
Communications-Electronics Security Group

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Excellence in Infosec

Information Assurance for UK Government

Internet, Intranet and Extranet Security

Chairman - John Doody
Head of Infosec Customer Services Group

Agenda

• Introduction	John Doody
• GSI Connection and Accreditation	Roger Griffin
• BS7799 Application within DETR	Terry Wells
• GSI Procedures and BS7799 Introduction into the Home Office	John Laskey
• IAG and e-commerce in MOD	John Peters
• Panel discussion	All

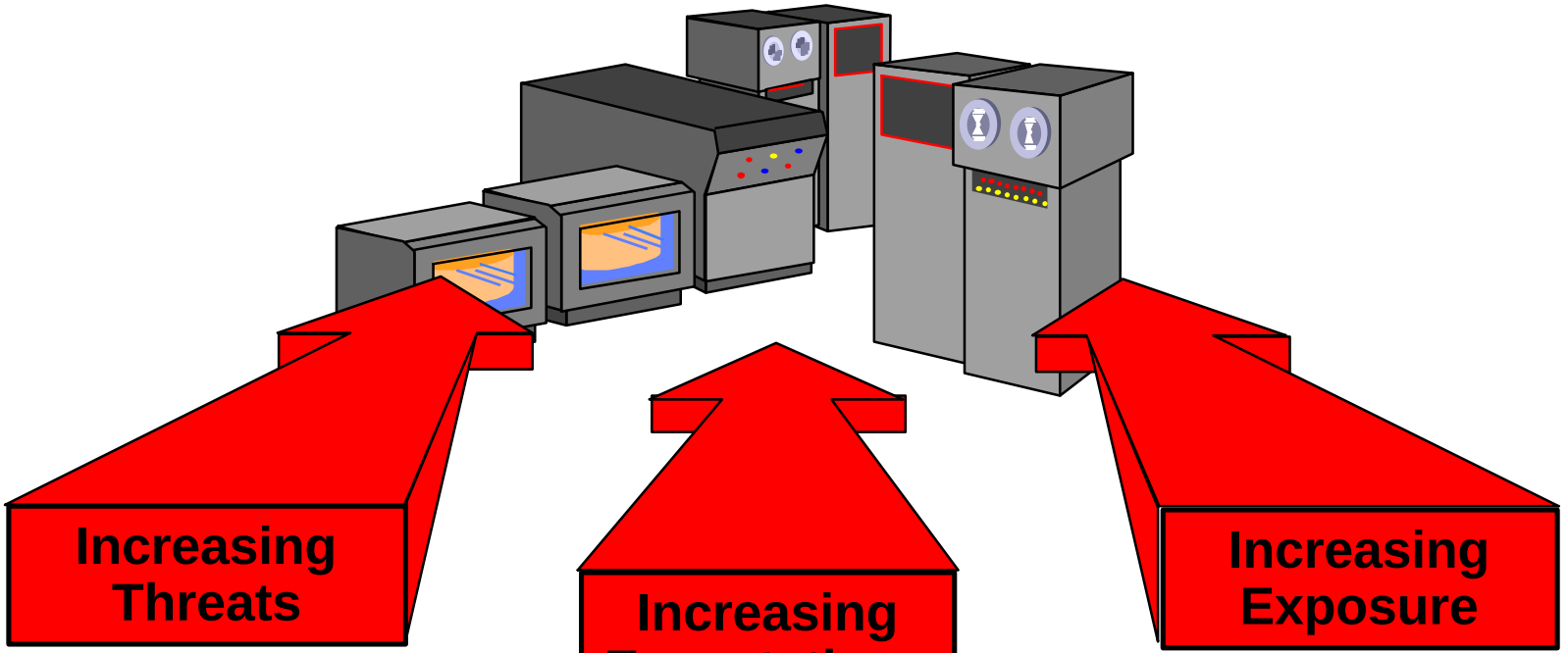
Introduction

John Doody

Government Secure Intranet

- Threats
- Risks
- Architecture

The increasing need for information security



from viruses, hackers, fraud, espionage

from customers, partners, auditors, regulators

greater dependence on IT, increasing connectivity

Information Security Breaches Survey 2000 (sponsored by DTI)

- UK e-commerce transactions in 1999 were valued at c. £2.8bn
- This sum is projected to grow ten-fold over the next 3 years
- 1 in 3 business in the UK currently buys or sells over the Internet - or is intending to in the near future

Waiting for the electronic Nemesis?

- The cost of a single serious security breach can be in excess of £100,000
- Over 60% of organisations sampled, had suffered a security breach in the last 2 years
- 1 in 5 organisations still does not take any form of security into account before buying and selling over the Internet

Worse to follow?

“By 2003, losses due to Internet security vulnerabilities will exceed those incurred by non-Internet credit card fraud”

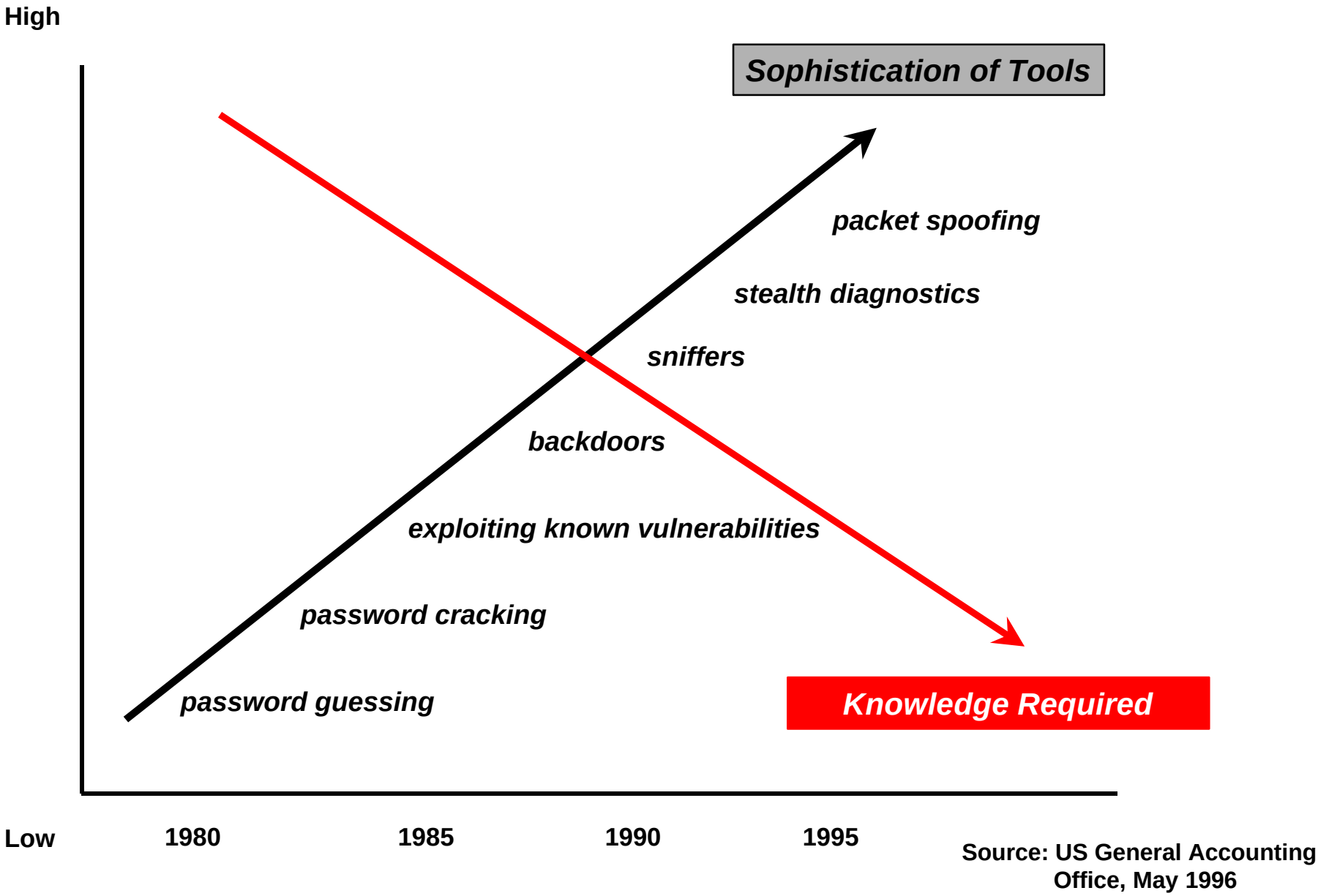
GartnerGroup - May 1999

The longer term?

“The 21st Century will be dominated by information wars and increased economic and financial espionage”

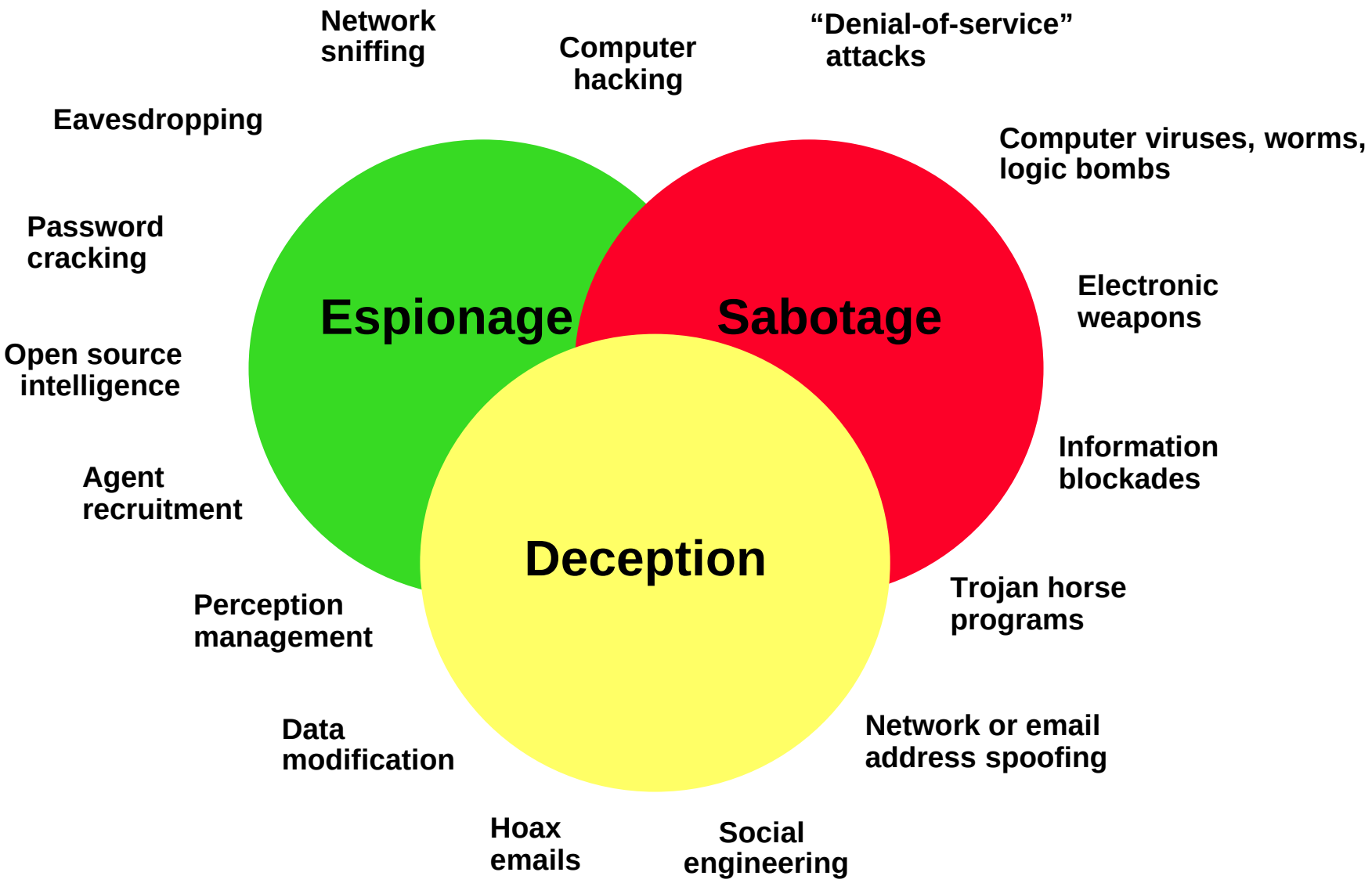
Alvin Toffler

Growing proliferation of hacking tools and know-how



Source: US General Accounting Office, May 1996

The world of information warfare



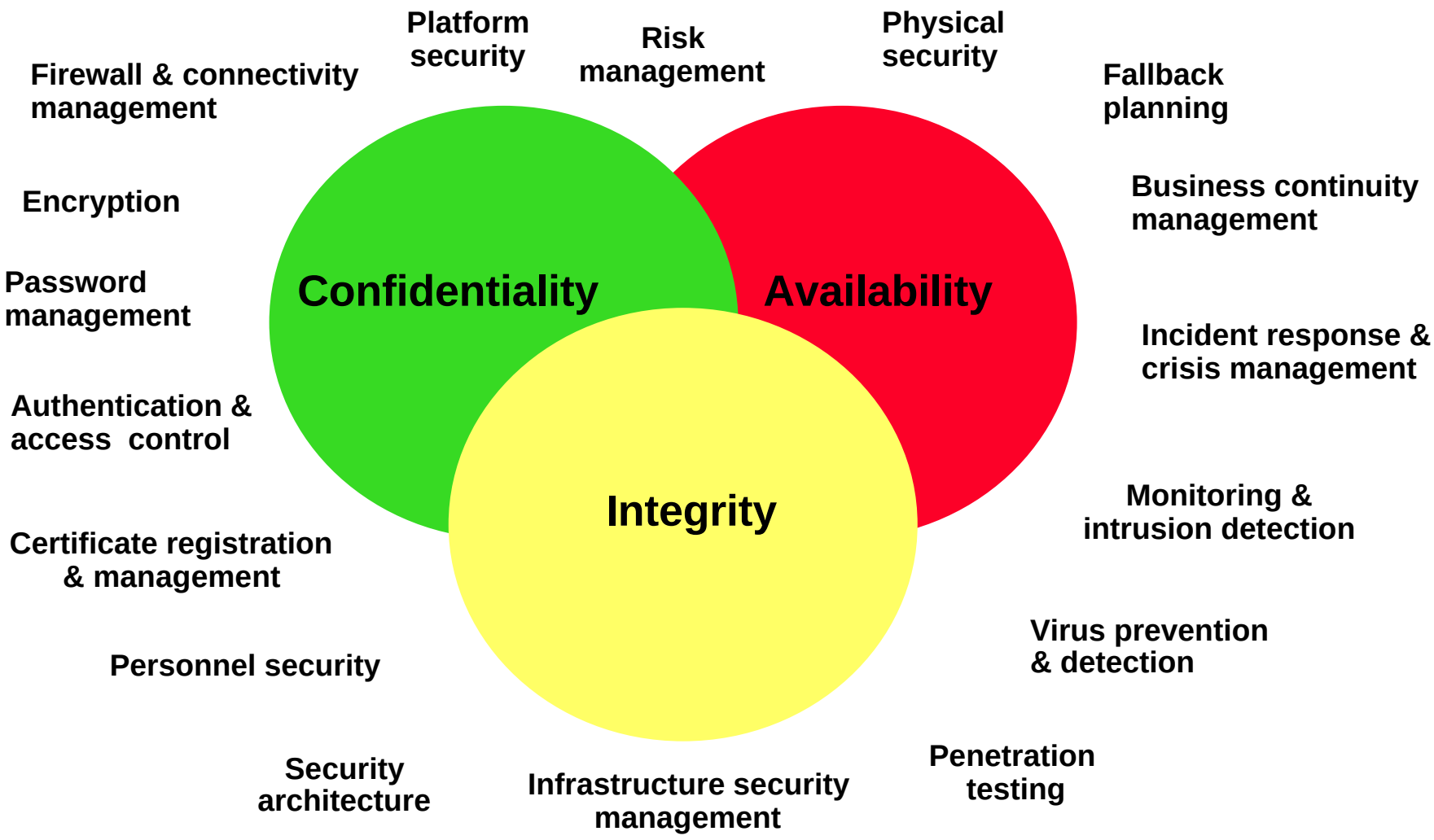
Key Principles

Partnership

Trust

Confidentiality

The world of information security



UK Modernising Government Initiative

- All policy making Government Departments connected and conducting business electronically by 2002
- All Transactions within Government and to the the Citizen conducted electronically by 2005
- Civilian Access to government achieved via electronic kiosks and digital TV
- Access into Government via a Portal by the use of Smartcards

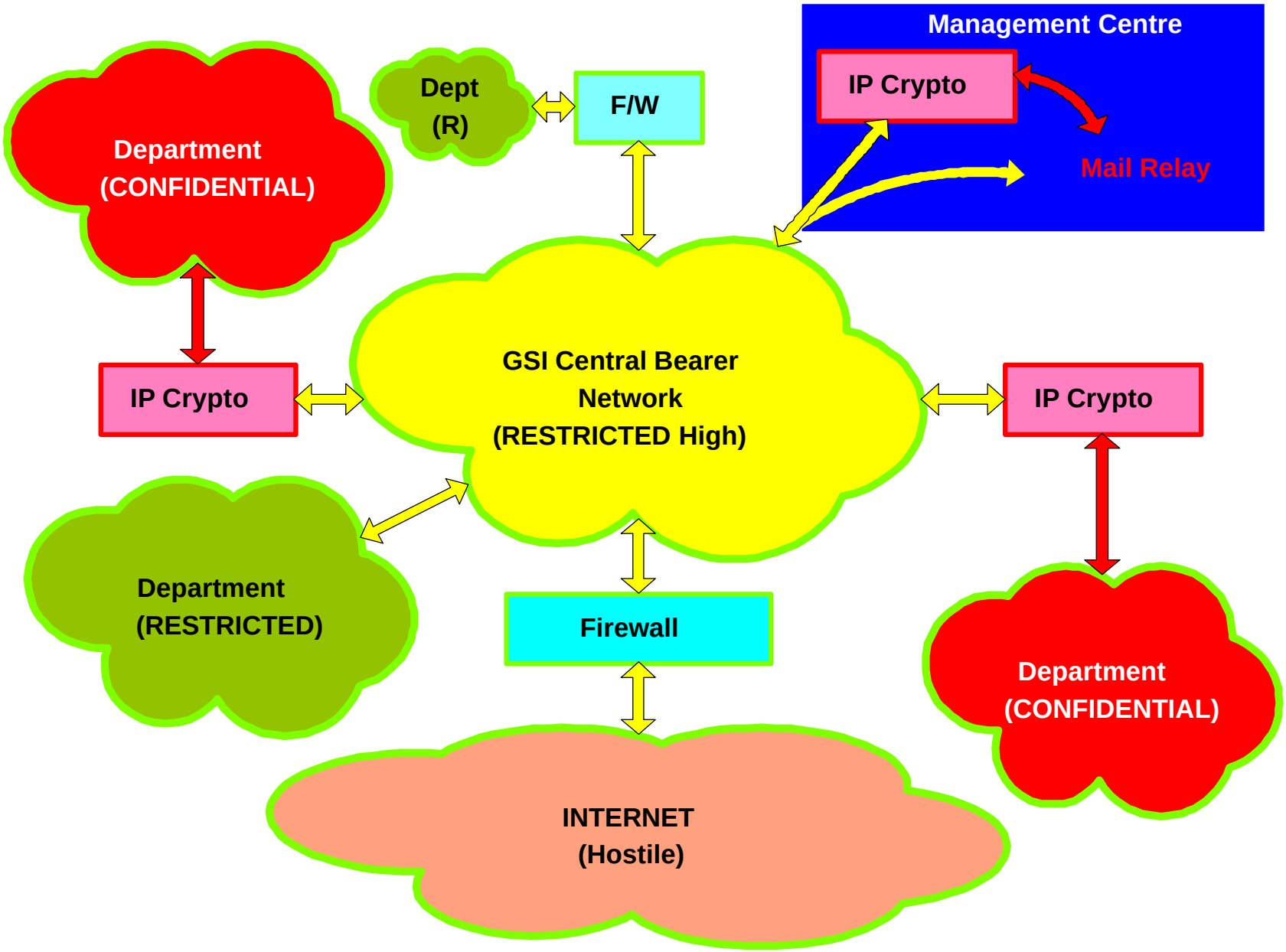
Government Secure Intranet (GSI)

- Infrastructure for “Open” Government - baseline for future connectivity (Modernising Government)
- Initiative started 1996
- Connect all Central Government Departments by end of 1999 (3 did not make it - 70 did)
- 100% of Government /Citizen business by electronic means - 2005
- Now available as Managed Service

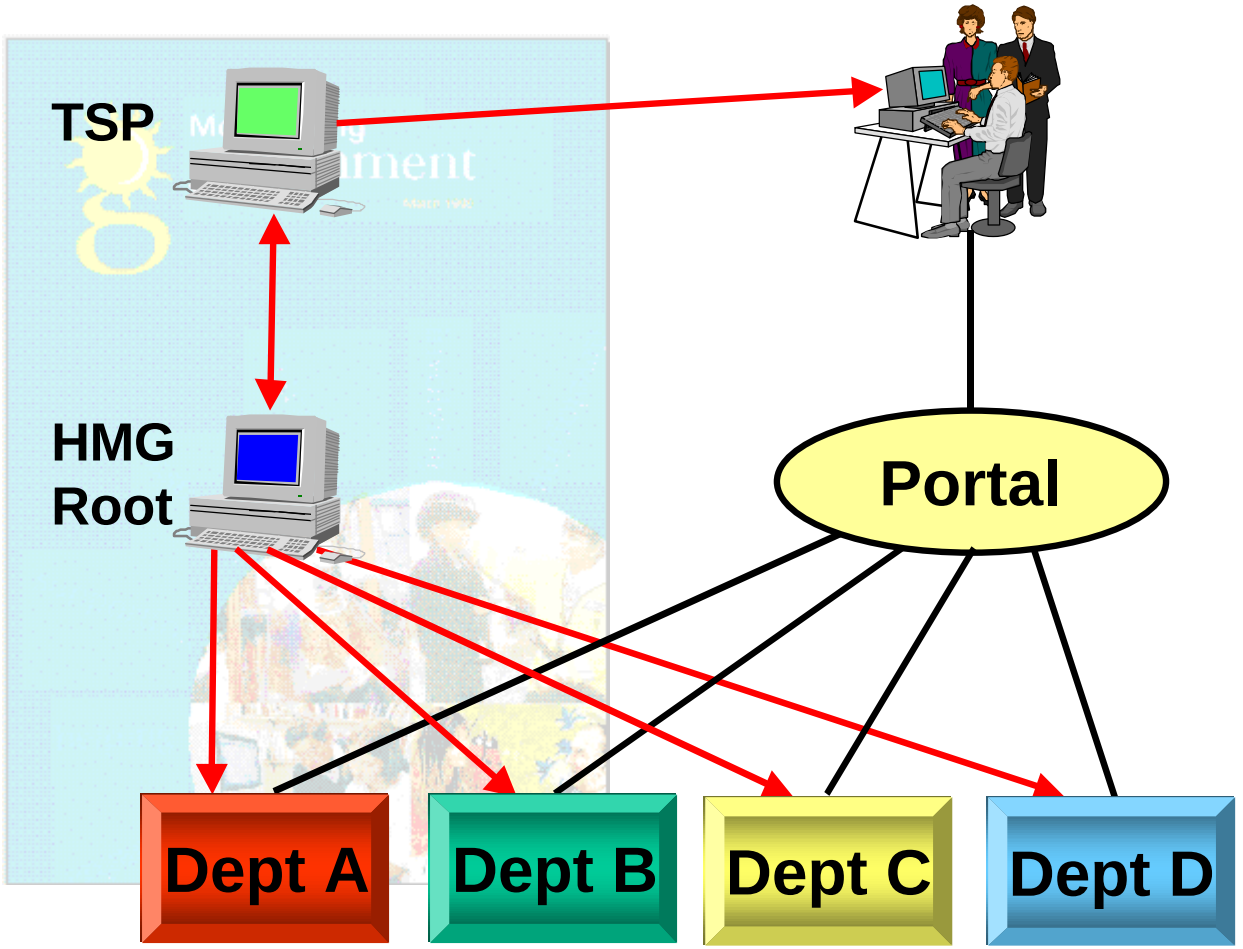
Business Drivers

- Better Internal Communications
- Better Access by External Bodies
- Centralised Management
  - Reduce Costs
    - resources
    - transport
    - time
  - Enhanced Service Quality
- Commitment to Electronic Business
- Public connectivity

xGSI System Architecture



Interoperability: HMG Root

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CABINET OFFICE

Accreditation and Connection of CMPS to GSI

By

Dr Roger M Griffin

Government's Centre for Management and Policy Studies
CMPS

CABINET OFFICE

Agenda

- CMPS.
- The System.
- Accreditation Issues.
- On-going Activities.

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CMPS

- Integration of Civil Service College into the Cabinet Office within CMPS.
- HMG corporate reform programme and wider Modernisation agenda.
- Opportunity to benefit from increased investment.
- Projecting a powerful “joined-up” image.
- Use of GSI in knowledge sharing.

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The System

- Based on servers running Windows NT Server Version 4, SP 4.
- PC clients running Windows NT Workstation v 4, SP 4.
- ISDN links to Edinburgh and Glasgow offices.
- 2Mb dedicated line between Sunningdale and London.

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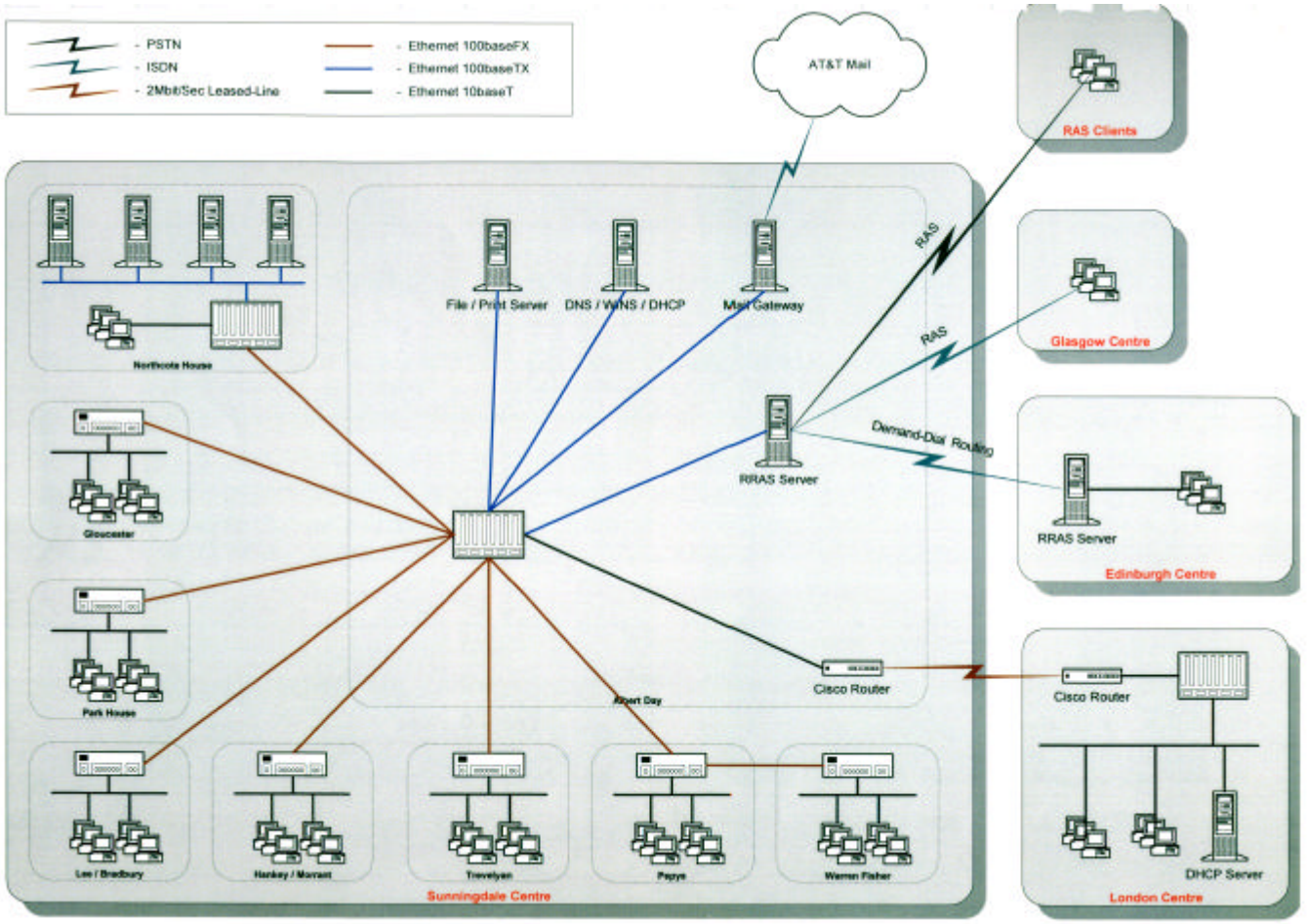
Sunningdale System Diagram



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Accreditation Issues

- Approach to accreditation.
- Application to connect to GSI:
  - Community Security Policy.

- Security documentation:
  - System Security Policy.
  - Security Operating Procedures.
  - Laptop policy.
  - Contingency plan.

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Accreditation Issues

- Personnel issues:
  - Security culture.
  - Clearance policy.
  - College staff and associates.
  - Account creation.
  - Visitors, students (UK and overseas).

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Accreditation Issues

- Physical security aspects:
  - Access tokens.
  - Intruder detection systems.
  - CCTV.

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Accreditation Issues

- Network security issues:
  - RAS users.
  - Password generators.
  - Security modems.
  - Separate unclassified network.
  - Firewall options.
  - Password screen saver.
  - Audit processes.

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Future Developments

- Use of GSI security features to establish:
  - Electronic booking system for course places.
  - Course fee /credit transfer facility.

- Extension of CMPS training activities via e-commerce.

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Benefits and Conclusions

- Development of an e-strategy to address enhanced training opportunities.
- Improved CMPS network security and functionality.
- Better support for HMG initiatives.
- A highly successful process gaining accreditation for GSI connection on 11 May 2000.

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BS 7799

The British Standard for Information Security Management Application within DETR

Terry Wells IT Security Officer

Department of the Environment, Transport, and the Regions

terry_wells@detr.gsi.gov.uk **www.detr.gov.uk**

Introduction

- The Standard - origins & development
- UK Government initiative
- DETR's experience
- the future

The Standard - Part 1

- Information security - not just IT security
- a code of practice
- best advice, guidance, voluntary
- approach and coverage

The Standard - Part 2

- How to manage it in an organisation
- not a rigid set of technical measures
- risk assessment is the driver
- organisations set their own scope

Certification Scheme (UK)

- called “C:cure”
- accredited auditors
- three-year certificates
- initial audit, then six-monthly checks

UK Government initiative

- Cabinet Office driving it
- common auditable standard
- Manual of Protective Security updated
- Departments now planning for compliance

DETR's experience

- appointed a 'Departmental Champion'
- established an 'Action Group'
- identified 'Key Systems'
- commissioned an initial 'Gap Analysis'

Lessons learnt so far

- need more, and fuller, documentation
- need greater awareness among staff
- need to improve co-ordination

The future

- work toward compliance in key systems
- maintain compliance once achieved
- review new and changed processes
- consider ‘stepping up’ to certification


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GSI Procedures and BS7799 Introduction into the Home Office

- John Laskey
- Home Office, Departmental Security Unit (DSU), London
- email: johngraham.laskey@homeoffice.gsi.gov.uk

Home Office
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Offices throughout Great Britain and Northern Ireland

Headquarters

- Criminal Justice
- Constitutional policy
- Policing policy
- Fire/Emergency Planning

Major Agencies

- Prisons: policy & management
- Immigration control
- Passport issue
- Forensic Science

Until recently, many Home Office staff had...

- no access to network facilities;
- differing systems/protocols;
- no access to Internet facilities:

..new approaches were needed

New Approaches to IT

- New networks, to be built from COTS products
- Links to the Government Secure Intranet (GSI) which would:
- give access to Internet browsing/email;
- provide secure (i.e. RESTRICTED) email facilities to other GSI users.

New Network/GSI Projects: How DSU Helped

- Accrediting the new core network to RESTRICTED (i.e. = U.S. ‘S.B.U’) level
- ‘Selling’ Infosec back to key IT players as ‘business enabling’
- Recommending changes through our accreditation inspections
- Enlisting the support of top managers to end established - but insecure - practices

Balancing Security & Functionality

- Agreeing initial restrictions on browsing rights
- Prohibiting use of certain ‘mobile codes’ (e.g. Active X, Java Script)
- Conservative approaches did restrict functionality - debates with senior users!
- New standard approaches to security a good rehearsal for BS7799 implementation

BS 7799 - Business Functions to be Investigated

- IT security policy
- IT system administration & use
- Physical security
- Accommodation
- Personnel management
- Personnel security
- Business continuity planning
- Staff training & security awareness

Home Office
BUILDING A SAFE, JUST AND TOLERANT SOCIETY

BS 7799 Action Plan #1

- June 2000 - determine essential areas for compliance - a work plan for a consultant
- July 2000 - senior ‘champion’ convenes BS7799 steering group
- September 2000 - consultant reports to DSU
- October/November 2000 - steering group agrees detailed plans for full implementation
- December 2000 - final report to the ‘champion’/central government

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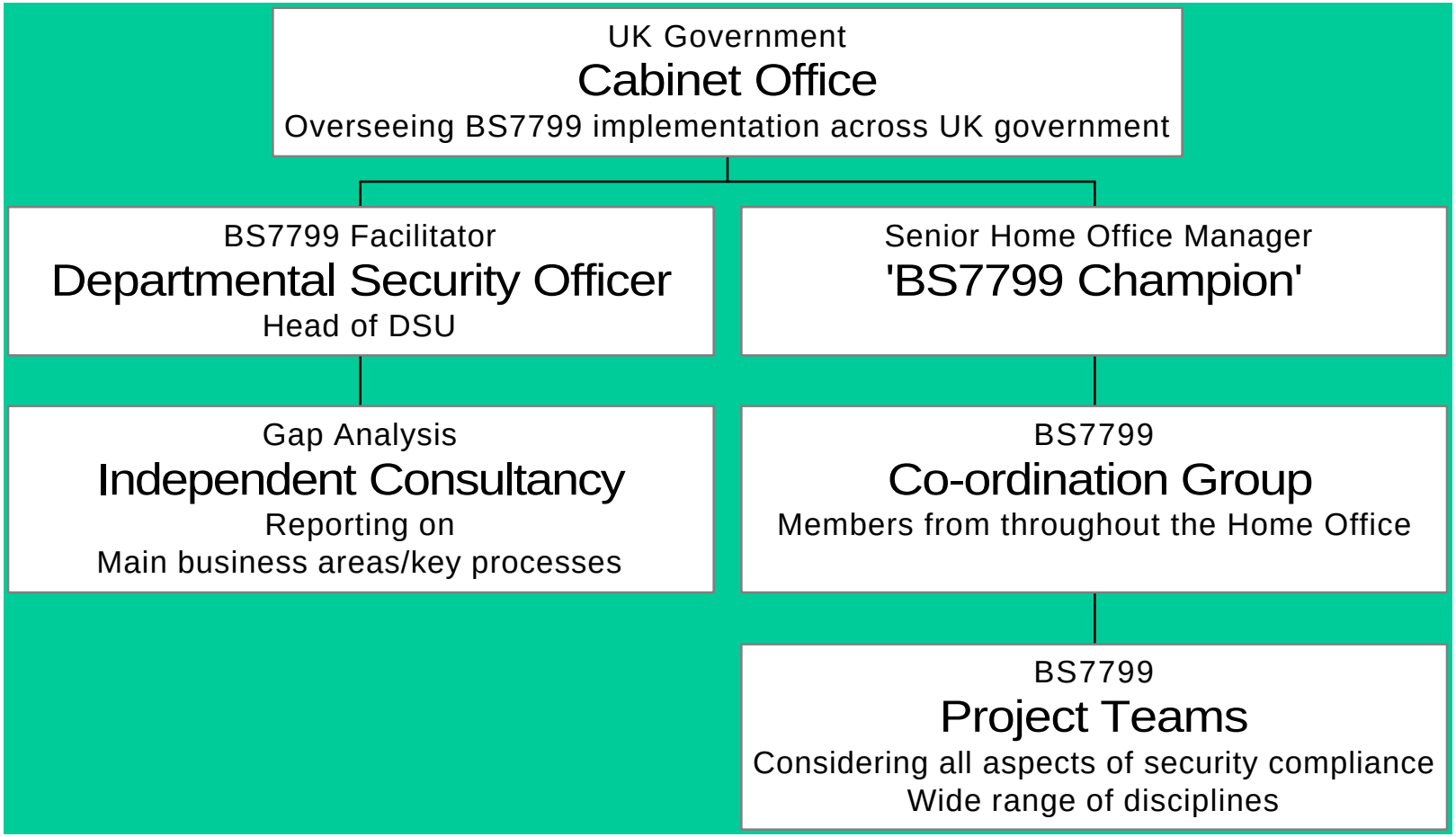
BS7799 Action Plan #2



Home Office
BUILDING A SAFE, JUST AND TOLERANT SOCIETY

Conclusions

- Home Office a traditional department
- Much work yet to be done in developing secure IT practices for all of its parts
- GSI and BS7799 are cornerstones of a more effective approach to security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SHARED ENVIRONMENTS

Internet, Intranet and Others

John Peters

Ministry of Defence (UK)

SMART PROCUREMENT

Shorten Timescales

Faster, Better, Cheaper

Integrated Project Teams

INTEGRATED PROJECT TEAMS

User

Logistic

Scientific

Procurement

Industry

SHARED DATA ENVIRONMENTS

Project Specific

Business to Business

Customers

Prime Contractor

Sub-Contractors

SHARED DATA ENVIRONMENTS

Information Requirements

Programme Data

Product Data

Design

Manufacture

Support

SECURITY ISSUES

- System High
- RESTRICTED
- Boundaries
- Accreditation
- Management
- Compliance

DEFENCE E-COMMERCE SERVICE

Bridge to Suppliers

Trading Intermediary

E-mail

Web Browsing

Dial-in

DOMAINS AND COMMUNITIES

- MOD
- Trading
- Procurement
- Suppliers
- Internet
- VAN

INTERNATIONAL COLLABORATION

Coalitions

Shared Information Systems

National Affiliated Systems

Common Accreditation Process

MULTINATIONAL SYSTEMS

Security Management Policy

Evaluation

Certification

Accreditation


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Panel Discussion