

行政院及所屬各機關出國報告

(出國類別：會議)

出席 2003 『國土安全大會暨展示會』  
會議報告

服務機關：行政院研考會

出國人 職 稱：副主任委員

姓 名：紀國鐘

行政院研考會  
編號欄

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出國地點：美國

出國期間：92 年 11 月 29 日至

92 年 12 月 3 日

報告日期：93 年 2 月 10 日

## 行政院及所屬各機關出國報告提要

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出國計畫主辦機關/聯絡人/電話：

行政院研考會/紀國鐘/02-23419066 轉 206

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出國類別：其他（出席會議）

出國期間：92 年 11 月 29 至 12 月 3 日 出國地區：美國

報告日期：93 年 2 月 10 日

分類號/目：

關鍵詞：國土安全

內容摘要：

在邁入二十一世紀的今日，全球各國政府莫不感受到新的局勢變遷與新挑戰，如何因應國際政經環境的瞬息萬變、如何提升政府效能以吸引及留住更多企業...等，亦正是我國及許多國家積極推動『電子化政府』的原因。惠普邀請出席此盛會，希望能藉此協助促進我國在此領域上經驗分享，且與其他國家進行更多元化之技術溝通和資訊交流。

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## 壹、目的

美國和我國都是自由、民主國家，相同點多過於不同點美國國土安全的建置經驗有許多值得我們參考。惠普科技邀請出席此一盛會，希望能藉此協助促進我國在此領域上經驗分享，且與其他國家進行更多元化之技術溝通和資訊交流。

## 貳、會議報告重要內容摘記

### 一、美國國土安全業務：

(一)白宮—國土安全室 (Office of Homeland Security)：  
國土安全部 (the Department of Homeland Security) 的前身，國土安全部成立，該辦公室繼續存在。

### (二)國土安全部：

1. 設置目的：為對付海外反美組織之對美國本土發動恐怖攻擊，及整合相關功能以提升國民保護效能，使免於各種天然或人為災害。
2. 主要內部單位：
  - (1)邊境暨運輸安全 (Border and Transportation Security ; BTS)
  - (2)整備與應變 ( Emergency Preparation and Respond ; EPR)
  - (3)科學與技術 ( Science and Technology ; S&T)
  - (4)資訊分析與重要設施保護 ( Information Analysis and Infrastructure Protection ; IAIP)
  - (5)管理 ( Management)

五個「次長辦公室」(Directorates)，分別由五位次長(Under Secretaries)擔任主管。

3. 所屬機關：

- (1)海岸防衛隊 (the U.S. Coast Guard)
- (2)特勤局 (the U.S. Secret Service)
- (3)公民及移民署(the Citizenship and Immigration Service)
- (4)關務及國境警衛署 (the U.S. Customs and Border Protection)

4. 整編原政府單位之功能：

- (1)美國海關 (財政部 Treasury)
- (2)FETC 聯邦執法訓練中心 (財政部 Treasury)
- (3)SS 秘情服務局 Secret Service (財政部 Treasury)
- (4)INS 移民歸化服務局 (part) (司法部 Justice)
- (5)DEST 國內緊急支援小組 (司法部 Justice)
- (6)FPS 聯邦防護服務處 (總務管理局 GSA)
- (7)FCIRC 聯邦電腦事件反應中心 (總務管理局 GSA)
- (8)TSA 運輸安全行政處(運輸部 Transportation)
- (9)CG 海岸防衛隊 Coast Guard (運輸部 Transportation)
- (10)APHIS 動植物健檢中心 (part) (農業部 Agriculture)
- (11)PIADC Plum 島動物疾病中心 (農業部 Agriculture)

Agriculture )

(12) NDPO 全國戰備辦公室 (聯邦調查局 FBI)

(13) NIPC 全國公共設施防護中心 (聯邦調查局 FBI)

(14) ESAP 能源安全確保計畫 (能源部 Energy)

(15) NIRT 核子事件反應小組 (能源部 Energy)

(16) CBRN 反抗對策計畫 (能源部 Energy)

(17) EML 環境量測實驗室 (能源部 Energy)

(18) 全國生物細菌防衛分析中心 (國防部 Defense)

(19) NCS 國家通訊系統 (國防部 Defense)

(20) CIAO 關鍵公共設施確保辦公室 (商務部 Commerce)

(21) FEMA 聯邦緊急管理局 (FEMA)

(22) NDMA 國家戰略物資儲備暨國家災害醫療系統 (衛生暨人道服務部 HHS)

(三)2003 年預算為 375 億美元。2004 年預算為 376 億美元。

(四)美國國土安全部之重要計畫與工作

1.BTS :

(1)提倡貨櫃保全

(2)反恐關稅貿易夥伴

(3)商業環境自動化

(4)美加連鎖計畫

(5)美國防禦網

2.EP&R：

- (1)資通訊系統
- (2)醫療監控系統
- (3)流行病學家交流計畫
- (4)媒體大眾情報運動
- (5)醫院基礎建設（分散實驗室）
- (6)州公共衛生實驗室產能
- (7)醫院互助計畫（計畫協調）
- (8)州流行病學小組
- (9)學校課程之教育獎勵
- (10) 醫療訓練運動
- (11) 大眾健康準備計畫
- (12) 都市醫療反應系統
- (13) 全國醫藥儲備
- (14) CDC 實驗室及產能升級
- (15) Ft. Collins
- (16) 改善消除污染之方式
- (17) 聯邦大眾健康反應小組
- (18) 聯邦備戰計畫
- (19) 天花疫苗之購買
- (20) FDA 食品安全

- (21) HHS 衛生人道服務部快速毒物掃描
- (22) SPA 環境保護局飲用水道安全
- (23) 郵政服務之污染清除
- (24) 核生化防護裝備之採購

### 3.IAIP：

- (1)辦公室資訊分享及認證流程計畫
- (2)安全遠距視訊會議
- (3)進出通關護照系統
- (4)威脅情報通報系統
- (5)地方政府教育訓練計畫
- (6)全國基礎建設模擬分析中心
- (7)情報網路網際警告系統
- (8)優先無線擷取
- (9)政府網路可行性調查
- (10) 網路合作
- (11) 聯邦電腦事件反應能力
- (12) 全國電腦事件防護中心
- (13) 電腦安全部門
- (14) 關鍵基礎設施保證辦公室
- (15) 其他 IT 情報分享

### 4.S&T：

- (1)生物防衛之基礎及應用研究



- (2)生物防衛基礎建設研究
- (3)炭疽病疫苗發展
- (4)促進藥品核准流程之研究
- (5)研究能力安全升級
- (6)生物武器防衛對策
- (7)識別偵查監控之特工
- (8)其他研究發展

## 二、 惠普科技全球國土安全計畫辦公室：

### (一) HP 對捍衛國土安全的看法：

1. 每個國家都有獨特的安全需求，其資訊科技的成熟度也各不相同。
2. 當今政府與人民所面臨的，不只是直接威脅，還包括間接威脅。不管是天人或人為危機的管理，其特質與影響是很相似的。
3. 其影響可能是經濟上的、政治上的或社會層面上的。
4. 危機反應模式可以採：預做主動準備、被動回應或兩者皆可。
5. 全球各國的人民對政府的期望都是一樣的。

### (二) 國土安全的運作原則：

1. 系統應一次就建立好，並可多次重複使用。
2. 資料庫的考靠度至關重要。
3. 藉由中介軟體技術來整合系統。
4. 機動調度政府單位與追蹤系統。

5. 從”必要知道”到”必須溝通”。
6. 以標準及模組化系統降低購置成本。
7. 在應用、更新、撤回與強化標準時，必須不斷進行分析。
8. 若要擴大迥異的內部 IT 系統的價值，則必須以安全的方式，作必要的內部系統連結與整合。

(三) 國土安全的關鍵目標：

1. 全球性焦點：
  - 強化公權力以防治犯罪與不法行動
  - 抵禦毀滅性的威脅
  - 邊界/運輸安全。
  - 保護重要的基礎建設與資產。
  - 緊急應變的準備度與反應能力。
2. IT 解決方案必須做到：
  - 通訊/資料共享。
  - 安全性。
  - 確保運作持續性。
  - 預測式運算/模擬與模型建立。
  - 靈活度。

(四) 惠普的國土安全策略：

1. 根據國土安全優先順序提出科技解決方案
2. 整合惠普與夥伴資源，打造出客製化的解決方案

3. 建構在政府部門的成功動能
4. 建立並強化與全球系統業者及合作廠商的夥伴關係
5. 在國土安全產業標準發展上，發揮關鍵影響力
6. 持續延伸與善用我們的全球資源與品牌聲譽

(五) 惠普的全球國土安全計畫辦公室：

1. 整合惠普在犯罪防治、緊急應變管理、情報與軍事管理的所有解決方案，以建構出國土安全解決方案基礎架構
2. 發揮與善用惠普在系統整合領域的全球資源與實務經驗
3. 提供全方位的服務，包括從整合顧問服務到完整的資訊科技架構服務
4. 扮演「應變代管者」的角色，以協助政府單位強化其對人為與天然災害的反應能力

### 參、心得建議與後續工作事項

我國目前國土安全事務執行機關林立，除內政部（警政署、消防署）為主要負責機關，另有行政院大陸委員會、內政部役政署、法務部、行政院海岸巡防署等，並有行政院災害防救委員會、治安會報、國家資訊通信安全會報之協調聯絡機制，現行政院也規劃成立「內政部入出國及移民署」、「內政部國家空中勤務總隊」等，機關總署的增加，增加了機關橫向整合的複雜與困難，而如何做好整合，乃當前必須思考的首要課題。

依據行政院研考會「反恐怖危機處理機制之研究」，危害國土安全之危機處理步驟可區分為預測預防、規劃整備、

發生處理及善後檢討等四階段，並建議針對不同階段維安力量分散，欠缺統合協調機制之現況，配合政府改造組織重整工作，重新思考我國國土安全危機處理機制之新作為，並以符合需要之組織設計以為因應。

雖然美國和我國各有不同的背景和需求，但兩個國家都是自由、民主國家，都注重人民的隱私權。另外對於國土安全的維護也都包括邊界、港口和機場等的檢查，因此相同多過不同點，美國國土安全的建置經驗有許多值得我國參考之處。此外，如果在馬來西亞或菲律賓等東南亞國家發生重大不幸事件，對台灣也會造成很大影響，因此台灣在防制天災人禍方面，除了本身要有這方面的自覺和自我評估優缺點，也一定要和亞太地區及全球加強合作和相關資料庫的分享。

## 伍、附錄及附件

### 一、議程

### 二、U. S. Department of Homeland Security 簡報資料

### 三、Global Homeland Security 簡報資料

十二月一日

惠普參訪與座談

09:30 E-government...by:Mr. Gary Rodgers(HP)

10:30 Q&A

10:45 Technology Trends in Taiwan Discussion...Lead  
by Deputy Asst. Secretary of State for East Asia-Mr.  
Randy Schriver(US gov't official)

11:15 Homeland Security...by-Mr. Larry Estrada(HP)

12:00 Q&A

12:15 Lunch at Fina Mundo

2003 年國土安全大會議程

十二月二日

7:30AM Registration/Breakfast

8:30AM Exhibition Keynote

Jayson Ahern Assistant Commissioner, Office of Field Operations, U.S. Customs and Border Protection, Department of Homeland Security

9:30AM Break

9:45AM Sessions

1-1 Identity Management Challenges and Results: A Case Study

2-1 Advanced Technology for Gathering and Sharing Threat Intelligence

10:45AM

11:00AM Exhibition Open Expo Opens

11:45AM Free Professional Education

12:00PM Lunch in Exhibit Hall

12:45PM

1:00PM Sessions

1-2 Regional Coordination for Information Sharing

-- Results to Date

2-2 Identification Tools for Physical and Cyber  
Security

1:30PM Free Professional Education

2:15PM Break

2:30PM

2:45PM Sessions

1-3 Update on the National Criminal  
Intelligence-Sharing Plan

2-3 Overcoming Hurdles to Information Sharing

3:00PM Free Professional Education

4:00PM Networking Reception with Sponsors in Exhibit  
Hall

十二月三日

7:30AM Registration/Continental Breakfast

8:15AM Breakfast Keynote

David Walker Comptroller General of the United States,  
U.S. General Accounting Office

9:45AM Sessions

1-4 Sharing the Responsibility for HLS -- Partners  
in Collaboration

2-4 Integrated Port Security and Surveillance  
Solutions

11:00AM Break

11:15AM Sessions

1-5 Connecting the Dots for Improved Border Control

2-5 Coordination Strategies for First Responder  
Support

12:30PM Luncheon Keynote

Margret Kellems Deputy Mayor for Public Safety and  
Justice, District of Columbia

2:00PM Break

2:15PM Sessions



1-6            Priorities for Critical Infrastructure

Protection -- What are the Economic Risks?

2-6      Open Technology Issues for HLS Professionals

3:30PM Break

3:45PM Plenary Session

P1      What's Next for Securing the Homeland?



**U.S. Department  
of Homeland Security**

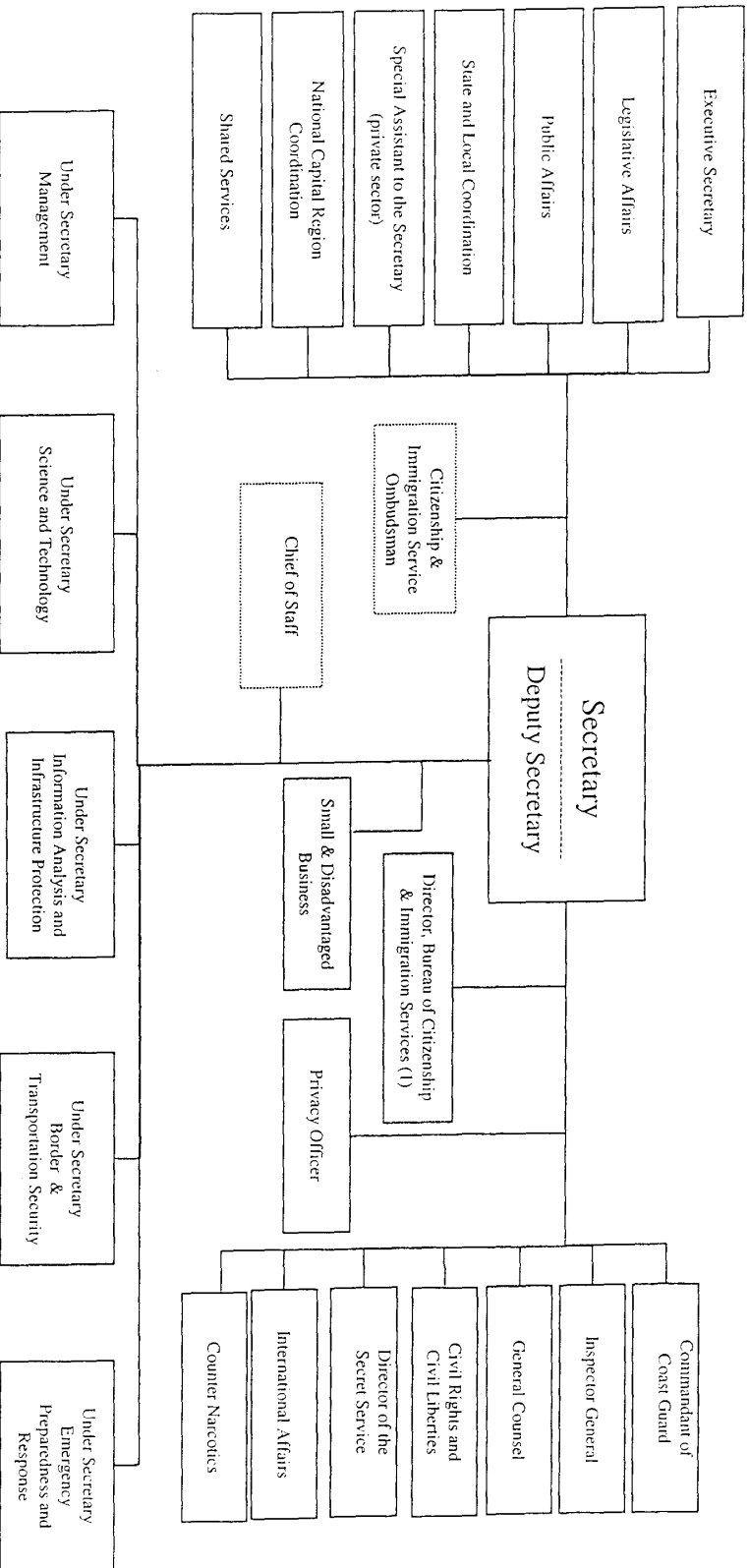


## **Mission**

- Prevent terrorist attacks within the U.S.
  - Reduce America's vulnerability to terrorism.
  - Minimize the damage from potential attacks and natural disasters.
-



# Organizational Chart





## **Border and Transportation Security**

- Secure the borders and ports-of-entry of the United States.
- Protect its transportation infrastructure.
- Administer the nation's immigration and customs laws.
- Protect federal buildings.
- Enforce agricultural laws at the nation's borders.
- Help build security preparedness at the state and local levels.
- Balance security with preserving individual and economic freedoms.



## **BTS Agencies Transferred into DHS**

- Bureau of Customs and Border Protection (TREAS)
  - Bureau of Immigration and Customs Enforcement (DOJ)
  - Transportation Security Administration (DOT)
  - Federal Law Enforcement Training Center (TREAS)
  - Office of Domestic Preparedness (DOJ)
-



## **Emergency Preparedness & Response**

- Coordinate and support Federal, state and local readiness and response efforts for all disasters, including terrorist attacks.
- Provide disaster preparedness educational programs for communities and citizens.
- Expand and enhance current capabilities of the Strategic National Stockpile pharmaceuticals and critical medical equipment.
- Improve readiness and capabilities of the National Disaster Medical System teams.
- Partner with other Federal emergency training institutions, standardize training curriculum and provide single portal for accessing the programs, including terrorism training programs.



## **EP&R Agencies Transferred into DHS**

- **FEMA**
- Strategic National Stockpile (HHS)
- National Disaster Medical System (HHS)
- Nuclear Incident Response Team (Energy)
- Domestic Emergency Support Teams (DOJ)





## **Science & Technology**

- Partner with operational end-users to identify requirements, develop and field capabilities to counter threats and enhance mission operations.
- Engage government, academic and private sectors in innovative research, development, rapid prototyping and systems development.
- Provide a rapid, efficient, and disciplined process for systems engineering and development.
- Provide the nation with an enduring research and development capability dedicated to homeland security.



## **S&T Programs Transferred Into DHS**

- CBRN Countermeasures Program (DOE)
- Environmental Measurements Laboratory (DOE)
- National Biological Warfare Defense Analysis Center (DOD)
- Plum Island Animal Disease Center (USDA)



## **IAIP Mission**

- Identify and assess current and future threats to the homeland
- Map those threats against our vulnerabilities
- Issue timely warnings
- Take preventive and protective action



## **IA&IP Entities Transferred Into DHS**

- Critical Infrastructure Assurance Office (DOC)
- Federal Computer Incident Response Center (GSA)
- National Communications System (DOD)
- National Infrastructure Protection Center (FBI)
- Office of Energy Assurance/National Infrastructure Simulation and Analysis Center (DOE)



## **IAIP Critical Tasks**

- Conduct Threat Assessments
  - Identify Critical Infrastructures and Key Assets
  - Map Threats to Vulnerabilities and Consequences
  - Detect, Identify, and Advise of Threats
  - Share Security Information
  - Recommend and Prioritize Protective and Support Measures
  - Conduct and Integrate National-level Critical Infrastructure and Key Asset Protection Planning
  - Assist Emergency Preparedness and Response in Critical Infrastructure/Key Asset Recovery and Restoration
-



# Management

- The Management Directorate is responsible for:
  - Budgeting, appropriations, expenditure of funds, accounting, finance, procurement;
  - Human resources and personnel, including personnel security;
  - Information technology;
  - Facilities, property, equipment, and other material resources;
  - Identification and tracking of performance measurements relating to the responsibilities of the Department.



## **United States Secret Service (USSS)**

- Protect the President and other government leaders.
  - Plan, coordinate and implement security for designated national special security events.
  - Protect U.S. currency from counterfeiters and safeguarding Americans from credit card fraud.
  - Emphasize prevention through protective intelligence and threat assessment.
  - Apply dual mission to protect nation's key assets and critical infrastructure.
-



## United States Coast Guard

- **Maritime Homeland Security**
  - Protect ports, waterways, & flow of commerce from terrorism
  - Maritime border security against illegal drugs, illegal aliens, firearms, & WMD
- **National Defense**
  - Armed Service at all times
  - Port Operations, Security, and Defense
  - Ensure rapid deployment and re-supply of military assets
  - Force provider for National Military Commands
- **Protection of Natural Resources**
  - Prevention and response to oil & hazardous material spills.
  - Protect against illegal fishing & destruction of natural resources
- **Maritime Mobility**
  - Waterways Management, Ice-breaking, Aids to Navigation.
- **Maritime Safety**
  - Search & Rescue
  - Commercial & recreational boating safety





## **How do I contact the Department of Homeland Security?**

- [www.dhs.gov](http://www.dhs.gov)
  - 202-282-8000 (main line)
  - 202-282-8404 (main fax)
  - Department of Homeland Security  
Washington, DC 20528
- Attn: Division/Name of Employee

# Global Homeland Security

December 1, 2003

Larry Estrada



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# HP's Commitment to Protecting the Homeland

"HP has been proud to be a trusted government partner for many years and we are honored to help you work through some of the challenges you face in integrating the Department of Homeland Security...it is one of the reasons why we have set up a new program office devoted to homeland security...to bring the full capabilities of HP to bear on this critical work"

Carly Fiorina, addressing the Information Processing Interagency Conference Orlando, FL  
3/3/03

"...The perception is that homeland security is primarily as US market for information technology, and that's just incorrect. "

Bill Mutell quoted in CQ Homeland Security, August 4, 2003 "HP Goes Global in a Search for Homeland Security"

## **We Live in an Interesting Time**

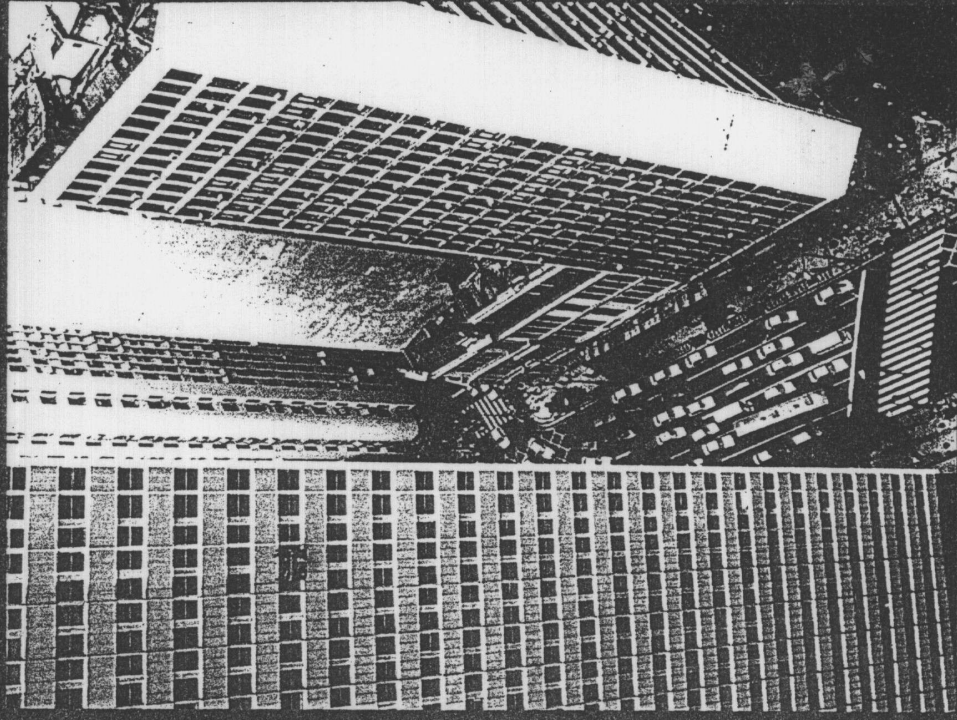


- We live in complex, multi-polar world
  - Each country has its own unique security requirements and different level of IT maturity
- Threats to our existing form of government & its people can be both direct & indirect
  - Crisis management for both natural & man-made have similar characteristics and impact
- Impact can be economic, political and social
- Responses can be proactive, passive, or both
- Citizens throughout the world have the same level of expectations of their government

# IT is only a part of the solution



- Governments should provide:
- Capable infrastructure to be prepared and respond accordingly
  - These unprecedented times call for more international cooperation as well as overcoming government agency "silo-thinking"
  - IT is an enabler not a "silver bullet"
  - Policy and decision makers need to have an arsenal of options available to them, IT being just one of them



# Homeland Security Operating Principles



- Systems built once, reused many times
- Databases must be trusted
- Rely on middleware to integrate systems
- Migrate multiple agencies and tracking systems
- Move from “need to know” to “need to communicate”
- Standards-based and modular systems that lower acquisition costs:
  - Focused innovation to improve manageability and utilization services
  - Solutions that deliver reduced complexity and business agility
- Analysis will be through reuse, renew, retire, enhance criteria
- Maximize IT-disparate internal systems by connecting and integrating systems that support delivery of products and services in a secure manner

# Key Homeland Security Objectives



- Global focus is on:
  - Enhanced law enforcement capabilities to prevent and illegal activities
  - Defense against catastrophic threats
  - Border/transportation security
  - Protection of critical infrastructure and key assets
  - Emergency preparedness and response
- Delivered via IT solutions that incorporate:
  - Communications/Data Sharing
  - Security
  - Business Continuity
  - Predictive Computing/Simulation and Modeling
  - Agility

## HP's Homeland Security Background



- HP and its partners provide computing infrastructure to the White House, the Kremlin, the British Cabinet Office and the Vatican City
- Over 80% of the US 911 emergency call centers run on HP
- HP has the leading development platform in fingerprint solutions for criminal investigations
- Over 500 Computer Aided Dispatch systems in US run on HP
- HP's CEO and Executive Council provide consulting to US Department of Homeland Security based on HP's integration and merger experience
- Founder Dave Packard served as Asst Secretary of Defense



# Did you know.....



HP supports mission critical systems in:

- 106 of the world's 120 stock exchange systems and over \$3 trillion (US\$)/day pass through the financial systems based on HP products/services
- 95% of the world's security transactions
- Over 80% of America's 911 emergency call centers us HP hardware
- Handles 80% of the mobile billing and customer care traffic in Europe and Asia
- 75% of all automated teller machine transactions
- 75% of the world's 100-largest electronic funds transfer networks
- 66% of all credit card transactions
- 60% of the world's inter-bank transactions
- Market leader in fingerprint solutions
- European and Asian leader in customs/entry/exit/smart cards

# HP's Strategic Value



A "trusted advisor" to governments worldwide. We make a difference by providing industry leading HLS solutions.

## Government challenge:

- Unconnected, inefficient:
  - People
  - Process
  - Technology

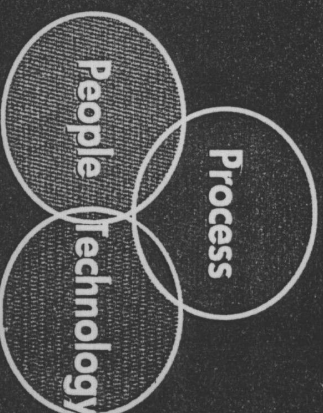


## HP's global solutions:

- Expert advice and consultative support
- Best-in-class solutions and partnerships
- Simplified, faster solution selection, time to market
- On mission, on budget deliverables



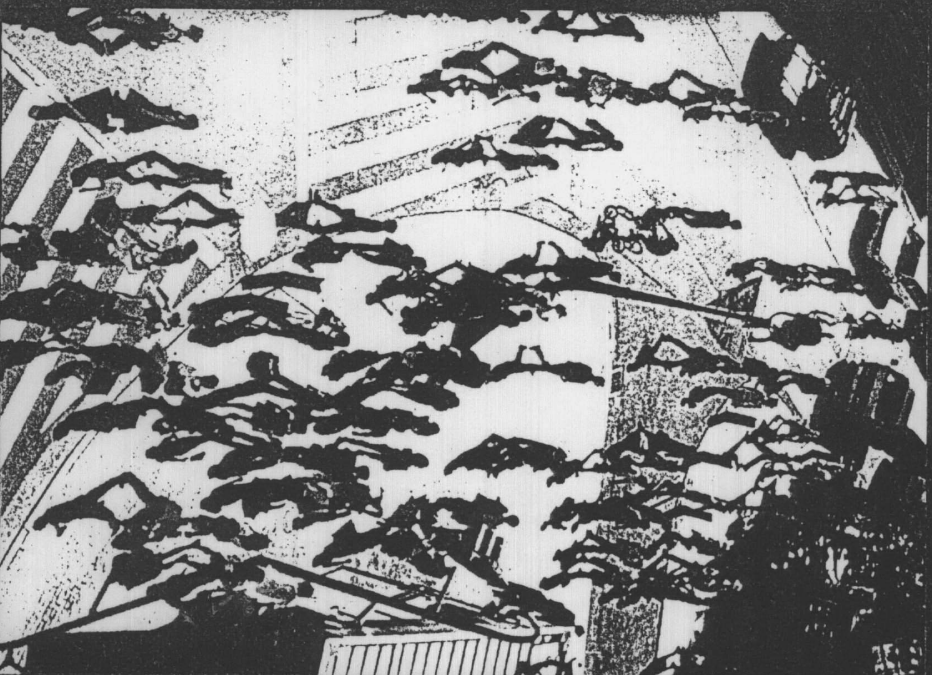
## Result: Integration!



# HP's HLS Global Strategy



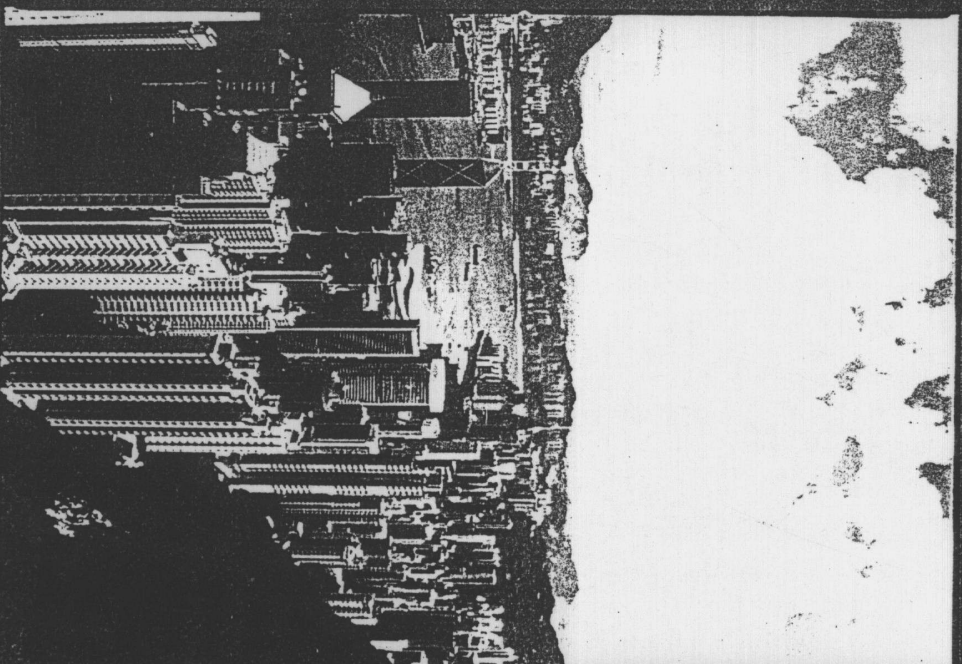
- Deliver technology solutions based on CIO's HLS priorities
- Design and delivering HP and partner-led solutions
- Build on successful momentum in the public sector
- Create/reinvigorate partnerships with leading partners and systems level integrators from around the world
- Influence the development of industry standards in HLS
- Continue to extend and leverage our worldwide global presence and brand reputation



## HP's Global Homeland Security Program Office



- Brings together all of our solutions spanning Criminal Justice, Emergency Management, Intelligence and Network Centric Warfare into a HLS Solution Framework
- Leverages worldwide capabilities and best practices in systems integration
- Provides services from Integration Consulting to full scale IT architectural services
- Acts as an "agent of change" to assist governments who are seeking to enhance their ability to respond to both man made and natural events



## Lessons Learned / Best Practices:

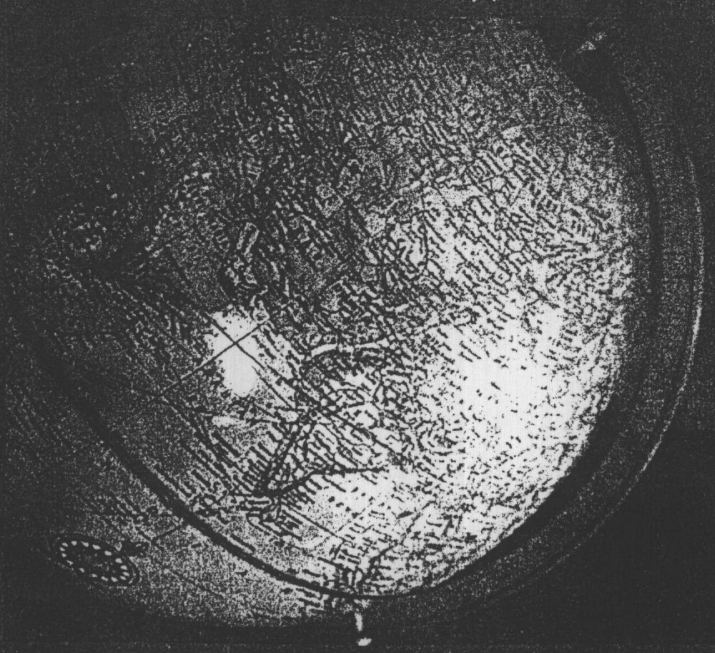


### Administrative (horizontal)

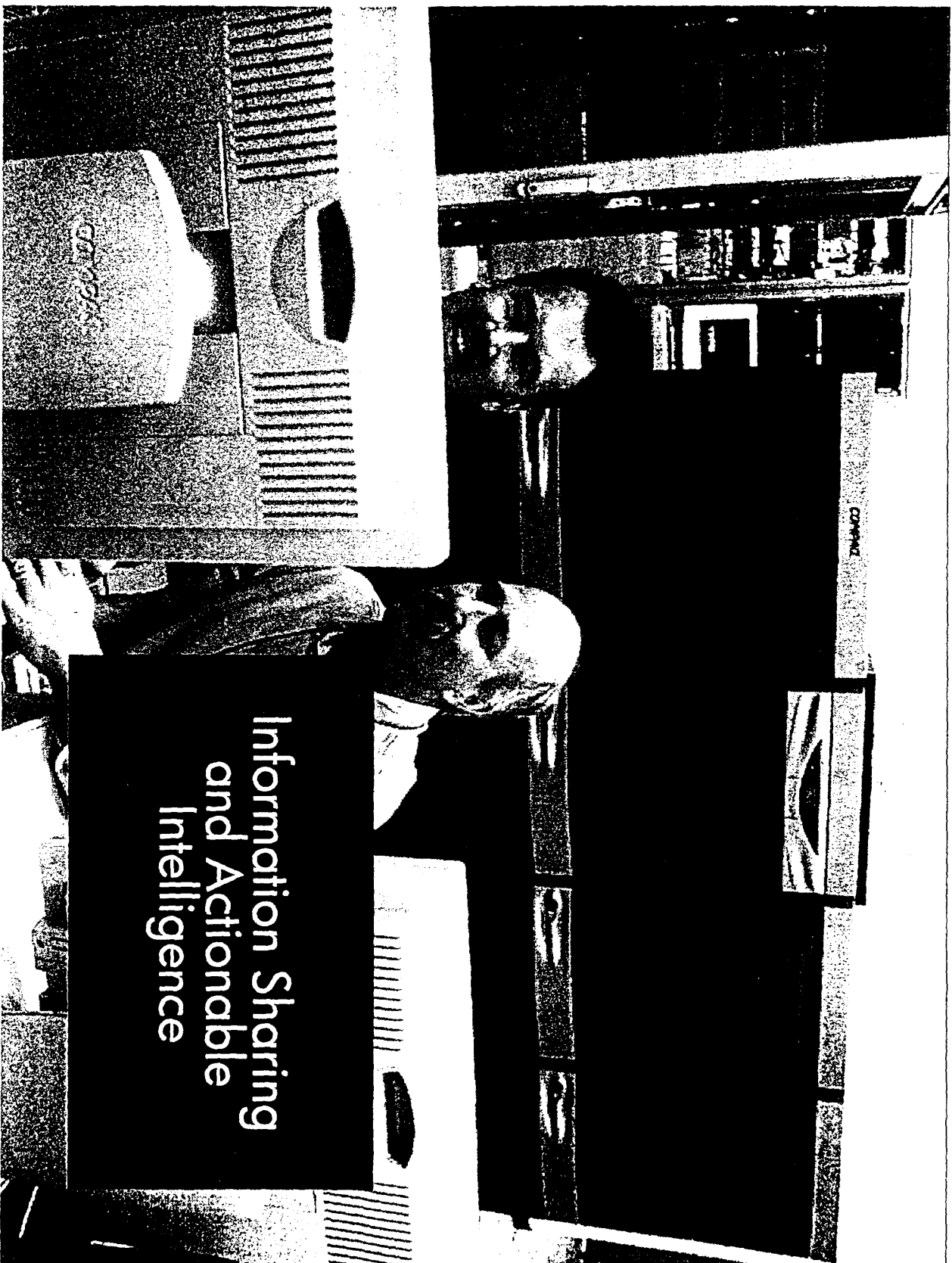
- Create dedicated integration team
- Structure follows strategy - form follows function
- Clearly defined roles and shared accountability
- Make decisions quickly and make them stick
- "Adopt and go"
- Address cultural similarities and differences
- Rigorously measure, manage and communicate integration progress, wins, issues, and opportunities

### Mission-related (vertical) solutions must be:

- Repeatable
- Interoperable
- Standards based (wherever possible)
- Cost-effective
- Scalable

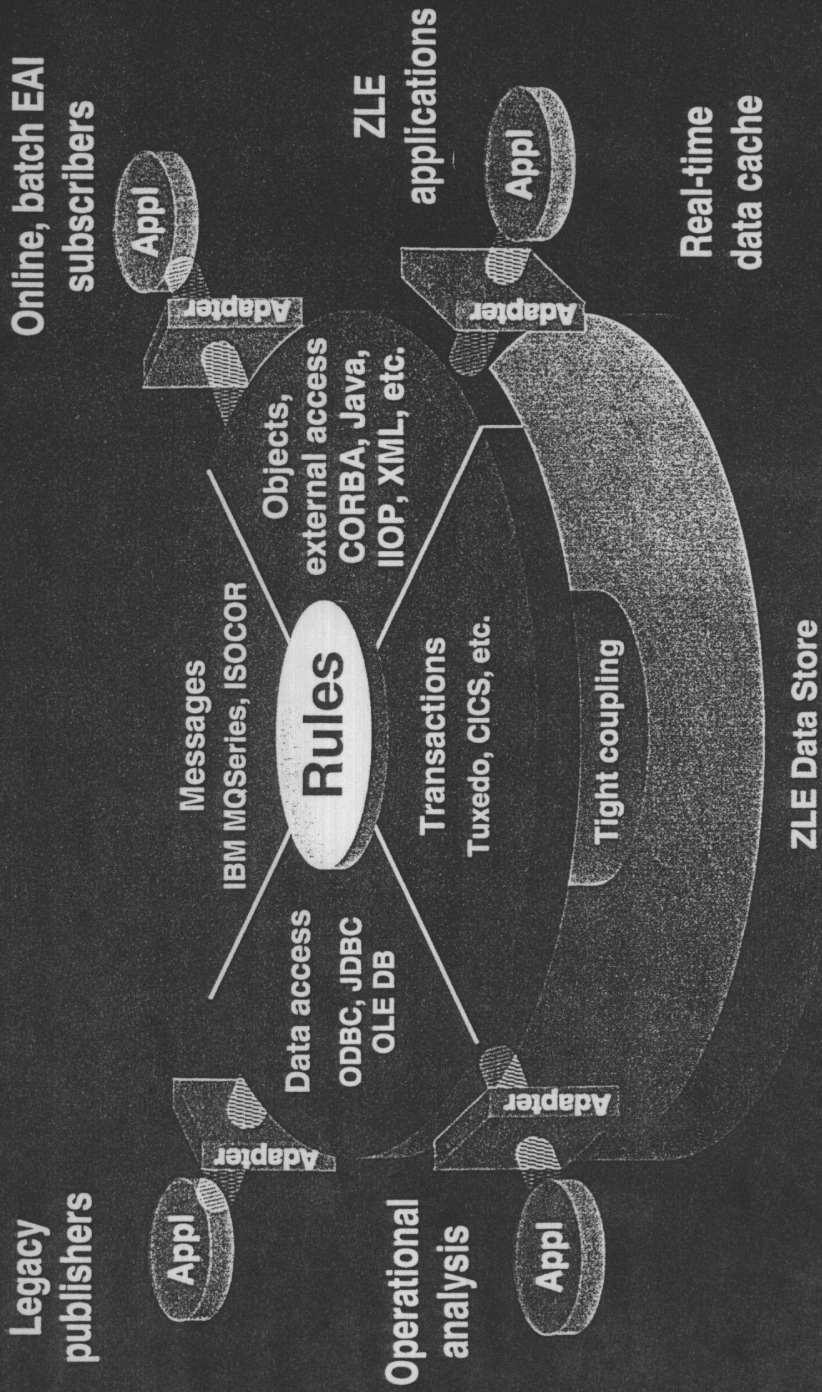


Homeland Security is a global issue and challenge

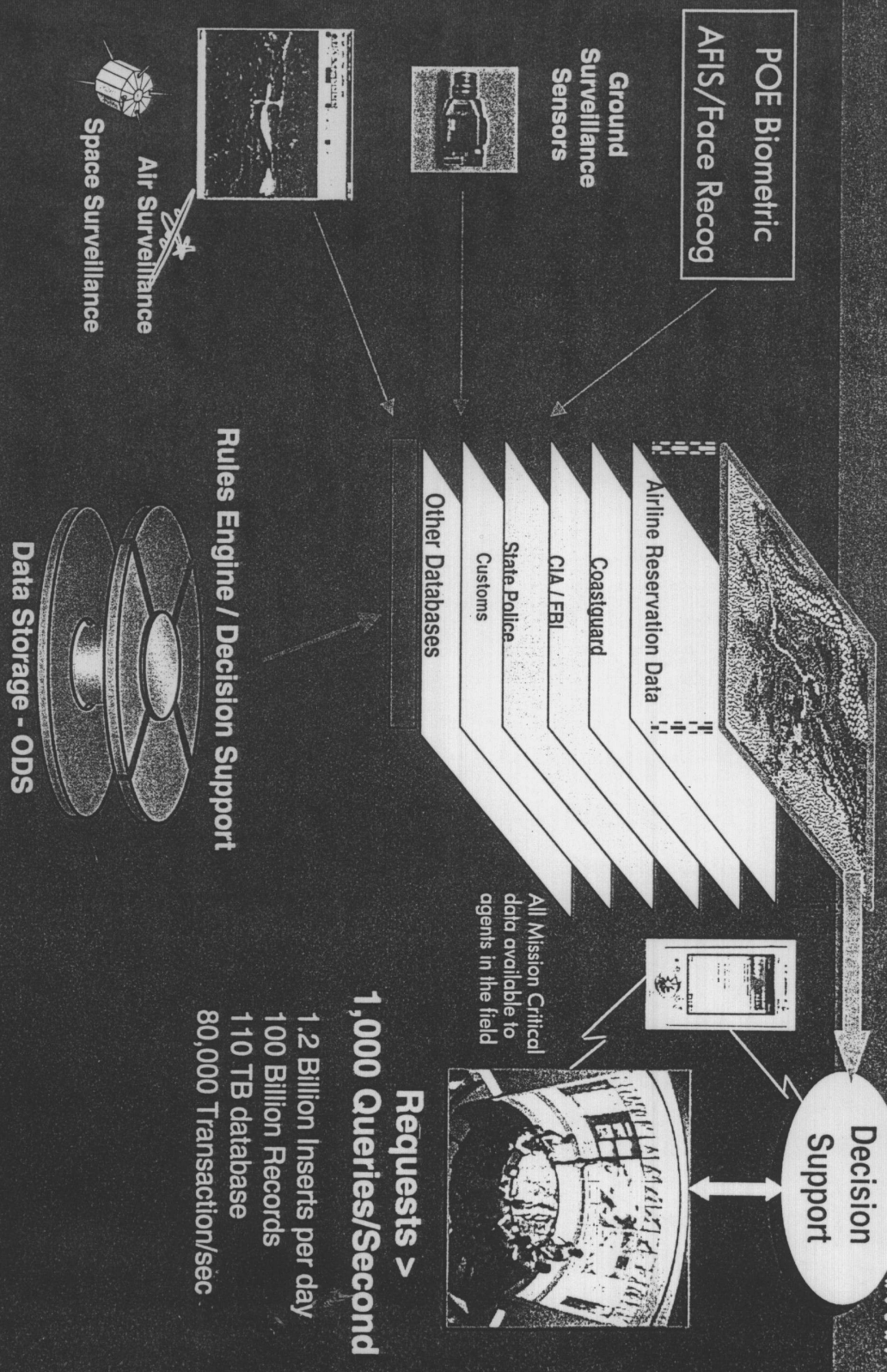


Information Sharing  
and Actionable  
Intelligence

# Zero Latency Enterprise Framework



# Application of Framework – Point of Entry



**1,000 Queries/Second**

1.2 Billion Inserts per day

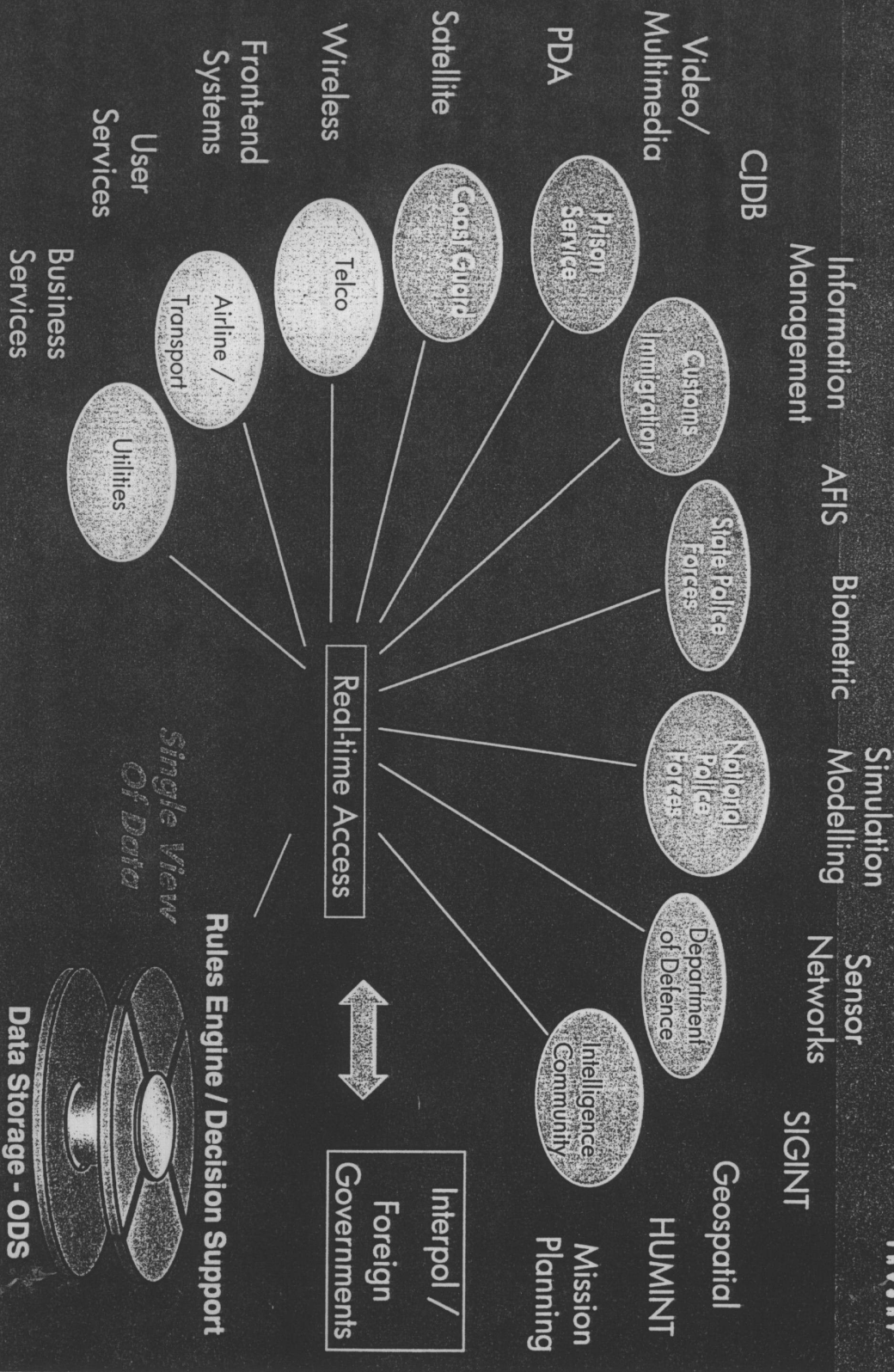
100 Billion Records

110 TB database

80,000 Transaction/sec



# HLS Solutions Framework



# Federal Enterprise Architecture (FEA)



"The TRM is a component-driven, technical framework used to identify the standards, specifications, and technologies that support and enable the delivery of service components and capabilities."

The Technical Reference Model (TRM) provides a foundation to describe the standards, specifications, and technologies to support the construction, delivery, and exchange of business and application components (Service Components) that may be used and leveraged in a Component-Based or Service-Oriented Architecture. The TRM unifies existing Agency TRMs and electronic Government (e-Gov) guidance by providing a foundation to advance the re-use of technology and component services from a Government-wide perspective.

## Service Access and Delivery

Refers to the collection standard and specifications to support external access, exchange, and delivery of Service Components or capabilities. This area also includes the Legislative and Regulator requirements governing the access and usage of the specific Service Component.

## Service Platform and Infrastructure

The Service Platform and Infrastructure Area defines the collection of platforms, hardware and infrastructure specifications that enable Component-Based Architectures and Service Component re-use.

## Component Framework

The Component Framework Area defines the underlying foundation and technical elements by which Service Components are built, integrated and deployed across Component-Based and Distributed Architectures. The Component Framework consists of the design of application or system software that incorporates interfaces for interacting with other programs and for future flexibility and expandability. This includes, but is not limited to, modules that are designed to interoperate with each other at runtime. Components can be large or small, written by different programmers using different development environments and may be platform independent. Components can be executed on stand-alone machines, a LAN, Intranet or on the Internet.

## Service Interface and Integration

The Service Interface and Integration Area defines the discovery, interaction and communication technologies joining disparate systems and information providers. Component-based architectures leverage and incorporate Service Interface and Integration specifications to provide interoperability and scalability.

## TECHNICAL REFERENCE MODEL (TRM)

<ul style="list-style-type: none"> <li>Active Channels</li> <li>Web Browser</li> <li>Wireless / PDA Device</li> <li>Collaboration / Communication</li> <li>Other Electronic Channels</li> </ul>	<ul style="list-style-type: none"> <li>Deliver Channel</li> <li>Internet, Intranet</li> <li>Extranet</li> <li>Peer to Peer (P2P)</li> <li>Virtual Private Network (VPN)</li> </ul>	<ul style="list-style-type: none"> <li>Service Requirements</li> <li>Legislative / Compliance</li> <li>Authentication / Single Sign-On</li> <li>History</li> </ul>	<ul style="list-style-type: none"> <li>Service Interfaces</li> <li>Network Services</li> <li>Transport</li> </ul>
<ul style="list-style-type: none"> <li>Support Platform</li> <li>Wireless / Mobile</li> <li>Platform Independent (PII)</li> <li>Platform Dependent (MII)</li> </ul>	<ul style="list-style-type: none"> <li>Deliver Service</li> <li>Web, Media</li> <li>Application</li> <li>Portal</li> </ul>	<ul style="list-style-type: none"> <li>Hardware, Infrastructure</li> <li>Servers / Computers</li> <li>Embedded Technology Devices</li> <li>Peripherals</li> <li>WAN, LAN</li> <li>Network Devices / Standards</li> <li>Video Conferencing</li> </ul>	
<ul style="list-style-type: none"> <li>Database, Storage</li> <li>Database</li> <li>Storage Devices</li> </ul>	<ul style="list-style-type: none"> <li>Software Engineering</li> <li>Integrated Development Environment (IDE)</li> <li>Software Configuration Management (SCM)</li> <li>Testing Management, Modeling</li> </ul>		
<ul style="list-style-type: none"> <li>Security</li> <li>Certificates / Digital Signature</li> <li>Supporting Security Services</li> </ul>	<ul style="list-style-type: none"> <li>Distribution / Interface</li> <li>Static Display</li> <li>Dynamic Server-Side Display</li> <li>Content Rendering</li> <li>Wireless / Mobile / Voice</li> </ul>	<ul style="list-style-type: none"> <li>Business Logic</li> <li>Platform Independent</li> <li>Platform Dependent</li> </ul>	<ul style="list-style-type: none"> <li>Data Management</li> <li>Database Connectivity</li> <li>Reporting and Analysis</li> </ul>
<ul style="list-style-type: none"> <li>Data Interchange</li> <li>Data Exchange</li> </ul>			
<ul style="list-style-type: none"> <li>Integrability</li> <li>Middleware</li> <li>Database Access</li> <li>Transaction Processing</li> <li>Object Request Broker</li> </ul>	<ul style="list-style-type: none"> <li>Interoperability</li> <li>Data Format / Classification</li> <li>Data Types / Validation</li> <li>Data Transformation</li> </ul>		<ul style="list-style-type: none"> <li>Services</li> <li>Service Discovery / Interface</li> </ul>



# HLS Solutions Overview

# Examples of HP Global HLS Vertical Solutions



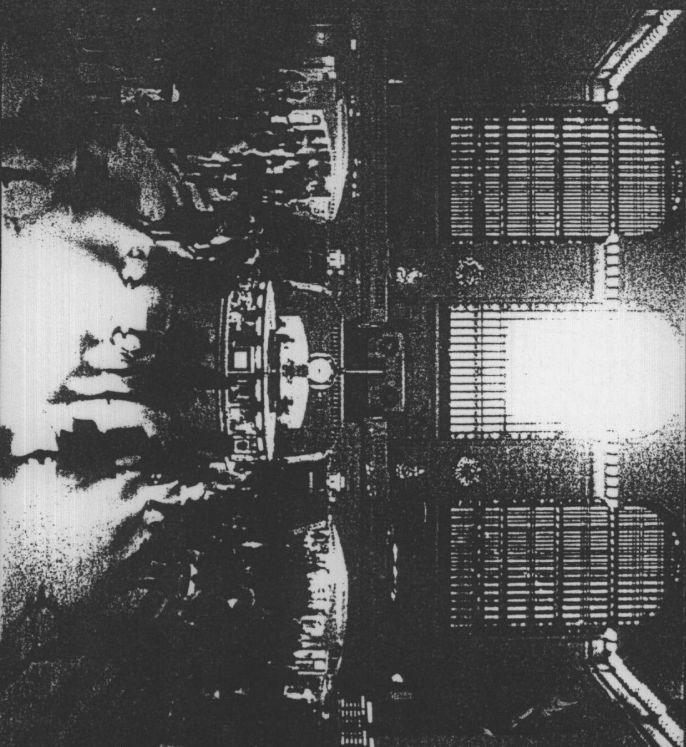
- Bioterrorism/infectious disease vector tracking
- Firefighting solutions - vehicle location systems, pattern analysis tools implemented in Wilson, NC and multiple high visibility cities
- Emergency Medical Services - onsite medical data gathered by EMS team and wirelessly transmitted to hospital while enroute - Taiwan
- PocketCop - wireless tool that queries national, state, and local criminal history systems for police data - Boston Logan airport pilot and Massachusetts State Police
- EMS/Emergency Preparedness - dam, infrastructure disaster assessments and modeling
- Customs Information System - import, export, bonded warehouse, risk management, taxation solutions
- 911/CAD - multiagency computer aided dispatch/records mgmt system
- AFIS - automated fingerprint identification system allows search/transmit capability by the FBI
- Entry/exit system - WW HLS database on aliens who cross US borders
- Border security - Customs information solutions

# HP's Horizontal Solutions Portfolio



HP has expertise in providing interoperable solutions for homeland security that includes:

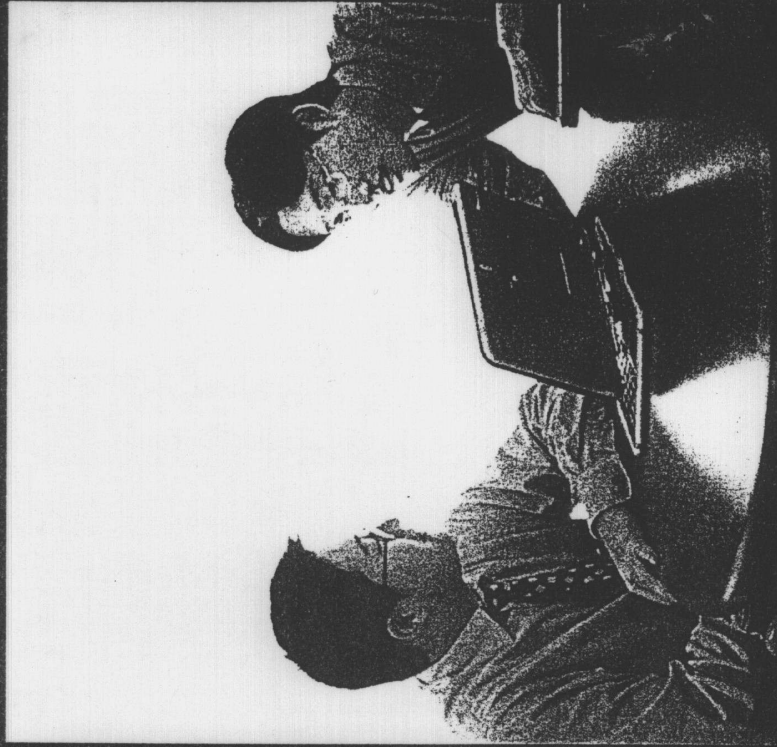
- Business Process Transformation
- Integration/Consolidation
- Architectural Services
- Adaptive Infrastructure
- Zero Latency Enterprise
- Security and Manageability
- Utility Computing
- Modeling and Simulation



## **Strong partnerships for a complete solution** meet today's challenges, build for tomorrow



- HP has an extensive network of leading ISV's, System Integrators and technologies companies. The keys to the partnering strategy include collaborative efforts with:
  - Industry leading global ISV's and technology companies such as: Microsoft, Intel, Cisco and Oracle
  - Global System Integrators such as: Deloitte Touche and BearingPoint.
  - Leading Defense Integrators including Lockheed Martin, Northrop Grumman, Boeing and Raytheon.



# Partnership: HP and Intrado



Intrado provides 911 emergency data management, network transaction, call handling, and notification services.

## Offerings include:

- Software, services and systems for 9-1-1 data management and carrier billing
- Notification services that broadcast emergency and non-emergency messages
- Wireless solutions for public safety and commercial services

## Intrado Markets include:

- 9-1-1 - leading provider of 9-1-1 services and systems for the ILEC, CLEC and wireless market
- Safety - leveraging 911 expertise and knowledge to create a new generation of public safety offerings
- Commercial - Services and systems for commercial data services, high volume data repositories and notifications services

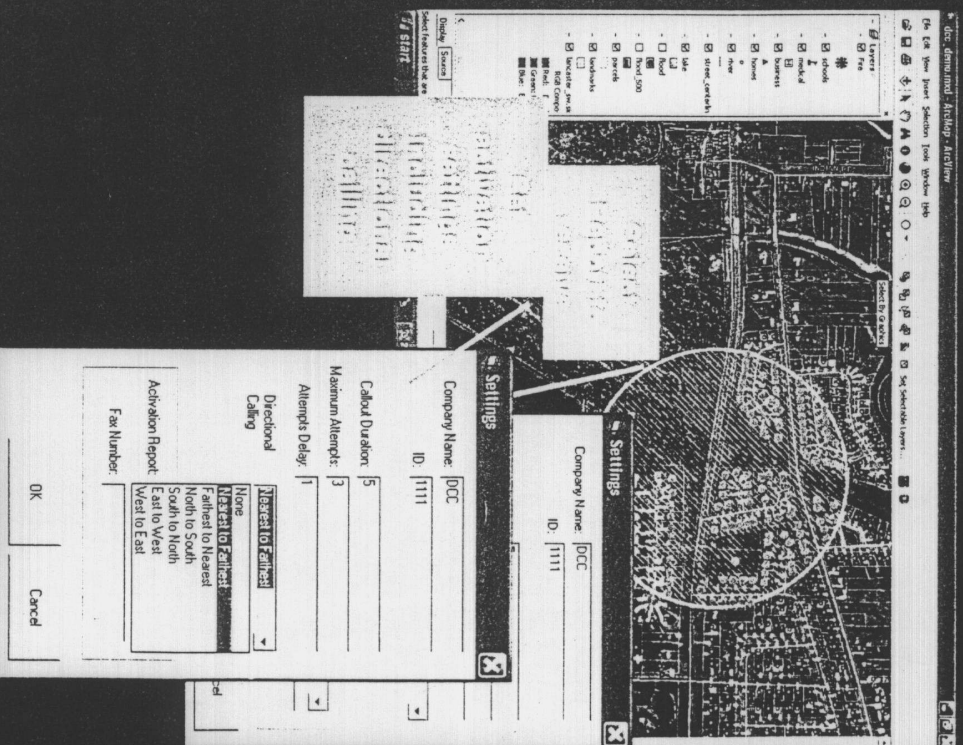


Intrado Systems Operations Center

# Partnership: HP and DCC



DCC is the global leader in creating technology for critical communications. For more than 20 years, DCC's products have been cutting through the information clutter and closing the communication loop through patented, high-speed computer and software systems. At home, at work or in a crisis, DCC's products allow people to communicate faster, more efficiently and more effectively.





# Partnership: HP and DCC



## **DCC provides the following solutions:**

**The Communicator!**™ Addressing the communications needs of the mission-critical environment, this high-speed notification system alerts individuals, groups or teams by phone, pager, fax, email, etc.; delivers incident-specific information and/or potentially life-saving instruction; confirms message receipt; and prints, faxes and emails comprehensive reports detailing call-out results. Optional GIS interface available.

**Reciprix™ Office** Ensuring "closed loop" communication, this innovative messaging solution (an extension of Microsoft® Outlook®), provides a far more effective means for sending, receiving and compiling important information across virtually any medium, resulting in faster, more informed decision-making enterprise-wide. Reciprix™ Office offers numerous critical communications applications for the corporate environment, including data disruptions, staff availability/scheduling, employee/client surveys, security breaches and human resource notifications.

## **Hosting & Back-up Service**

Serving as an off-site hub for critical and routine communications, as well as reinforcing on-site installations of The Communicator, this DCC service provides round-the-clock access to a secure bank of phone lines for 24/7 readiness.

**Frontwave™** Providing a unique, modular approach to contact center management, this powerful suite of products combines IVR (interactive voice response), CTI (computer telephony integration), web response and Reciprix™ messaging for the delivery of information (e.g., account balance, appointment reminder, payment locations, etc.) any time, day or night by phone or the web.

## Why Public / Private Partnerships are Critical: Unique Benefits Partners can Provide



- **Specialized knowledge / best practices**
  - Details of executing complex mergers
  - IT best practices and data consolidation
  - Best solutions/applications from across the world and from DSI, SI, alpha partners
- **Immediate access to advanced technology**
  - World-class R&D capabilities
  - Cutting-edge applications and equipment
- **Mission —tailored outsourcing**
  - Database integration and management
  - Research, engineering, project management
- **Reduced risk, accelerated time to market**
  - Demos /pilots test proof of concept and speed rollout of final application
- **Financing —economies of scale**
  - Finding creative ways to execute now!
- **Lobbying / legislative capabilities**
  - Drive legislative and lobbying agenda to reflect changing requirements of HLS

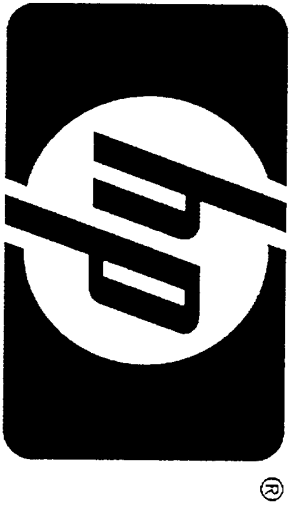


# Homeland Security Summary



- HP is committed to the Public Sector:
  - Locally
  - Regionally
  - Globally
- HP and its partners offer an extensive solutions portfolio, products, services ensure a successful partnership with Governments around the globe
- HP has responded to Government call-for-action by exhibiting:
  - Adaptability
  - Flexibility
  - Accountability





i n v e n t

## **Strong partnerships for a complete solution**

Meet today's challenges, build for tomorrow



- Collaborative partnering with leading ISV, technology, consulting/integration partners
  - All-encompassing participation
  - Support from top global ISVs and SIs i.e.: Microsoft, Intel, Cisco, Lockheed, Accenture, Bearing Point, and Deloitte Touche
- Leading platform share with many of the world's largest solution partners for broader choice i.e.:
  - #1 partnership for Microsoft Exchange, leading .NET partner
  - Linux leadership
  - Merger integration success practice with leading systems

# Global Homeland Security Hot Buttons

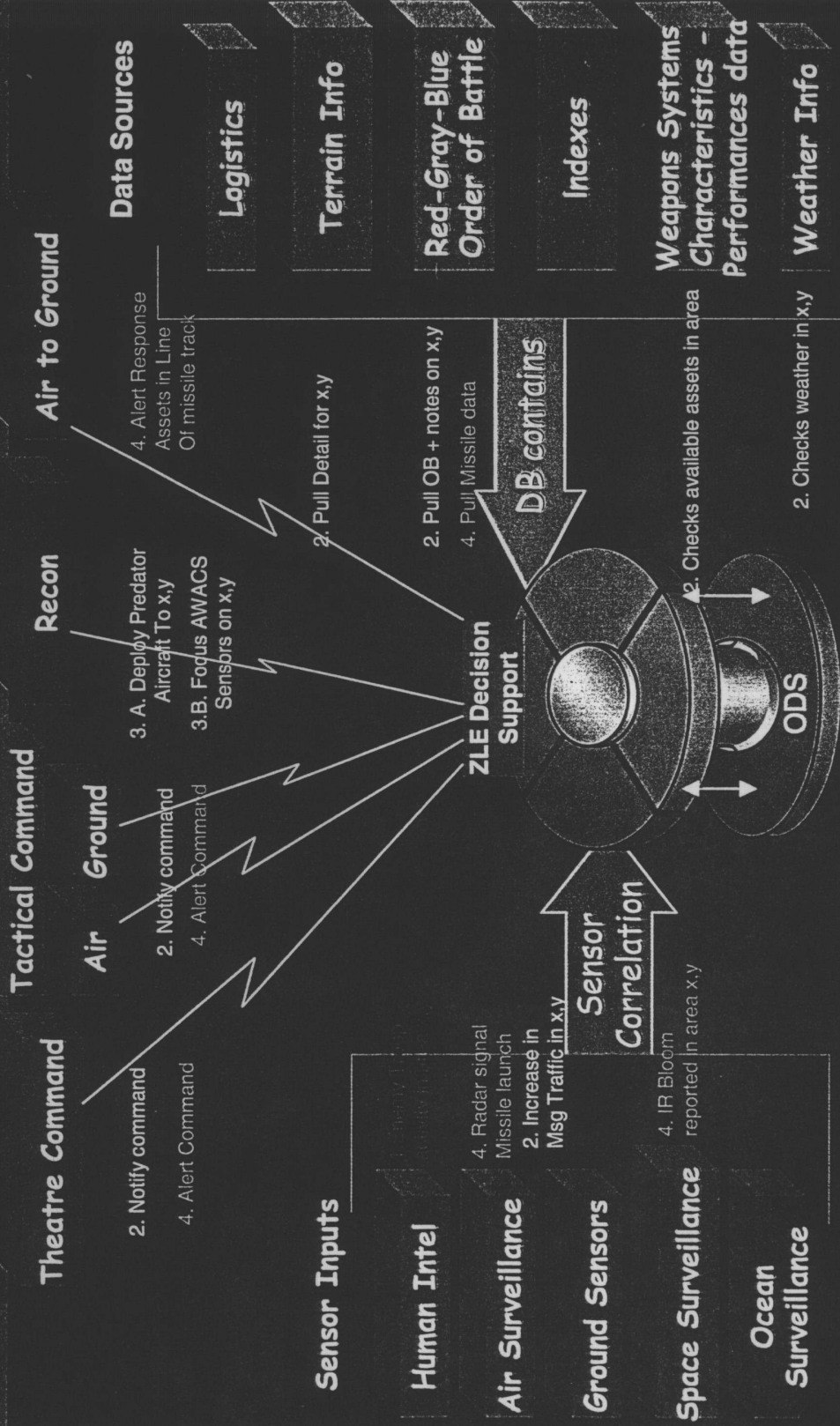


- **Urgency**
  - Need to act correctly, decisively, quickly to protect against threats to the homeland
- **Overwhelming mission scope**
  - Need to integrate and securely access multiple, disparate, non-compatible databases
- **Mission complexity**
  - Multiple needs & requirements
- **Selection complexity**
  - Need experienced, reliable solution providers from a variety of corporations offering products and services
- **Integration challenges**
  - Need to integrate People, Process, and Technology from multiple sources into an effective, integrated whole

# Application of Framework - Defence



Standing Order 1. Any 2 Sensors detect activity in area bounded by xx,yy - Investigate immediately and report.



Real-time detailed data about situations and their characterization

## What can HP provide in an ID card project



- Conceptual analysis
- Strategic planning & Roadmap
- Detailed technical design
  - Process re-design
  - System design
  - Network & Infrastructure design
  - Security design
- IT technology and infrastructure
- Centralized/distributed application including ID management system
- Implementation & Integration (with partners)
- Education and change management
- Complex solution support
- Help Desk Solution
- Outsourcing of some/all ID management system operations





## Typical cost items in an ID card project

- ID card – 2-10\$ per piece (renewals, validity, life time)
- Personalization systems
- Readers (simple PC 20\$, mobile/update facilities 100-500\$)
- Public kiosks (20-100 K\$)
- Communication infrastructure between regions and center
- Training and communication campaign
- Highly available central systems and databases
- Distributed systems (enrollment/registration/update)
- Certification authority and PKI

# Financial aspects of card introduction



December 1, 2003

HP Asia Pacific Food show - October 2003

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