哈根：1982 年
- 美國加洲舊金山：1980 年
- 西班牙巴塞隆納：1978 年

第二節　2006 年世界資訊科技大會介紹

2002 年，在世界上眾多的競爭地點當中，美國德州被選中主辦 WCIT 2006 世界會議，並在該州的首府舉行。奧斯汀因其溫和的氣

候、起伏地帶、創造性的文化和繁榮的高技術產業著稱。該市最新式的會議中心將作為 WCIT 2006 的總部。

2006 年世界資訊科技大會的主題是：「Global Impact-Unleashing Human Potential through Information Technology」。本次大會吸引了來自全球的 80 個國家大約 2,000 位資訊界精英和決策者，包括財富 100 的首席執行官、總裁、首相、外交部長、諾貝爾獎獲獎者、大學領導人和技術人員。來自商業界、政府部門和學術界的領導人，將深入討論資訊科技產業的政策，明確未來技術的發展方向，並就此驅動社會和經濟的發展。2006 年世界資訊科技大會聚焦於有關資訊科技產業改革和對人類生活產生積極影響的重要話題。將聚首此次論壇，討論當今世界最迫切的 IT 產業全球影響問題，例如：隱私性、安全性、普及數位化，以及 IT 應用健康照護等問題，簡要說明如下：

◆ 隱私性與安全性

在 21 世紀對資訊安全敏感的世界中，我們將如何處理此一內在衝突——即日益增加的共享資訊需求與如何使資訊擺脫犯罪集團之手的衝突？

◆ 普及數位化

隨著資訊科技在世界的日益流行，已開發國家和開發中國家需要為其公民能於新的數位經濟提供積極服務而有所準備。為普及電腦和支持 IT 基礎設施需要做些什麼？社會和經濟的繁榮所需要的電腦最低水準是什麼？

◆ IT 應用健康照護

沒有那種工業能夠像健保業那樣能夠從 IT 的發展中獲取更多的利益。但是儘管可以帶來巨大的經濟利益和對生活品質的提高，該行業與技術的結合一直發展較為緩慢。我們如何共同努力制定並啟動 IT 標準，以期提供更有效的診斷和保健？

第三節 2006 年世界資訊科技大會議程

本次大會主要是由創新交流(Innovation Exchange)、主要議題演講(Keynote)及全球主要議題研討會(Executive Session)三大部份所組成。

其中創新交流是由世界各國所設立的展示區，包含了政府組織及民間企業。展示了目前各國政府電子化的成果，亦是各家資訊廠商新產品及技術交流的展示區。本次中華民國台灣亦有參展，主要是由工研院、資策會及中華電信公司等三個機構、公司所共同設置的 E 台灣

展示區，除了增進國外廠商對於台灣投資環境的了解，亦將台灣過去5年實現從數位化的「E台灣計畫」到塑造行動城市的「M台灣計畫」，並獲世界經濟論壇評比全球 115 個國家的資訊科技競爭力排名第七的成果和與會各國分享。台灣館主要展示近幾年台灣在資訊、通訊上的重要計畫及目前正在推動「U（Ubiquitous）台灣計畫」，這項計畫是運用最新的無線射頻辨識系統（RFID）技術、無線網路和寬頻技術，整合數位家庭、網際網路和無線網路及設備。這將是台灣再創科技和經濟發展的奇蹟，並為臺灣資訊界帶動「二次IT革命」。

本次中華民國台灣代表團不僅參與創新交流展示，亦主辦 GALA Dinner-WISTA Global Awards for excellence 2006，在大會發表許多重要的演說，介紹台灣資訊科技及通訊產業的發展，以吸引更多國外的廠商來台投資。茲將台灣代表團團員名單及參與大會各項活動列於附錄。

本次大會議程列表如下：

日期	地點	行　　程
4/30	台北-奧斯汀	搭機前往奧斯汀

5/1	奧斯汀	■ 大會報到(Registration) ■ 開幕典禮(Opening Ceremony) ■ 日落酒會(Sunset Party)
5/2	奧斯汀	■ 創新交流展示 ■ 參訪德州東元西屋公司 ■ 歡迎酒會(Welcome Party)
5/3	奧斯汀	■ 創新交流展示 ■ 台灣展覽館開幕 ■ 主題演講 ■ 專題研討會 ■ Lone star party
5/4	奧斯汀	■ 創新交流展示 ■ 主題演講 ■ 專題研討會 ■ GALA Dinner-WISTA Global Awards for excellence 2006

5/5	奧斯汀	■ 創新交流展示 ■ 主題演講 ■ 閉幕典禮(Closing Ceremony)
5/6	奧斯汀-台北	搭機返回台北
5/7	奧斯汀-台北	抵達台北

第三章 世界科技大會會議內容摘要

本次大會在美國德州州長及 WISTA 主席的歡迎致詞中展開序幕。為期三天的演講議題主要包括大會的三大議題：隱私性及安全性、普及數位化，及 IT 應用健康照護等數十場的演講及研討會，茲摘要分述如下：

第一節 Welcome Keynote – The honorable Rick Perry – Governor, State of Texas

德州為美國重要工業州與農業州，德州產值與全球各國經濟實力相較，排名世界第 11 位。目前德州石化工業執全美牛耳，另能源工業、航太工業、電子、生物醫療科技、醫療器材製造業、交通運輸、環保及農牧業等亦頗負盛名，投資優勢如下：

一、 德州有 29 座海港，其所處理的貨櫃比美國的其他港口還要多。德州內共有 28 個商務機場 ，達福國際機場和休士頓洲際機場均有非常多的航班至歐洲、亞洲和拉丁美洲。

二、 土地面積大、能源充足、房地產便宜、交通運輸方便、生活費低廉、勞工便宜年輕且教育程度高。

三、 德州政府提供許多基金協助各企業的運作，以及提供稅負的減免等以利外商投資。

四、 德州不徵收州所得稅或財產稅。

五、 德州為一高科技州，資訊發達，許多知名廠商皆設在德州。前 10 名德州的出口市場，台灣佔第六名，金額為 225,000,000 美元。貿易量大，相對的貿易機會也多。

而最後德州州長 Mr. Rick 亦提出其經營德州的信念

"Vision without action is a daydream"

"Action without vision is a nightmare"

第二節 Featured Keynote – Dr. Hector Ruiz – Chairman of the Board and CEO, AMD

這幾年來 IT 已經向我們證明它是聰明的，如今，它要向全世界證明它是有生命的。(IT has proven it has a brain; now it is time to show the world it has a heart)。因此，我們現在的焦點不再是利用 IT 來獲得更大的利益，而是利用 IT 來解決我們目前所面臨的問題，也就是如何減少數位落差，讓電腦普及化，使得開發中國家的孩子可以突破環境上的限制，透過 IT 獲得學習的機會，減少數位落差；再者，我們要應用 IT 於 21 世紀健保的議題，提供更好的保障。如何有效應用 IT 的力量來改善我們的生活呢？以下有三種方式：

一、 讓病患能從被動就醫的角色透過 IT 轉為主動了解自身的狀況，進而有效掌握本身的病情，守護自己的保健。(Help patients

become active participants in their own healthcare)

二、 利用 IT 來更有效管理有限的資源。(Better manage the world's limited resources)

三、 透過數位普及化，提供全球更一致化的標準。(And unify the globe through digital inclusion)

AMD 亦針對 IT 在醫療健保上的應用針對醫護人員進行問卷調查，調查發現，在處理癌症病患時，有些基本的需求都未達到。

一、 82%的病人及看護人員都希望在醫院藉由網路得到更多醫療上的資訊或是其它醫療的建議。

二、 但是，只有 4%的人能獲得這樣的支援。

三、 而一旦他們在醫院裡自網路搜尋有關癌症的資訊，有 57%的病患會覺得被一大堆搜尋到的相關資訊所淹沒，而無法找到有用的資訊。

四、 而在這些人當中有 70%的人在尋找適當的工具來過濾所找到的相關資訊。

對於我們來說，資訊科技的確可以幫助病人更了解本身病情，但事實上的結果卻和我們想要得到的結果有一大段的落差，這是我們目前要努力的部份。

而 AMD 針對這部份做了以下的努力：

一、 在醫療診所提供更方便的方式存取網路。

二、 透過標準化的格式和紀錄提供更有效的資訊管理和溝通方式。

三、 提供醫護人員、病患及研究學者更有效的線上支援服務。

而在環保議題方面，AMD 亦積極投入「綠色網格」計畫，無論在業務方面還是環境方面，資訊中心耗能都是一個日益嚴峻的全球性問題。建立綠色網格的目的就是將業界精英匯聚在一起，幫助制定出創新的能源解決方案，以提高今後整個行業的瓦特數性能。綠色網格所代表的不僅是一種呼籲，要其它 IT 領導廠商採取行動；而且也是高科技行業發展的自然步伐，既關注解決全球日趨嚴重的問題和挑戰。縱觀創立初期人們對它的關注、認可和參與熱情，我們不難發現，綠色網格的創立恰逢其時，有助於解決資訊中心和整個 IT 環境中的能源問題。綠色網格（The Green Grid）組織主要是協助降低企業資訊中心不斷增長的能源耗用和散熱需求。AMD、惠普、Sun Microsystems 和 IBM 均是綠色網格的原始贊助商。綠色網格是一個開放的國際性組織，其宗旨獲得了美國環境保護局（EPA）和美國節能聯盟的一致認同。 綠色網格的成員希望通過制定和宣傳資訊中心運營、構建與設計方面的最佳實踐，優化資訊中心和其它 IT 設施的能源使用模式。 綠色網格將作為 IT 專業人士的互動資料庫，同時它也是一個論壇，用於分享資訊中心能源管理方面業經驗證的範例；並

與其它組織協同合作，共同建立能源相關的新行業標準。

作為一個獨立的非營利性組織，綠色網格組織歡迎所有希望解決全球能源耗用問題的 IT 業專業人士，尤其歡迎資訊中心經理和 IT 營運管理人員的加入。同時，綠色網格也熱切期盼獨立軟體開發商、獨立硬體開發商、系統整合廠商、加值經銷商、產業分析公司、公共服務公司，以及任何關心企業節能問題的個人加入組織創始成員的行列。

第三節 Featured Keynote –Joseph W. McGrath – Chief Executive Officer, Unisys

資訊安全問題在全球政府、企業和消費者之間同時迅速上昇，再加上圍繞個人隱私問題的爭論日趨激烈，導致有迫切需要制定身份驗證的標準。身份驗證幾乎是人們每天都在做的事情，如登錄電腦網路、進行網路銀行交易、機場安全導航、跨境手續辦理等。然而，在身份控管的業務運作模式和流程方面，各國之間卻很少能夠協調統一。

Unisys 是全球第一個提倡建立一個多樣化的中立聯盟，以致力於為全球身份驗證開發標準化的業務流程。聯盟的最終目標是建立可以採用的全球運作模式的基準，允許身份資歷證明在不同國際邊境的使用，促進在全世界的企業和個人之間建立信心和信任。

Unisys 的 McGrath 提醒，隨著上網人數激增，保護隱私以免駭客盜用身分資料，是很重要的。他說：「通常政府的反應都慢半拍。但政府在這件事有機會領先出擊。」

諸如智慧卡(Smart Cards)、射頻識別(RFID)追蹤等技術，拼湊成 McGrath 對更安全的數位世界願景。他指出，馬來西亞政府採用智慧卡儲存護照資料、銀行資料和醫療健保紀錄，可作為政府帶領民眾進入數位時代的榜樣。

同時，他呼籲務必邀請消費者隱私捍衛者加入決策過程。Unisys 提議各國採納放諸四海皆準的標準，讓使用者持 RFID 護照在國際間通行無阻。

第四節 Featured keynote – Steve Ballmer – CEO, Microsoft Corporation.

IT 改變了我們目前的商業模式，而隨著 IT 的進步，我們可以發現 IT 所帶來的效益不再只是為企業獲利，更是改善人類生活的一項利器。我們可以發現目前新興商業有下列幾種：

一、 數位內容產業。

二、 數位經濟及無線網路協同合作模式。

三、 可攜式平板電腦及手機等數位載具。

Steve 也提到了目前 IT 深入日常生活，尤其是接觸電腦網路的年

齡層不再限於上班族，更擴及至兒童；因此，如何落實數位內容分級化並有效限制兒童從網路中接觸不良的網站，也是目前資訊社會重要的議題之一。因此，Steve 亦提出了「Trustworthy Computing」的概念，主要在電腦作業系統中提供了限制網路連線的設定方式，以保護兒童在使用網路上的安全。最後 Steve 亦提到，「未來的首要研發目標將是把軟體視為服務。」

第五節 Featured Keynote – Paul Otellini – President and CEO, Intel Corporation.

英特爾「全球卓越計畫」進一步拓展了公司在開發中國家業已展開的各項計畫，通過推動以下三個領域的進展，整合公司實力以提高生活品質：

一、 個人電腦普及：通過研發功能齊全的、符合地區需要的、價格適中的個人電腦，使個人電腦在價格、使用和內容上更貼近需求，從而為其廣泛擁有和使用創造機會。

二、 網絡連接：通過培育必要的生態系統並鼓勵部署，包括 WiMAX 的廣泛推廣使用和部署，擴展無線寬頻互聯網介接。

三、 教育：通過推行教育計畫和提供資源，比如在全球展開教師專業培訓，協助學生從容應對全球新經濟。

英特爾「全球卓越計畫」未來五年的目標是：為全球下一批 10

億個人電腦用戶提供寬頻介接，同時新培訓 1,000 萬名教師使用這一技術，從而使學生受益面再擴展 10 億人。

Otellini 表示：「幾十年來，技術進步越來越多，產品價格越來越低，為廣大開發中國家、社會和人民帶來了巨大收益，但是在這方面還有很多工作要做。雖然個人電腦的經濟性至關緊要，然而英特爾的『全球卓越計畫』所提供的將超越低成本，更重要的是它將研發適合各地需求的合適系統、推動關鍵性的網絡連接，培養本地人才及其能力，並提供所需的高質量教育，以豐富人們的生活。」

Otellini 亦提到這幾年來，英特爾投入巨大精力，致力於在全球普及個人電腦的使用，推動快捷和經濟的互聯網連接，並擴大教育計畫的覆蓋範圍。英特爾公司在世界各地都有針對當地的廣泛計畫，從針對貧困青少年的社區教育計劃，到英特爾平台維運中心，在該中心研究人員和工程師通過定義和研發以用戶為中心的技術，來滿足全球不同區域的特殊需求。

而「全球卓越計劃」通過整合這些計畫，加快其發展、提高其效能並擴展其範圍。如其中的「發現個人電腦計畫」，旨在研發功能齊全、低成本的個人電腦技術，滿足開發中國家民眾的需要。英特爾計劃在今後兩年內，將「英特爾印度社區電腦計畫」的模式複製到世界其它地區，向全球推出六款符合當地需要的個人電腦。英特爾還將繼

續致力於 WiMAX 技術的普及應用以實現低成本寬頻介接。通過普及個人電腦使用、網絡連接以及教育，英特爾致力於為開發中國家和地區的學校提供功能齊全的個人電腦，讓他們享受到高速互聯網寬頻介接的便利，並對教師們進行培訓，幫助他們將技術融入教學。英特爾將對開發中國家的學校捐贈 10 萬台個人電腦，以幫助他們提高教學和學習水平。

Otellini 表示英特爾公司以往的投資已在全球技術融入、網絡連接以及教育方面取得了可觀的成果：

一、 英特爾與 52 個國家的政府合作，進行數位發展計畫，也稱為「個人電腦政府援助計畫」，以方便民眾購買或租賃個人電腦。在 2005 年，有 850 萬台個人電腦的購買與租賃，得到了這個項目的支持。

二、 英特爾公司「發現個人電腦計畫」提供個性化的技術解決方案，使新型電腦可以更好地滿足開發中國家的特別需要：其中包括開發低成本、多功能、更易於被家庭和工作所使用的個人電腦；在農村地區設立社區電腦資訊站供公眾使用的個人電腦；針對學校和教育工作者的需求提供低成本個人電腦。有一個計畫是"聰明教育（EduWise）"，是專為電腦課程和特殊的教育設計一種小型筆記本式電腦，以方便師生教學互動，在課堂上學習。

三、 為了促進全球教育的發展，英特爾每年投資一億美元與 50 個國家的政府和教育機構進行合作。「英特爾未來教育計畫」已經幫助超過 35 個國家的 300 多萬名教師高效率地將資訊科技整合到他們的教學工作中，以提高學生的學習水準。另外，已經有來自巴西、埃及、以色列、墨西哥、中國、俄羅斯和土耳其的 15 萬多名青少年學生通過近期推出的英特爾®學習計畫而受益。英特爾電腦俱樂部網絡的服務已經覆蓋到了 20 個國家的 50000 個團體、機構中的弱勢青年群體。在一年一度的英特爾國際科學與工程大賽中，來自全球 40 個國家的 1400 多名學生競爭每年超過 300 萬美元的獎項和獎學金。英特爾® 高等教育計畫與 30 多個國家的 100 所大學合作，致力於推動技術創新和建立技術人才培育的管道。

四、 英特爾公司致力於推廣能提供低成本寬頻互聯網介接的 WiMAX 技術，至今超過 175 個 WiMAX 試點項目已在全球展開，其中有超過 35 個業已取得商業上的收益。

五、 英特爾投資基金在過去的 15 年中，已經在 1000 多項有前景的科技領域投資超過 40 億美元，在 2005 年，這些投資中的 60% 用於美國之外的地區，包括中國、台灣、韓國、印度、東歐和拉丁美洲地區。

Otellini 提到 Intel 將致力於開發能夠縮短貧窮國家中數位落差的新式產品技術。

除了硬體之外，Intel 在大會上還展示針對開發中國家所設計使用的應用軟體。Otellini 在會中還操作一種課程學習軟體。它可以讓教師輕鬆地「監視」學生藉由 Eduwise 筆記型電腦瀏覽哪些網站，或是學生在瀏覽課堂資料時的進度。當學生想在網路中與他人聊天時，老師只要一個按鈕便可以封鎖學生之間或與他人的對談

Otellini 也提到了 Intel 的理念「What is Intel's vision is what is action」。 Intel 表示這款低價筆記型電腦的研發，結合了包括中國、巴西和印度等多個開發中國家的研發中心，當然這些國家的新興市場更是此款 Eduwise 產品的主要銷售目標。Intel CEO Otellini 進一步表示，400 美元筆記型電腦將在明年 2007 年 Q1 開始問世。

第六節 Featured Keynote – Michael Dell – Chairman of the Borad, Dell Inc.

戴爾電腦董事長 Michael Dell 呼籲參加「世界資訊科技大會」（WCIT）的代表們，務必要讓各國領導人了解 IT 對於經濟發展的重要性。

並提到各國政府應該要制定這樣的目標－任何想要接觸現代 IT 的人士，要用隨時都可取得。因此，減少「數位落差」，便是 Dell 與

會的主調。 Dell 提到進步的國家需要擁有先進技術的人才，需要能夠充分利用現代科技的能力。基此，Dell 呼籲各國政府允許具有競爭力的寬頻業者在其國內成立分公司，讓外資和本土公司公平競爭。

他也贊成政府應該對 IT 產品與服務業者減稅，讓民眾可以用更便宜的價格取得個人電腦與網路服務。戴爾亦提到最近宣佈加入由 AMD 贊助的「綠色網格聯盟」計畫，該聯盟成立的宗旨是想辦法減少數位中心的能源耗用。在回答一位與會者提問時，Dell 本人並未明說戴爾是否會開發與 AMD 處理器相容的伺服器。

第七節 Featured Keynote – Anne Mulcahy – Chairman of the Board and CEO, Xerox Corporation.

Anne Mulcahy 提到了"Smartening up" 文件的概念，也就是智慧型文件的趨勢。文件不僅僅只是文字的紀錄，更是承載資訊的容器。為達到以上的目標，Anne Mulcahy 提出了 Xerox 三個步驟：

一、 藉由更有效的文件管理，讓文件達到自我管理的目的，使得「dumb documents」更聰明。

二、 創新是 Xerox 目前努力的目標，惟有創新才能創造文件的價值，Xerox 採用了 DataGlyph 的技術，創造智慧型文件。

三、 聆聽客戶的需求，目前資訊安全議題仍是文件管理重要的課題，Xerox 目前正在發展將 radio frequency identification (RFID)

的晶片植入文件當中，以確實掌握文件被使用的軌跡。除此之外，Xerox 亦站在顧客的立場，努力降低文件植入 RFID 晶片的成本。 Mulcahy 提到有效的文件管理程式可以降低 30%企業文件管理的成本。

Mulcahy 提到 Xerox 反應了目前全球資訊科技的演變，資訊產業目前逐漸從產品製造者轉型為服務提供者。就 Xerox 來說，它已經看到了市場巨大的轉變，因此，Xerox 也從硬體製造商轉型為軟體及服務的提供者。而在此同時，Xerox 的員工亦從 9 萬 6 千人減至 5 萬 8 千人，且在過去 2 年，Xerox 的市場亦擴及全世界 160 個國家，尤其是東歐及俄羅斯。而中國大陸及印度亦是 Xerox 下一步要前進的市場。

Mulcahy 也給予 IT 新的意義。過去資訊科技產業著重在「IT」中的「T」即「Technology」，因此，致力於技術上的研發，資訊產業主要是硬體製造者的角色，而如今，隨著環境的轉變，資訊科技產業應該把焦點由「IT」的「T」轉為「I」即「Intelligent」，如何將 IT 巧妙地融入我們的日常生活中，有效地運用 IT 以帶來更多的好處。

第四章 參加世界資訊科技大會心得與建議

第一節、會議成果

本次會議相關成果摘要如下:

一、 縮減數位落差、科技交流趨勢

此次大會主題分別為醫療照護、資訊安全與數位落差，然大會演獎者大都以縮減數位落差為各項議題之終極目標。其中 AMD 董事長提出的 5015 計畫, 目的在促使全球 50%的人口在 2015 年之前都能擁有電腦，另外麻省理工學院 Dr. Negroponte 主持的「一百美元電腦計畫(One Laptop per Child)」，更受到聯合國的全力支持。這種國際趨勢與我國推動數位台灣計畫中的「縮減數位落差計畫」不謀而合，另我國在 APEC 會議中倡議之「APEC 數位機會中心(ADOC)計畫」也受到 APEC 會員國一致推崇，因此善用我國資通訊產業實力，拓展科技交流管道與國際能見度，至為重要。

二、 大會晚宴(Gala Dinner)

由台灣贊助的大會晚宴於5月4日晚上舉行, 首先由WCIT 2006 執行長 MR. Glyn 介紹台灣對全球 ICT 產業之貢獻，接著撥放 4 分鐘影帶介紹「台灣精品(It ’s very well made in Taiwan)」，突顯台灣十幾項居世界領先地位的產品，大會則在林政務委員逢慶致歡迎辭後正式開始。會中安排由東元集團黃董事長茂雄專題

報告台灣資通訊產業現況與未來展望，並由中華電信公司賀陳董事長旦頒獎表揚麻省理工學院Dr.Negroponte協助設計聯合國100美元電腦計畫，一方面彰顯台灣筆記型電腦全球領先地位，另一方面突顯台灣重視數位人權，關懷國際弱勢族群的理念。Dr.Negroponte 在致詞上更進一步指出，「聯合國百元電腦計畫受到全球各界的高度重視，將使世界上許多國家與人民受惠，但是此計畫若是沒有台灣的協助，是無法成功的」。最後，主席更頒獎表揚台灣政府在政策制定與推廣 ICT 產業永續經營的貢獻，由台灣代表團團長林政務委員逢慶代表受獎。

在參加晚宴的 1000 餘位全球資通訊領袖與代表的面前，台灣代表團充分展現我國的優勢與企圖心，成功行銷台灣，強化台灣在全球資通訊產業的影響力。

三、 大會展覽

此次參與 WCIT 2006 會議，特別規劃「台灣館」的展示，由工研院與資策會分別以 M 台灣與 e 台灣為主題，展現我國在資通訊基礎建設，分享台灣 e 化經驗；並運用最新的無線射頻辨識系統（RFID）技術，整合數位家庭、網際網路和無線網路及設備，結合友好國家與國際組織共同努力邁向「優質網路社會(UNS)」。

展覽期間，林政務委員逢慶分別接受印度當地媒體的專訪，

分享參與 WCIT 2006 的感想與收穫，並進一步說明如何藉助台灣經驗與成果，協助該國強化資通訊基礎建設與環境，建構國家 e 化藍圖。

此次台灣館的展示廣受各國與會人士之迴響，不但增進國際人士對台灣之了解，更提升我國在國際間正面之影響。

四、 科技交流、經驗分享

此次參與 WCIT 2006 會議，林政務委員逢慶與墨西哥經濟部長 Sergio Garica 會面，商討台墨雙邊投資事宜，我方陪同人員為中華電信公司賀陳董事長旦，台北縣電腦公會許理事長明仁，以及東元集團代表殷執行長允中與黃總經理台陽等。林政務委員逢慶也於早餐時與美國國務院與會代表 Mr. Tim Finton 會晤，就台美關係初步交換意見。台灣代表團也是 80 個與會國家中，唯一的一個代表團與德州州長裴瑞在其州長辦公室會晤。裴瑞州長表示，台灣是德州第 3 大貿易夥伴，這對致力於發展高科技產業德州政府非常重要，希望以後能在更多的領域與台灣合作與交流。

鑑於台灣資通訊產業的實力，許多跨國企業都積極與我國企業代表商談合作事宜，另規劃資策會柯執行長志昇代表經濟部，在大會上介紹台灣資通訊產業的發展現況與投資環境，會後並有日本與馬來西亞代表對資策會的能量展現高度興趣，而資策會、

工研院、與東元集團代表也在展場闢設的演講區提出業務簡報，推廣台灣資通訊產業。另工研院也特別安排「人才招募」活動，適時推廣台灣經驗。

第二節、結論與心得

儘管馬來西亞與墨西哥政府於會前即釋出誘因，不斷要求 WITSA 與 WCIT 主辦大會最重要活動--晚宴(Gala Dinner)的強烈意願，主辦單位仍肯定台灣對全球資通訊產業的貢獻與影響力，於 2005 年底即派代表多次訪台，促成台灣贊助與組團參加 WCIT 2006 活動。我國應本於目前的基礎上，以科技與經濟實力更積極參與國際相關活動，行銷台灣，拓展台灣國際舞台，增加台灣對全球社會的影響力。

縮減數位落差、重視數位人權已成為全球最關心的議題之一，與我國 2003 年在 APEC 領袖會議所倡議的「數位機會中心計畫(ADOC)」的理念一致，ADOC 計畫也獲得 APEC 會員國一致的支持與讚賞。建議可以此為出發點，積極分享我國創造數位機會及協助縮減國際數位落差的經驗與成果，拓展科技外交的空間與管道，鞏固邦誼，強化台灣在國際的實質影響力。

雖然與會各國代表一致推崇台灣對全球 ICT 產業的貢獻與成就，但微軟與戴爾電腦總裁等業界領袖在專題演講中，談到東亞、東

南亞地區幾個重要夥伴，以及未來極具競爭力國家時，並沒有提到台灣，值得我們注意並繼續努力。

第三節、建議

一、持續強化資訊建設，並推動縮減數位落差

我國跟許多國家一樣對縮減數位落差現象相當重視，每年皆會辦理新電腦或再生電腦捐贈給偏遠地區民眾或弱勢族群，惟在執行過程須考慮到受贈者的實際需求及相關配套，以免美意大打折扣。諸如偏遠地區網路可及性、學習輔導與網路服務費負擔等。因此要加速縮減數位落差及提高個人電腦使用率、上網率，除了降低電腦價格、網路服務費外，持續強化資訊基礎建設，同時注重城鄉間的平衡發展，善用自由軟體資源，亦是政府與民間必須共同致力解決的。

二、積極參與國際會議，汲取國外資訊科技之發展趨勢

世界資訊科技大會有「資訊科技界的奧林匹克大會」之稱，從我國參與本屆世界資訊科技大會的團員名單來看，政府單位參加人數並不多，相較於前幾屆參加單位與人員，參與熱度似有減少，代表一種警訊。資訊科技的推動不能光靠民間的力量，資訊政策錯誤或不明確、資訊環境條件不理想都是政府可著墨的地方，政府在推動各項資通訊相關計畫時，也應汲取國外資訊科技產業的經驗，才能有效結合民

間力量，再創台灣資訊奇蹟。

三、美國聯邦政府資訊長論壇借鏡

本次會議由於事前準備工作妥適，先行掌握美國聯邦政府資訊長論壇的舉辦情報，因此很榮幸的參與美國聯邦政府資訊長論壇，席間僅開放台灣、英國及加拿大資訊主管與會；該論壇係由美國 OMB（Office of Management and Budget）主導，並由各政府部門每月輪流舉辦，進行相關資訊議題研討與做為跨部門合作的溝通平台。此模式非常值得我國沿引，值此電子化政府已完成相關資訊基礎建設及服務平台建置之際，未來務必投入更多的資源於跨機關資訊整合服務，同時透過定期溝通的機制，因應資訊科技日新月異的變化及其所造成的衝擊。建議未來我國中央政府機關資訊主管每季應最少進行一次高峰論壇，進行新興議題研討與跨機關資訊交流合作；與地方政府機關每半年應最少進行一次中央與地方資訊主管論壇，藉以溝通資訊政策與資源分配事宜。

參考資料

附錄一 CIO COUNCIL

UNITED STATES FEDERAL CIO COUNCIL

We are pleased to announce the **United States' Federal CIO Council** (www.cio.gov) will host a meeting in Austin, Texas USA during World Congress week. Their meeting will take place on **Tuesday, 2 May** at the Texas State Capitol.

On behalf of the CIO Council, we would like to **invite you to join your counterparts from the United States** for a day of thought provoking discussions regarding ICT issues facing each of us across the globe, while also having the opportunity to forge new relationships with your peers from the United States.

The CIO Council serves as the principal interagency forum for improving practices in the design, modernization, use, sharing and performance of Federal Government agency information resources. The Council's role includes developing recommendations for information technology management policies, procedures, and standards; identifying opportunities to share information resources; and assessing and addressing the needs of the Federal Government's IT workforce.

Membership on the Council is comprised of CIOs and Deputy CIOs from the following US Federal executive agencies:

• Agency for International Development	• Department of the Navy
• Central Intelligence Agency	• Department of State
• Department of Agriculture	• Department of Transportation
• Department of the Air Force	• Department of the Treasury
• Department of the Army	• Environmental Protection Agency
• Department of Commerce	• Federal Emergency Management Agency

• Department of Defense	• General Services Administration
• Department of Education	• National Aeronautics and Space Administration
• Department of Energy	• National Science Foundation
• Department of Health and Human Services	• Nuclear Regulatory Commission
• Department of Housing and Urban Development	• Office of Personnel Management
• Department of the Interior	• Small Business Administration
• Department of Justice	• Social Security Administration
• Department of Labor	

For more information regarding the CIO Council meeting during the World Congress, please contact Ainsley Williams at 512/505-4014 or via e-mail awilliams@WCIT2006.org

附錄二 U.S. Health Information Technology Agenda

U.S. Health Information Technology Agenda

John W. Loonsk, MD Director for Interoperability and Standards Office of the National Coordinator for Health Information Technology

May 2, 2006

＊ Agenda

- **Critical needs**
- **Issues to overcome**
- **Infrastructure**
- **Breakthroughs**

＊ Some Critical Needs for Health IT

- **Avoidance of medical errors**
  - **Up to 98,000 avoidable annual deaths due to medical errors**
- **Improvement of resource utilization**
  - **Up to $300B spent annually on treatments with no health yield**
- **Acceleration of knowledge diffusion**
  - **17 years for evidence to be integrated into practice**
- **Reduction of variability in healthcare delivery and access**
  - **Access to specialty care highly dependent on geography**
- **Empowerment of the consumer**
  - **Capitalize on growing consumer trend of active health management**
- **Strengthening of data privacy and protection**
  - **HIPAA becomes reality**
- **Promotion of public health and preparedness**
  - **Surveillance is fragmented, and importance to homeland security brings heightened awareness**

＊ Current HIT Landscape – Information Sharing

- **Most practices do not have Electronic Health Records (EHR's)**
- **Where EHR's exist:**
  - **Do not exchange data electronically with each other, hospitals, labs, or pharmacies**

- **EHR data must be input manually - impedes adoption**

- **Primary transfer of clinical information: paper mail, phone and fax**
  - **Not infrequently all approaches have to be supported by the clinician**

✳ Current HIT Landscape – Information Sharing

Disincentives to exchanging data

- **Complex information**
- **Unique solutions**
- **Integration professional services**
- **Concerns about HIPAA - privacy**
- **Competition and accrual of benefits**

✳ Need a Safe Environment for Data Exchange

- **Creating a Market to Reduce Risk**
  - **Standards-based competition**
- **Intra-organizational Risk Factors**
  - **Competition and trust in sharing**
  - **Making systems work together is hard**
- **Regional Risk Factors**
  - **Unique technology approaches bring the risk, cost and delay**
  - **Each network becomes a self-developed or custom-developed project**
- **Interoperability Demands High Specificity**
  - **Need to balance market and technical forces**

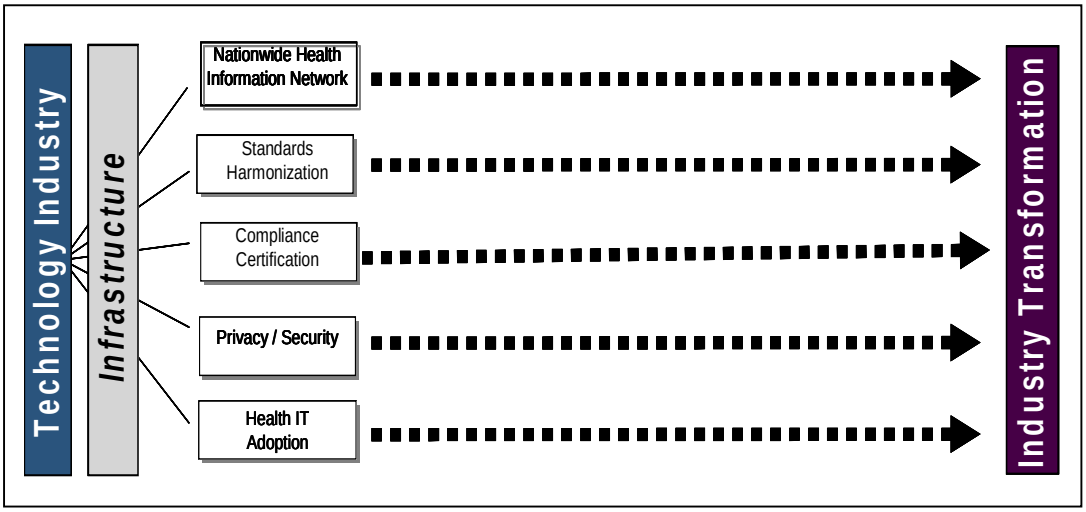
✳ Perfect Storm?

✳ National Health Information Technology Agenda

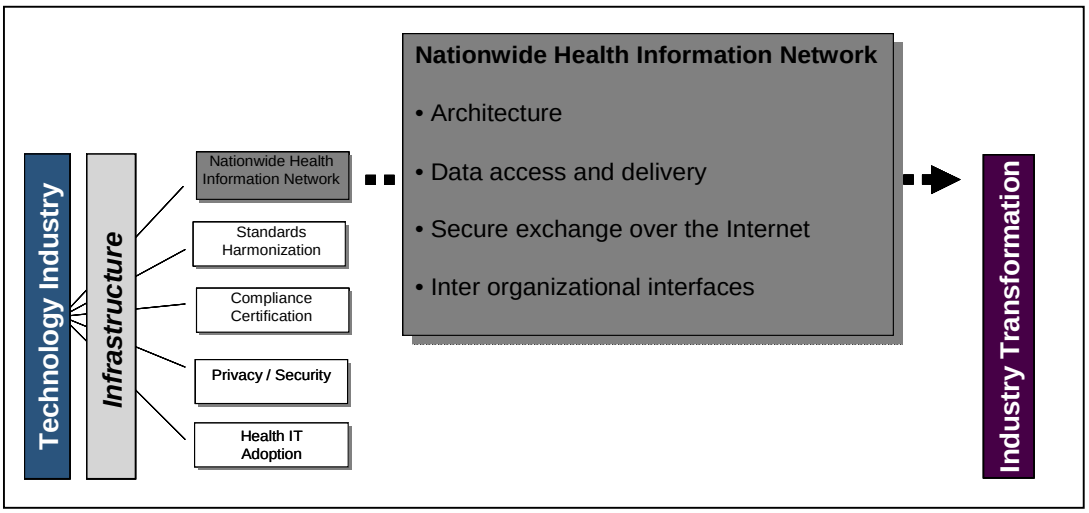
- Widespread adoption of interoperable Electronic Health Records within 10 years
- Medical information follows the consumer
- Clinicians have complete, computerized patient information
- Quality initiatives measure performance and drive quality-based competition
- Public health and bioterrorism surveillance are seamlessly integrated into care

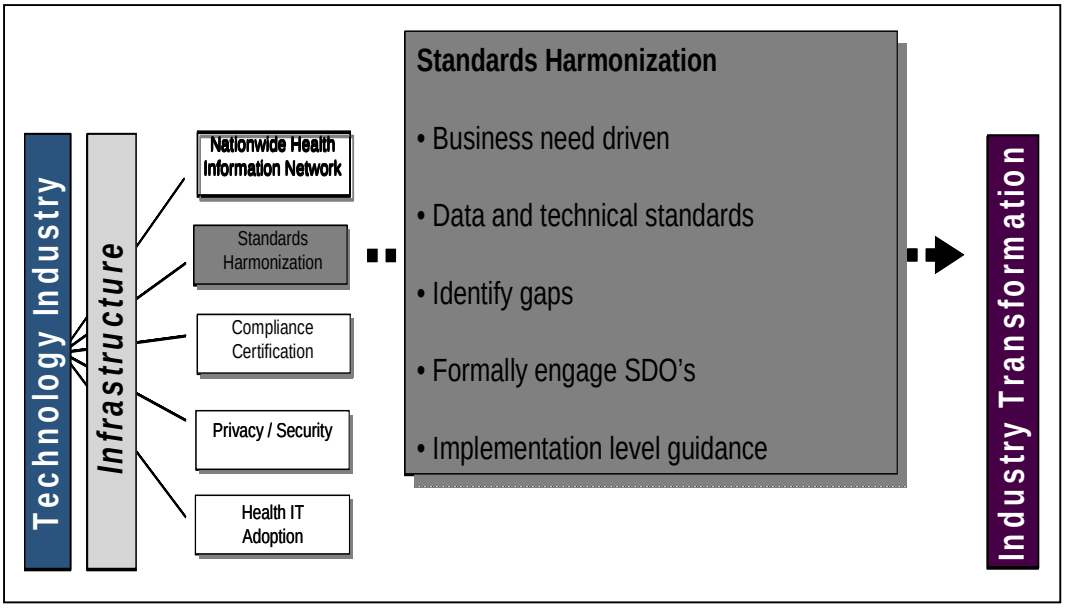
Office of the National Coordinator (ONC) for Health IT Established in response to Executive Order 13335, April 27, 2004 to advance this vision.

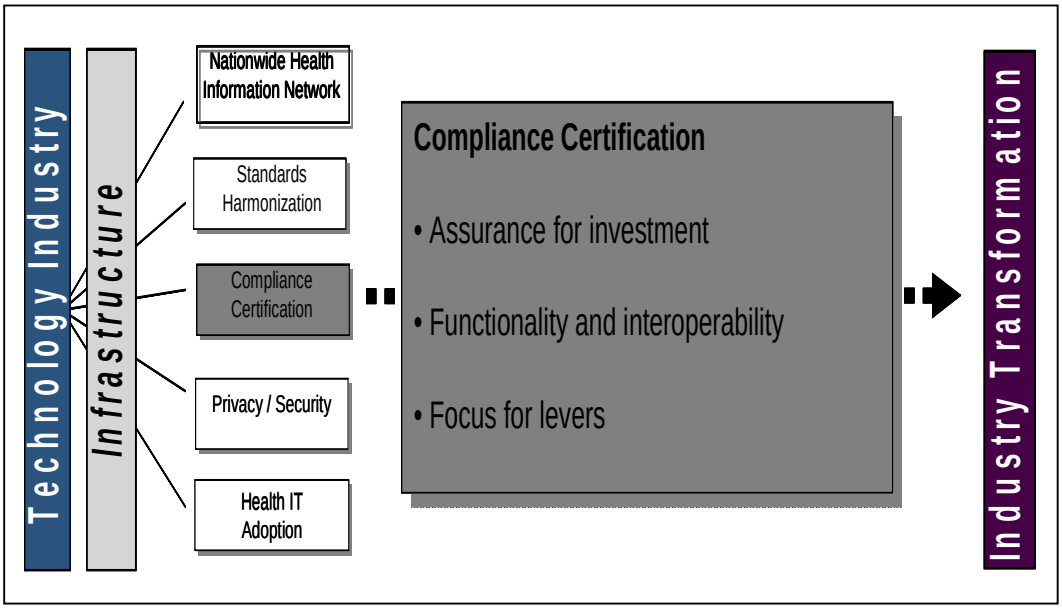
✳ Health Information Technology Deployment



✳ Health Information Technology Deployment





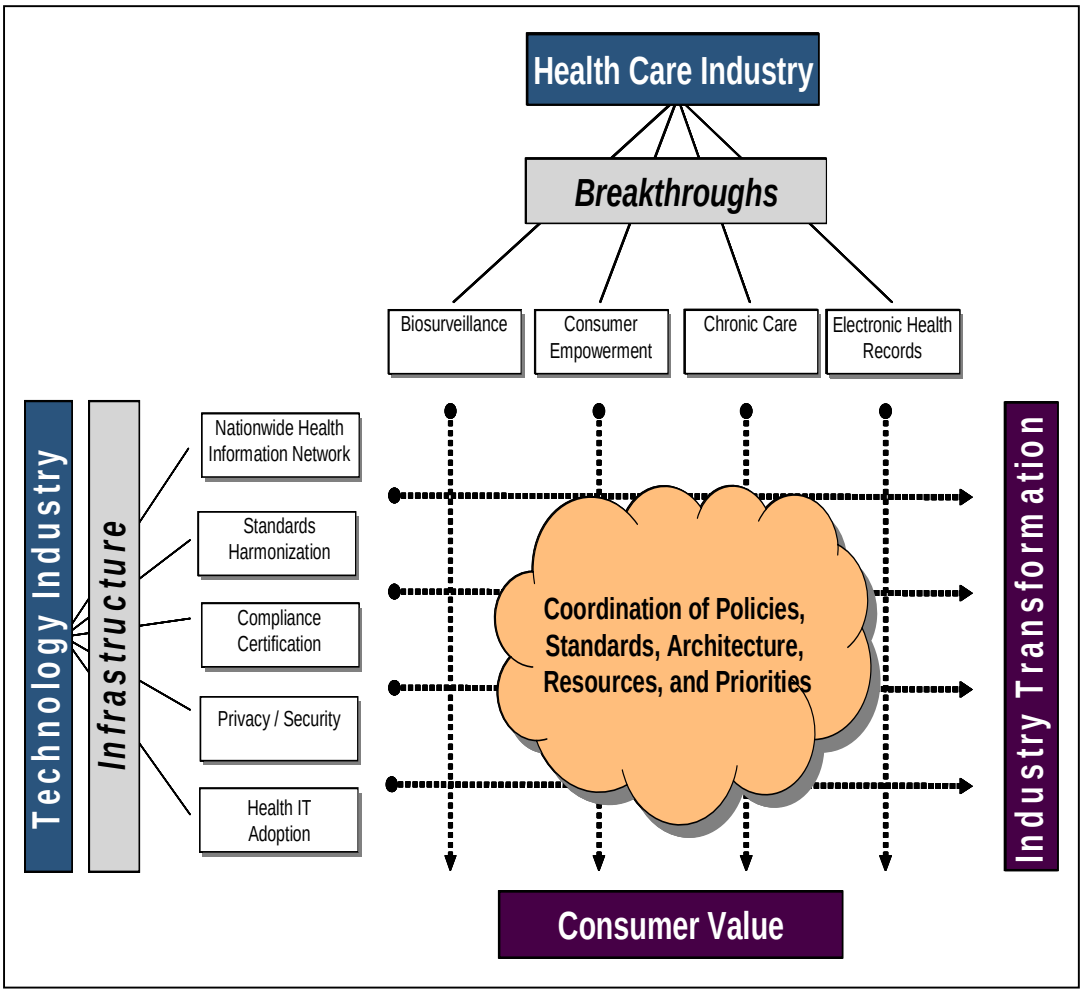


✳ The American Health Information Community

- Federal Advisory Committee appointed and chaired by Secretary Leavitt
- Nine public sector and eight private sector appointees
- Initial recommendations:
  - Prioritize Health IT initiatives
  - Identify breakthrough opportunities
  - Ensure privacy and security protections
  - Work to common interests

- Consumers
- Providers
- Payers
- Private industry

✳ Health Information Technology Deployment



附錄三 CIO Council Implementation of HSPD-12

Austin, Texas

John G. Sindelar

General Services Administration (GSA)

Office of Governmentwide Policy

May 2, 2006

✳ The HSPD-12 Mandate

Home Security Presidential Directive 12 (HSPD-12):
"*Policy for a Common Identification Standard for Federal Employees and Contractors*"
-- Signed by President: **August 27, 2004**

HSPD-12 has Four Control Objectives:

- **Issue Identification based on sound criteria to verify an individual's identity.**
- **Strongly resistant to fraud, tampering, counterfeiting, and terrorist exploitation.**
- **Personal Identity can be rapidly authenticated electronically.**
- **Issued by providers who's reliability has been established by an official accreditation process.**

✳ Key Milestones

Timeline	Agency/Department Requirement/Milestone
August 27, 2004	HSPD-12 signed and issued
Not later than 6 months (**February 27, 2005**)	NIST Issue standard (FIPS-201)
Not later than 8 months following issuance of standard (**October 27, 2005**)	Compliance with FIPS-201 Part One: Identity Proofing and Enrollment. **PIV-I**
Not later 20 months following issuance of standard (**October 27, 2006**)	Commence deployment of FIPS-201 compliant Identity Credentials (FIPS-201 Part Two). **PIV-II**
Not later than 32 months following issuance of standard (**October 27, 2007**)	Compliance with FIPS-201 Part Two: Fully operational Physical and Logical Access

Implementation of the following components may be deferred past October 2007 based on agency determined risk and coordination with OMB: Deployment of readers/access control systems, application-side software, agency communication protocols.

✳ HSPD-12 Executive Steering Committee

· **HSPD-12 ESC members**

Karen Evans & Carol Bales, OMB, Mary Dixon, DoD, Chris Niedermeyer, USDA, John Sindelar, GSA, Scott Charbo, DHS, Rich Yamamoto, DOC, Gary Steinberg, VA

· **HSPD-12 ESC goals**

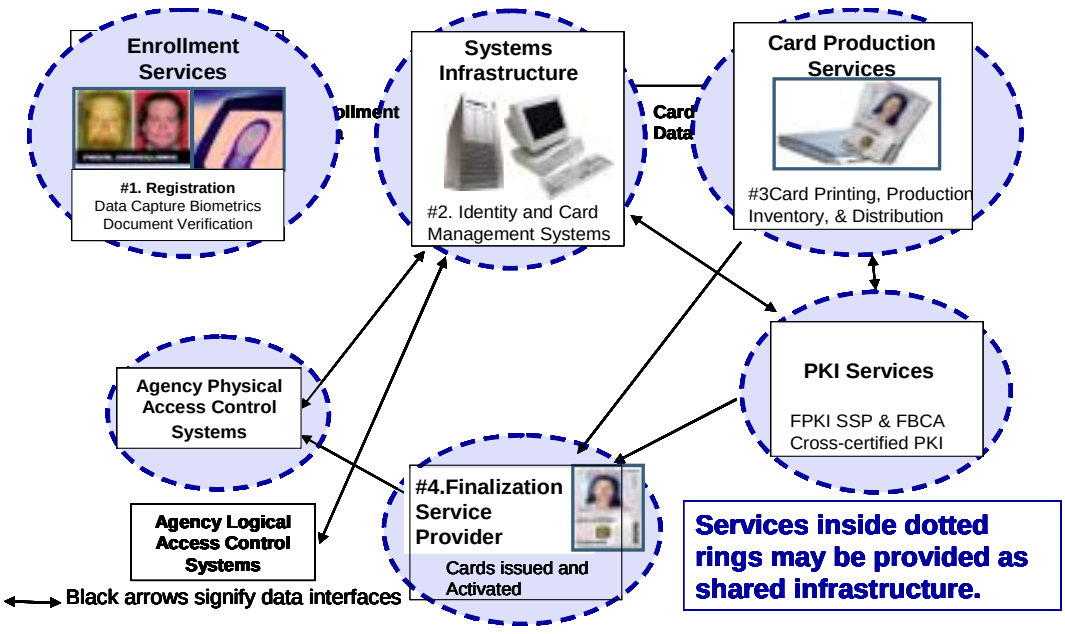
✓ Help large agencies reduce the costs of HSPD-12 implementation.
✓ Provide means for small agencies to acquire HSPD-12 shared services.
✓ Share resources to help agencies achieve the October 2006 HSPD-12 deadline

· **HSPD-12 ESC Working Groups:**

✓ Geographic Diversity Working Group, chaired by Owen Unangst, USDA.
✓ Inventory Working Group, chaired by Ron Martin, DOC and Judith Spencer, GSA.
✓ Technical Development Working Group, chaired by Michael Butler, DoD.

Inventory WG

✳ HSPD-12 Service Components



✳ Sponsorship and Shared Services

- Process for an agency(ies) to provide common, shared infrastructure for HSPD-12 implementation.
- Based on cost savings realization by pooling resources to provide common, shared infrastructure, rather than each agency "going alone".
- HSPD-12 components targeted for potential common, shared infrastructure:
  - ✓ Enrollment/registration stations
  - ✓ PIV systems infrastructure
  - ✓ PKI Services
  - ✓ Card/credential production systems
  - ✓ Finalization services.
- GSA will provide HSPD-12 components through Schedule 70 SIN 132-62 for the following types of offerings:
  - ✓ Equipment items,
  - ✓ bundled equipment and services,
  - ✓ managed services.
- For all acquisitions GSA wants to provide aggregated buys, as possible.

✳HSPD-12 ESC Approved Definitions for Enrollment Station Analysis:

Enrollment Stations and Rollout Phases

Phases for Enrollment Station Rollout :

- Phase 1 → 80% of Federal Workforce

  Stations in 120 Key Metropolitan Areas located so that Federal Workforce travels maximum of 25 Miles to Enrollment from Duty Station

- Phase 2 → 90+% of Federal Workforce

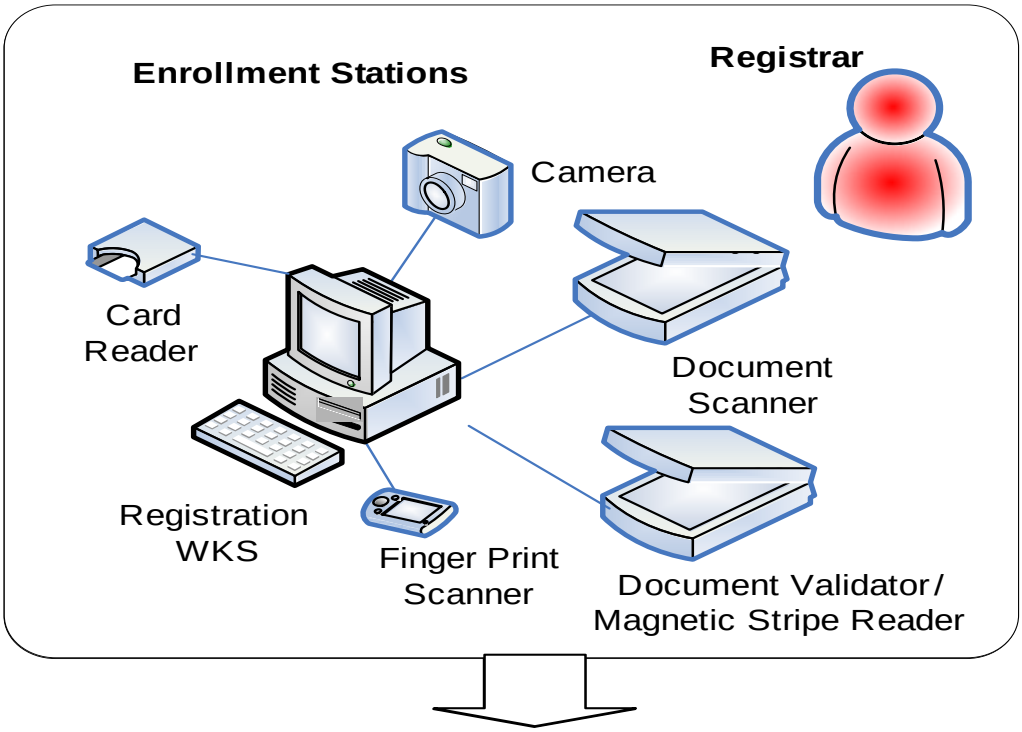
  Stations in up to 250+ Key Areas

- Phase 3 → 99% of Federal Workforce

  Mobile stations will reach even the remotest of the Federal Workforce

- Phase 4 → On-going Operations & Maintenance

An Enrollment Station is a location where the Federal Workforce can provide identity information to the Certified Registrar and it is submitted for validation.



✳ Enrollment Station Rollout Phases

- **Phase 1 to begin NLT 10/27/06 and covers 80% of federal civilian workforce and contractors**

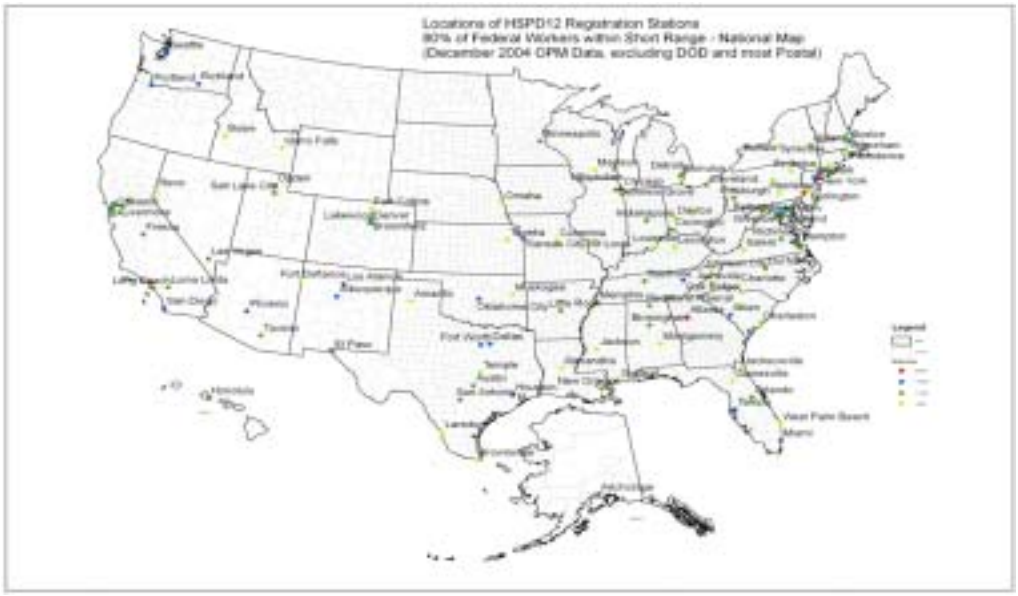
- **Phase 2 begins 6 – 9 months after phase 1 – NLT than7/07 – and covers additional 10%**

- **Phase 3 transitions all remaining Federal personnel and contractors to PIV through combination of enrollment station deployment, mobile stations, personnel travel to deployed station areas.**

- **All phases to be completed within 24 months so that all Federal personnel and contractors are enrolled into PIV program by 10/08.**

✳ Enrollment Station Locations:

120 Key Areas with 80% of Federal Workforce (Duty Stations within 25 Mile Max. Drive to Key Area)



✳ Next Steps: Determine Operation Model

An Operations CONOPS will be necessary to support the Enrollment Stations once they have been established.

<u>Agreements among Government Entities need to specify:</u>

- ✓ **Operations of the Enrollment Stations with Certified Registrars**
- ✓ **Defining centralized management structure for the Enrollment Stations**
- ✓ **Building Locations and space for the Enrollment Stations and support from the Sponsoring Agency**
- ✓ **Schedules for Operations and Deployments for the Enrollment Stations**
- ✓ **Help Desk support for the Enrollment Stations**
- ✓ **Maintenance of the hardware and software for the Enrollment Stations**
- ✓ **Fee for Service Agreements**

✳GSA's Role for HSPD-12 Acquisition

	Statue:
· **Establish interoperability and common performance testing to meet NIST standards**	In progress
· **Compliance for GSA contractors (e.g., cleaning, maintenance, etc.)**	Ongoing
· **Award SIN 132-62 listings as approved products and services become available**	In progress
· **Establish Approved Products Lists for product categories requiring FIPS 201 compliance**	In progress
· **Provide full-range of qualified products and services to meet Agency implementation needs**	Pending
· **Provide assisted acquisition services to customer agencies on reimbursable basis**	Pending
✓ Facilitate aggregated acquisitions of products and services across customer agencies	Pending
· **Provide HSPD-12 components as shared services as determined appropriate.**	Pending

✳ Other Privacy Guidance and Responsibilities

Privacy Act of 1974 (5 U.S.C. 552a)
E-Government Act of 2002 (44 U.S.C. ch. 36) Section 208 Privacy Impact Assessment (PIA), and OMB M-03-22 - Guidance to implement privacy provisions of the EGov Act.

Agency Responsibilities include:

- **Establishing Privacy Officials**
- **Conduct PIAs on systems and processes**
- **Procedures to address privacy violations**
- **Appeal procedures for denials/revocation of credentials**

✳ HSPD 12 Implementation = Greater Privacy Protection

HSPD 12 OMB Directive (M-05-24, section 6) itemizes privacy related elements for meeting requirements collection of personal information and OMB Directive M-06-06 provides agencies sample privacy documents on:

- **System of Records Notice of Personnel Security Files**
- **System of Records Notice for Identity Management System(s)**
- **ID Proofing and Registration Privacy Act Statement**
- **Card Usage Privacy Act Statement**
- **Privacy Impact Assessment for Personal Identity Verification**

附錄四 Information Dissemination — a Key Component of E-Government (and a Government Obligation)

May 2, 2006

＊ Why Disseminate Government Information?

“The effective functioning of our constitutional democracy depends upon the participation in public life of a citizenry that is well informed.”

President George W. Bush Executive Order 13392December 14, 2005

＊ Why Disseminate Government information —

- **Permits citizens to hold their government accountable**
- **Is a valuable national resource and a commodity in the market place**
- **Helps maintain the healthy performance of the economy**
  Disseminating information is to government what advertising is to industry

＊ Principles for Dissemination

- **Assume the public is entitled to and interested in all information**
- **Make information available on timely and equitable terms**
- **Use all available distribution channels and accommodate disabled users, those with unsophisticated access, and those without electronic access**
- **Don’t charge fees for government information—the taxpayer has already paid for it—limit costs to those for dissemination**
- **Ensure quality—objectivity, utility, timeliness, accuracy, relevancy, completeness, and authenticity**
- **Avoid competing with industry—freely disseminate and let the market decide if value added services are worthwhile**

✳ Key Challenges to Information Dissemination

- **Preserving security and privacy—provide confidentiality (when needed) and integrity and availability (always)**
- **Balance security with the public's need and right-to-know**
- **Manage the risk, but don't try to avoid it**
- **Bottomline — Not all information is appropriate for public release, but history shows most is**

✳Three Common Dissemination Types

- **Casual and active—broadcasting to the public-at-large by simply exposing to Internet search mechanisms (least costly, but sifting although the volume can be bewildering to users)**
- **Formal and active—working with and designing for specific user groups and communities (more costly, but improves usefulness)**
- **Formal and reactive—Freedom of Information Act (most costly, largely paper-based, and can be avoided through active dissemination)**

✳ Four Common Dissemination Mechanisms

- **Agency Websites**
  - **Obvious first choice for disseminating agency-specific information, perhaps less obvious for those searching (where do I go?)**
  - **We require agencies to publish inventories and schedules and provide search capabilities for the content on their websites**
- **Firstgov.gov**
  - **Central government portal using targeted search capabilities (e.g., clustering and .gov/.mil domains only)**
  - **Not as widely known as we would like, but searches for "government" or**

"government information" place it at or near the top of relevancy

- **Specialty or Information/Program-Specific Websites**
  - **Grants.gov, Regulations.gov, Business.gov (tailoring to subject areas of known interest)**

- **Federal Register**
  - **Still the U.S. Federal Government's official daily publication—both electronic and paper**

✳ Learn More About Information Dissemination Policies and Practices

On OMB's Website (http://www.whitehouse.gov/omb/inforeg/infopoltech.html)

- **Report to Congress on Implementation of the E-Government Act of 2002, March 1, 2006**
- **Report to Congress on Organizations Complementing Federal Agency Information Dissemination Programs, April 15, 2005**
- **Policies for Improving Public Access to and Dissemination of Government Information, December 16, 2005**
- **Policies for Federal Agency Public Websites, December 17, 2004**
- **OMB Circular A-130, Management of Federal Information Resources, November 28, 2000**

On the White House Website

(http://www.whitehouse.gov/news/releases/2005/12/20051214-4.html)

- **Executive Order 13392, Improving Agency Disclosure of Information, December 14, 2005**

附錄五 USA Services & FirstGov.gov

Office of Citizen Services & Communications U.S. General Services Administration

＊Agenda

What is USA Services
Citizen Services Approach
What Do Citizens Want?
Services to Citizens
FirstGov
Government Services
Performance Measures
FirstGov Search
National Contact Center
Pueblo Distribution Center
Accomplishments
Government-Wide Citizens Services Leadership

＊ USA Services

- **One of 24 U.S. Presidential E-Gov Initiatives**

- **Mission - Helping government better serve citizens**

  - **Direct services to Citizens**
  - **Government-wide leadership**

- **Both take many forms**

＊ Citizen Services Approach

- **Understand citizens' expectations**
- **Understand how well the government is serving citizens — identify gaps in service**
- **Benchmark how other governments and private industry serve citizens**
- **Deliver the right information to citizens and businesses when and how they need it**

- **Improve citizen awareness**
- **Provide tools for other agencies to use**
- **Educate the citizen services community**
- **Share best practices**

✳ What Do Citizens Want?

- **A single point of contact**
- **Convenience - primarily through Internet and Cell/Telephone**
- **Multiple channels (and expect to use several)**
- **Competent service**
- **Services "pushed" to them**
- **Examples:**
  - Contact information for people to call by phone
  - Government grants
  - Disaster assistance
  - How to get a Federal job
  - International travel questions, i.e. passports, etc.
  - Immigration issues: Visas, Green Cards, Becoming a Citizen
  - Taxes
  - Information updates – i.e., subscriptions
  - Consumer protection
  - Wage and hour issues
  - Commenting on legislation
  - Many, many more

But they have low expectations for successful outcomes in government interaction

✳ Direct Services to Citizens

We provide citizens with the information they want and need through channels of their choice

- **Web:**
  - **FirstGov.gov, FirstGov en Espanol, Pueblo.gsa.gov**
  - **Email**
  - **FAQs**
  - **Email updates**

- **Telephone: 1-800-FED INFO**
- **Publications: Pueblo, CO 81009**

✳ FirstGov.gov

- **The Official Portal to the U.S. Government**
- **Catalogues millions of federal and state web pages for ease of navigation**
- **Best-in-class search engine for government information**
- **319 million web sites link to FirstGov.gov**
- **88 million site visitors in 2005**
- **15 million page views per month**

✳ History Of FirstGov

- **Launched - September 2000**
  - Designed around topics
- **Expanded to limited state & local coverage – April 2001**
  - Added audience channels for citizens, business, & government
- **Added channel for Non-Profits – December 2002**
- **Site redesign 2003**
  - Reorganized around audience channels
  - Citizen channel set as default

- **Launched FirstGov en Espanol – October 2003**
- **Launched upgraded Search – January 2006**
  - Integrated Federal, State, Local information
  - Utilized clustering technology and government accessible databases
  - Increased available index from 8 million to over 50 million documents
- **Site refresh design underway – projected re-launch October 2006**
  - Simpler navigation based on usability studies
  - New graphics and features

✳ Awards

- **July 2002 – Yahoo! Internet Life Magazine's 50 Most Incredibly Useful Site**
- **May 2003 – Innovations in American Government Award**
- **October 2003 - 101 Most Incredibly Useful Sites, PC Magazine**
- **December 2003 – "EContent 100" – EContent Magazine**
- **April 2004 – Forbes.com Best of the Web**
- **September 2004 - # 1 in Overall Federal e-Government – Taubman Center for Public Policy at Brown University**
- **April 2005 – PC Magazine's Top 100 Classic Sites**
- **June 2005 – Webby Worthy Award – International Academy of Digital Arts and Sciences**
- **December 2005 - # 1 in Global E-Government Readiness – United Nations Global E-Government Readiness Report 2005**
- **January 2006 – Favorite Places on the Web – Chicago Sun Times**
- **2006 – Finalist (pending) Stockholm Challenge Award Finalist**
- **+ Others**

✳ Browsing: Features & Functionality

- **Audience Channels and Sub-channels**
  - Online Services
  - Most Requested, Seasonal, New, Highlights
  - Finding In-Person Services at Community Level
  - Accountability for Results – Service Performance Indicators
- **Topical Directory – by Audience**
- **Organizational Directory – Fed, State, Local, Tribal, International**
- **Reference Section**
- **Integrated FAQs**

- **Contact Your Government – Public Interaction by Web, E-Mail, Phone, Print**
- **Option for email updates of preferred content**
- **Special Features**
- **Customer Satisfaction Survey**
- **Free e-Mail Newsletters (Common Subscription) & Updates**
- **Library of RSS Feeds**
- **Search News & Images (Arriving May 2006)**

✳ Government Services

- **Get your driver's license**
- **Find a college loan or scholarship**
- **Find a job**
- **Get a copy of your birth certificate**
- **Change your address**
- **Apply for social security**
- **Find eldercare housing and assistance**
- **Get homework help**
- **Find most popular baby names**
- **Learn more about government**
- **Volunteer in your community**

✳ Performance Measures

FirstGov Success

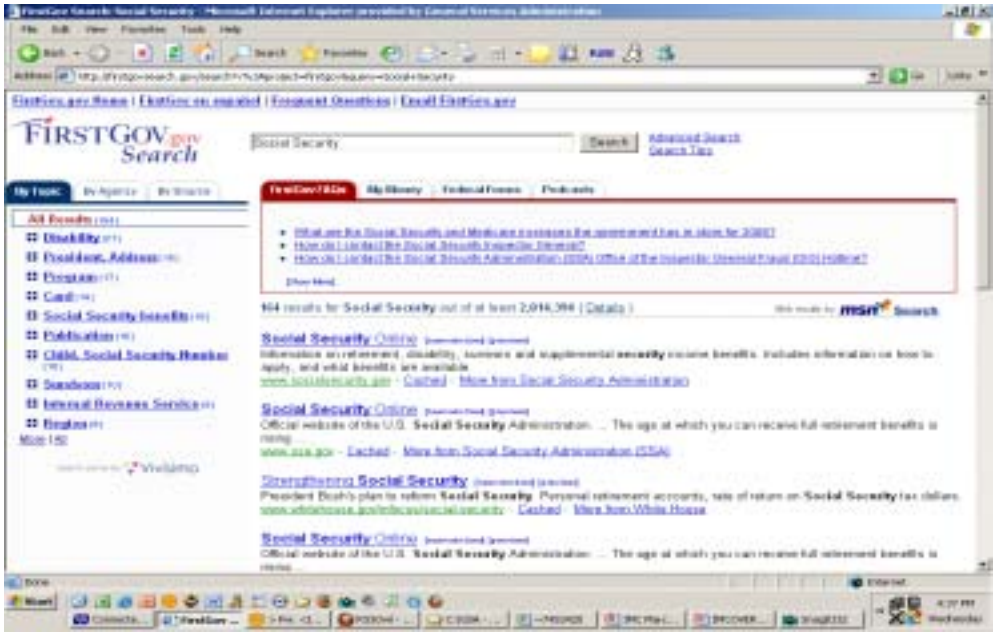
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Website visitors	**14 million**	**33 million**	**63 million**	**78 million**	**88 million**
Web page views	**48 million**	**91 million**	**176 million**	**203 million**	**179 million**
Sites that link to FirstGov		**77,000**	**129,000**	**209,000**	**319 million**

✳ FirstGov Search

- **2002 to 2006 - Ran our own search engine**
- **2006 - Outsourced and combined best practices and indexing power of industry with government accessible information**
- **Utilized partnership of Vivisimo, Inc. and MSN Search**

OLD SEARCH	NEW SEARCH
8 million documents	Over 50 million documents
Federal only	Federal, state, local, tribal, and territorial
Government in-house operations	Leverages Vivisimo's Clusty.com and MSN Search engine
Searched only web documents	Searches web documents and government databases from one search box – unique in government
Returned only a list of search results	Clusters relevant results by topic so citizens find their answers faster
Government-centric	Citizen-centric – improvements also include espanol.gov, kids.gov, consumeraction.gov
Estimated $3.2 million annual cost	$1.8 million annual cost
Manually configured results for relevancy	Relevancy automatically determined by MSN Search
Fewer features than popular search sites	Next generation search with unique features not found on other search engines (e.g. preview function)
Limited ability to add new features	Greater flexibility to provide new features and services

✳FirstGov Search Today - *Continued*



✳ National Contact Center

- **1 (800) FED-INFO**
- **English and Spanish agents**
- **Available 8am to 8pm (M-F)**
- **IVR 24 x 7**
- **Online Knowledgebase**

✳Publication Distribution Center

- **Consumer Information Catalog**
- **Pueblo, Colorado 81009**
- **Over 200 free or low-cost federal publications**
- **Full text available online**
- **Topics include health, federal benefits, money, housing, childcare, employment, small business, education, nutrition, cars travel, and more**

✳ Public Contacts

Channel	Fiscal Year 2005
FirstGov.gov citizen visits	88,758,590
FirstGov.gov page views	179,081,601
Other OCSC Web page views	33,550,287
Print publications	8,213,942
Toll-free telephone calls	1,695,017
Assisted Telephone Calls	6,720,849
Email via FirstGov.gov	106,575
ListServ emails	1,123,582

✳ Government-Wide Citizen Services Leadership

- **Contracts**
  - FirstContact
  - Citizens Services Infrastructure (CSI)
- **Standards and Best Practices**
  - Intergovernmental Committees – Standards
  - Citizens Services Advocates – Metrics, Benchmarking Studies, Technology Trends
  - Search and Web Content Communities
    - ◎ WebContent.gov
  - Web Manager University
  - Usability Consulting
- **Networks**
  - USA Services Partners
  - Intergovernmental Committees

✳ For Information

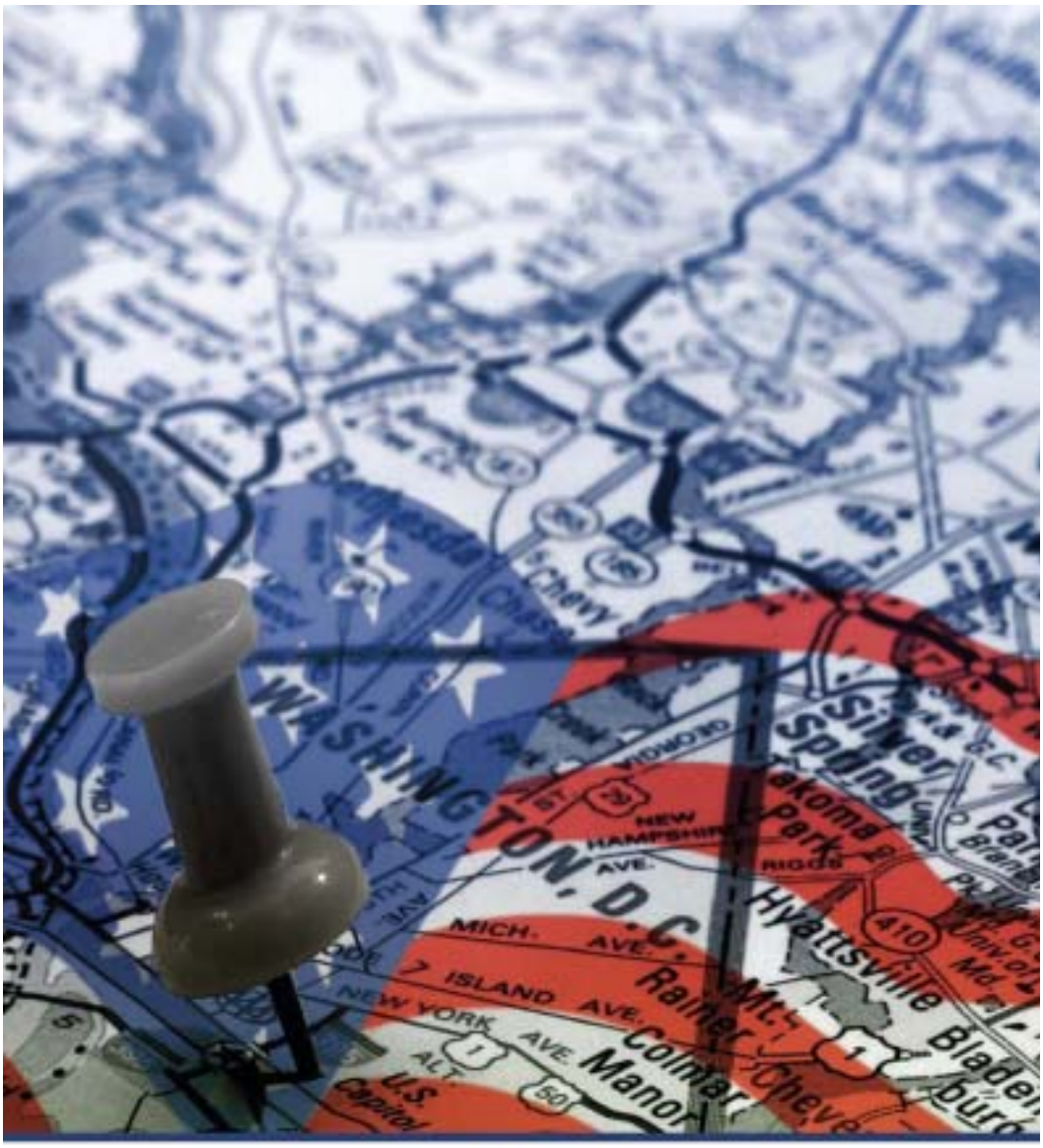
Martha Dorris
Deputy Associate Administrator
Martha.dorris@gsa.gov
(202) 501-0225

Teresa Nasif
Director, Federal Citizen Information Center
Teresa.nasif@gsa.gov
(202) 501-1794

John Murphy
Director, FirstGov Technologies
Jr.murphy@gsa.gov
(202) 219-1198
Denis Gusty
Director, Office of Intergovernmental Solutions
Denis.gusty@gsa.gov
(202) 501-3729

Beverly Godwin
Director, Content Management Division
Beverly.godwin@gsa.gov
(202) 208-5163

附錄六 FEDERAL CIO ROADMAP



FEDERAL CIO ROADMAP

THE COUNCIL FOR Excellence IN GOVERNMENT

touchstone consulting group an SRA International, Inc. company

The Federal CIO Roadmap provides a high level look at areas of responsibility for Federal CIOs. Specific detailed CIO responsibilities are specified in law, regulation, and OMB circulars and guidance.

Strategic Planning

IRM/IT Strategic Planning: The Agency CIO is responsible for the development and annual maintenance of a strategic information resources management (IRM) plan describing information and technology management functions and activities. To use IT effectively it is recommended that CIOs develop a comprehensive IT/IRM strategic plan that aligns to the agency business strategy and ensures IT investments are funded only where they have the greatest impact on business results.

Federal IT Workforce: Agency CIOs are required to assess the information resources management skills needed for agency personnel and to evaluate and rectify deficiencies identified in meeting the agency performance goals. CIOs are further required to develop strategies and specific plans for the hiring, training and professional development that is needed. Agencies work with OMB and the CIO Council to identify needed competencies and to fill skill gaps. Agencies are also required to assign a qualified project manager to each project and to examine and document the qualifications of these individuals.

Enterprise Architecture (EA)

Federal laws and guidance direct agency CIOs to develop and maintain enterprise architectures as blueprints to guide IT modernization. Measurement of EA effectiveness is essential to achieving mission and business results. The EA Assessment Framework v2.0 was designed to advance agency adoption and use of EA across four primary objectives:

1. Completion of an agency's EA and related artifacts demonstrating alignment to the Federal Enterprise Architecture.
2. Use of an agency's EA to drive improved decision-making.
3. Results achieved from the use of an agency's EA improving efficiency and effectiveness.
4. Policy alignment between the agency's EA and IT policies established by OMB.

Annual EA Assessment: OMB will conduct an annual assessment of agency's EA programs. Agencies will receive an average score for each capability area above. Annual results will be reflected in the *Status* score for E-Government within the President's Management Agenda (PMA) Scorecard.

- Score equal to or greater than 3 in both the "Completion" and "Use" Capability areas OR a score equal to 3 or greater in the "Results" capability area
- Score equal to or greater than 3 in either the "Completion" or "Use" capability area
- Score less than 3 in each capability area

Quarterly EA Performance Review: Agencies are required to submit quarterly progress reports to OMB on the status of achieving transition strategy milestones. Results will be reflected in the *Progress* score for E-Government within the PMA scorecard. By applying the assessment for themselves, agencies can identify strengths and weaknesses within their EA program and adjust them accordingly.

Budget Formulation and Capital Planning & Investment Control (CPIC)

The Capital Planning and Investment Control process is an integral part of agency budget formulation and execution. To maximize the value of invested taxpayer dollars, CIOs are required to monitor and evaluate the performance of information resource investments through a CPIC process and advise the agency head on whether to continue, modify, or terminate a program or project. Agency CIOs may use the CPIC process to manage IT investments on an individual basis as well as in the context of the entire IT portfolio. An effective capital planning process requires long-range planning and a disciplined budget process as the basis for managing a portfolio of capital assets. A sound capital planning process defines how an agency:

- **Selects** capital investments for funding each year;
- **Controls** and manages capital investments to achieve intended cost, schedule and performance outcomes;
- **Evaluates** performance to maintain a positive return on investment.

E-Government and IT Implementation

E-Gov Implementation and Alignment: To ensure the Federal Government achieves results for E-Government, Lines of Business (LoB), and SmartBUY initiatives, OMB measures agency participation and adoption of initiative outputs against a set of established milestones agreed to by the agency and OMB.

Agency Requirements: Agencies are required to submit quarterly progress reports on the status of their E-Gov implementation milestones. For any missed milestones, CIOs are required to provide a rationale and expected date of completion. In addition, as initiatives progress and new requirements are identified, CIOs are required to update their implementation plans and milestones.

Standards for Success: Agencies must demonstrate completion of all E-Gov implementation plan milestones scheduled for that quarter or risk being downgraded in *Progress* on their E-Gov PMA scorecard. In addition, Agencies that miss a major milestone will be downgraded in *Status* on their E-Gov PMA scorecard. If an agency misses a milestone due to circumstances outside its control, its *Progress* and *Status* scores will not be downgraded.

Lines of Business Initiative: Building upon the efforts of the Federal Enterprise Architecture Program to expand E-Government, OMB and designated cross-agency task forces launched the Line of Business (LoB) Initiative for six lines of business.

- Case Management
- Grants Management
- Federal Health Architecture
- HR Management
- Financial Management
- IT Security

An LoB initiative is a cross-agency effort to define, design, implement, and monitor a set of common solutions for a government-wide business function or service of the Federal Government. The scope of a Line of Business effort is to:

- Define processes and business rules associated with government-wide business functions;
- Shape existing or inform future policy by making recommendations to the appropriate policy authority associated with the business function;
- Provide implementation guidance to agency IT projects or systems to come into alignment with the LoB initiatives.

SmartBUY: SmartBUY is a Federal government-wide enterprise software licensing initiative designed to streamline the acquisition process and provide the best priced, standards-compliant IT. Agencies are required to maximize the use of SmartBUY leveraging government buying power to reduce software licenses expenses and avoid redundant purchases.

Program Management and Performance

When managed effectively, IT investments can have a dramatic impact on an organization's performance. If not, however, they can result in wasteful spending and lost opportunities for improving delivery of services to citizens.

Earned Value Management (EVM): EVM is a project management tool that effectively integrates the scope of work with schedule and cost elements for optimum investment planning and control. EVM allows for the development of a performance measurement baseline against which accomplishments may be measured in an independently verifiable basis. As a result, decision-makers have consistent, quantifiable indicators of performance to determine if a project is progressing as planned.

Standards for Success: Agency CIOs are required to assign a qualified project manager to each project. In addition, agencies are expected to achieve, on average, 90% of cost, schedule, and performance goals for all major and non-major projects. OMB evaluates agencies' actual performance of major IT investments on the PMA E-Gov Scorecard as follows:

- Green: Has demonstrated appropriate planning, execution, and management of major IT investments, using EVM or operational analysis, and have IT portfolio performance operating within 10% of cost, schedule, and performance goals.
- Yellow: Has demonstrated appropriate planning, execution, and management of major IT investments, using EVM or operational analysis, and have IT portfolio performance operating within 30% of cost, schedule, and performance goals.
- Red: Has cost and schedule overruns, and performance shortfalls, that average 30% or more.

In evaluating whether an agency has achieved the "green" standard for success for cost, schedule, and performance, OMB looks for:

1. Documented agency policy.
2. Established cost, schedule and performance baselines.
3. Examples of how the agency uses data and analysis to make decisions.
4. Contract language requiring the use of EVMS that meets the ANSI/EIA-STD 748.
5. Current cumulative EVM data and variance analyses, and corrective action plans.

Security and Privacy

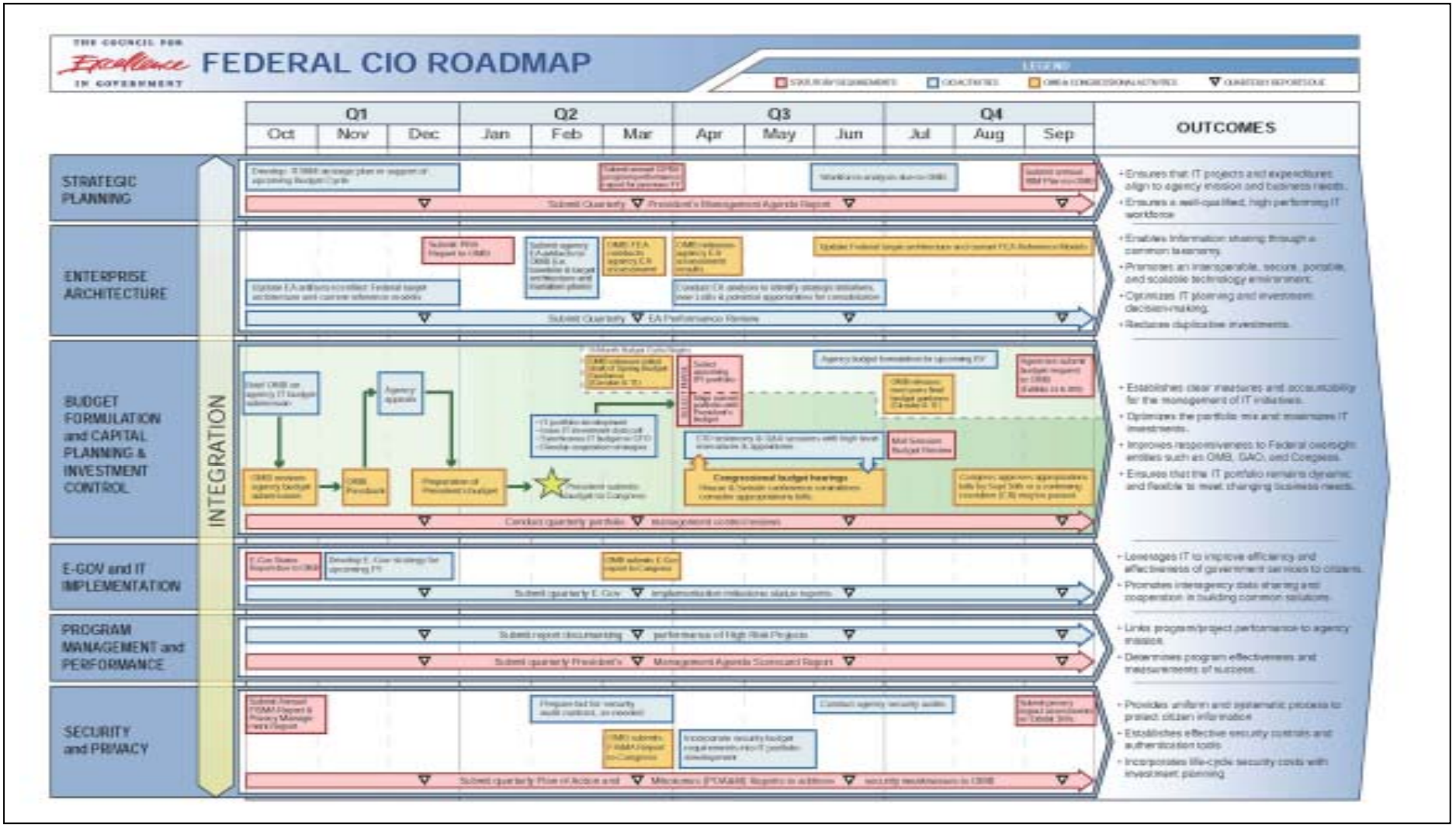
Security Considerations: The Federal Information Security Management Act (FISMA) provides the framework for securing the Federal Government's information technology including both unclassified and national security systems. All agencies must implement the requirements of FISMA and report annually to the Office of Management and Budget (OMB) on the effectiveness of their security programs. OMB uses the results of the reports to develop its annual security report to Congress. In addition, as part of the PMA scorecard process, agencies are required to submit quarterly reports demonstrating progress addressing security weaknesses on their Plan of Action and Milestones (POA&M).

Privacy Considerations: The Privacy Act of 1974 requires Federal agencies to develop systems of record for any information in their possession that identifies an individual by name, number, or any identifying particular assigned to that person. In addition, a notice of the existence and character of the system of records must be published in the Federal Register. Furthermore, agencies are required to:

- Provide notice to the individual of the system of record;
- Permit the individual access to that record;
- Disclose the routine uses of the information and gain consent prior to using the information beyond its original intent;
- Establish the appropriate safeguards to ensure the security and confidentiality of records.

The E-Government Act of 2002 directs agencies to conduct reviews of how information about individuals is handled within their agency when they use IT to collect new information, or when agencies develop or buy new IT systems to handle collections of personally identifiable information. In summary, Agencies are required to:

1. Conduct privacy impact assessments for electronic information systems and collections.
2. Make the privacy impact assessment publicly available through the website of the agency, publication in the Federal Register, or other means.
3. Translate privacy policies into a standardized machine-readable format.
4. Report annually to OMB on compliance with section 208 of the E-Government Act of 2002.


THE COUNCIL FOR Excellence IN GOVERNMENT
FEDERAL CIO ROADMAP
LEGEND
Q1
Oct
Nov
Dec
Q2
Jan
Feb
Mar
Q3
Apr
May
Jun
Q4
Jul
Aug
Sep
OUTCOMES
STRATEGIC PLANNING
Submit Quarterly President's Management Agenda Report
ENTERPRISE ARCHITECTURE
Submit Quarterly EA Performance Review
BUDGET FORMULATION and CAPITAL PLANNING & INVESTMENT CONTROL
Congressional budget hearings
Conduct quarterly portfolio management control reviews
E-GOV and IT IMPLEMENTATION
Submit quarterly E-Gov implementation milestone status reports
PROGRAM MANAGEMENT and PERFORMANCE
Submit report documenting performance of High Risk Projects
Submit quarterly President's Management Agenda Scorecard Report
SECURITY and PRIVACY
Submit quarterly Plan of Action and Milestones (POA&M) Reports to address security weaknesses in OMB
INTEGRATION
• Ensures that IT projects and expenditures align to agency mission and business needs.
• Ensures a well-qualified, high performing IT workforce.
• Enables information sharing through a common taxonomy.
• Promotes an interoperable, secure, portable, and scalable technology environment.
• Optimizes IT planning and investment decision-making.
• Reduces duplicative investments.
• Establishes clear measures and accountability for the management of IT initiatives.
• Optimizes the portfolio mix and maximizes IT investments.
• Improves responsiveness to Federal oversight entities such as OMB, GAO, and Congress.
• Ensures that the IT portfolio remains dynamic and flexible to meet changing business needs.
• Leverages IT to improve efficiency and effectiveness of government services to citizens.
• Promotes interagency data sharing and cooperation in building common solutions.
• Links program/project performance to agency mission.
• Determines program effectiveness and measurements of success.
• Provides uniform and systematic process to protect citizen information.
• Establishes effective security controls and authentication tools.
• Incorporates life-cycle security costs with investment planning.

GAO's Summary of CIO's Information Management & Technology Responsibilities

IT/IRM Strategic Planning - The agency CIO is responsible for strategic planning for all information and technology management functions - thus, the term information resources management (IRM) strategic planning. 44 U.S.C. 3506(b)(2).

IT/IRM Workforce Planning - CIOs have responsibilities for helping the agency meet its IT/IRM workforce or human capital needs. 44 U.S.C. 3506(b) and 40 U.S.C. 11315(c).

Capital Planning and Investment Management - Federal laws and guidance direct agencies to develop and implement processes for IT capital planning and investment management. 44 U.S.C. 3506(h) and 40 U.S.C. 11312 & 11313.

Systems Acquisition, Development, and Integration - GAO found that a critical element of successful IT management is effective control of systems acquisition, development, and integration.

Major Electronic Government (E-Gov) Initiatives - Various laws and guidance have directed agencies to undertake a variety of e-gov initiatives relating to using IT to improve government services to the public, as well as operations within the government.

Enterprise Architecture (EA) - Federal laws and guidance direct agencies to develop and maintain enterprise architectures as blueprints to guide IT modernization.

Information Security - The agency CIO is responsible for protecting information and systems. 44 U.S.C. 3506(g) and 3544(a)(3).

Privacy - The agency CIO is responsible for compliance with the Privacy Act and related laws. 44 U.S.C. 3506(g).

Information Collection/Paperwork Reduction - The agency CIO is responsible for overseeing a process to review agency information collection proposals in order to maximize the utility and minimize the public "paperwork" burdens associated with the agency's collection of information. 44 U.S.C. 3506(c).

Records Management - The agency CIO is responsible for ensuring that the agency implements and enforces records management policies and procedures. 44 U.S.C. 3506(f).

Information Dissemination - The agency CIO is responsible for ensuring that the agency's information dissemination activities meet policy goals, such as timely and equitable public access to information. 44 U.S.C. 3506(d).

Information Disclosure/Freedom of Information Act (FOIA) - The agency CIO is responsible for information access requirements, such as those of the FOIA and related laws. 44 U.S.C. 3506(g).

Statistical Policy and Coordination - The agency CIO is responsible for the agency's statistical policy and coordination functions. 44 U.S.C. 3506(e)

Source: GAO-04-823, Federal Chief Information Officer Responsibilities, Reporting Relationships, Tenure, and Challenges

Key Legislation

The E-Government Act of 2002

Federal Information Security Management Act of 2002 (FISMA)

Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA)

Government Paperwork Elimination Act of 1998 (GPEA)

Clinger Cohen Act of 1996

Freedom of Information Act of 1996 (FOIA)

Paperwork Reduction Act of 1995 (PRA)

Federal Acquisition Streamlining Act of 1994, Title V (FASA V)

Government Performance Results Act of 1993 (GPRA)

The Privacy Act of 1974

Records Management by Federal Agencies **(44 U.S.C. Ch.31)**

Federal Depository Library Program Laws (44 U.S.C. Ch.19)

Please refer to the OMB website (http://www.whitehouse.gov/omb/inforeg/infopoltech.html) for specific memos, circulars, and other IT related guidance.

THE COUNCIL FOR Excellence IN GOVERNMENT

Council for Excellence in Government
1301 K Street, NW Suite 450 West
Washington, D.C. 20005

Created in conjunction with

touchstone consulting group
an SRA International, Inc. company