Parliamentary ICT

Enterprise Architecture & the Houses of Parliament

Presented by:

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Parliamentary ICT

PICT is a joint service for the Houses of Parliament and we aspire to give an excellent professional service to both Houses.

We are Business Partners building the Information Technology Services, Communication and the Infrastructure to enable Parliament to work effectively and Connect with the Public.
A Member’s day ...

...arrives at parliament, (& uses the Security Pass Access System)

Attends Chamber or Committee, where proceedings are recorded and transmitted (using Hansard Reporting applications & webcasting)

buys a cup of coffee, and makes payment (using the EPOS system, which in turn integrates with the stock control systems)

Goes in office, equipped with facilities and furniture (maintained using Accommodation Systems), sends emails, asks PQs, tables EDMs and makes telephone calls (using equipment provided & maintained by PICT and Procedural Applications such as e-Tabling)

collects Official Report, Order Paper, and Vote Bundle for day’s proceedings, (created overnight using Procedural Applications)

Researchers may be using Library Applications
Constituency staff may be connected remotely to the Parliamentary Network and systems
A Member’s staff may be receiving IT training.
Finance is processing a Member’s expenses
A Member can be receiving email communications via new Mobile PDA technology.
The General Public may be accessing publications via the Parliamentary website.

Meanwhile.....
PICT Services

Procedural Services (Clerks & Official Report)
- PQs, EDMs,
- Vote Bundle, Bills,
- Hansard,
- Select Committee Reports
  (Modernisation Committee Outcomes)

Knowledge Services (Libraries)
- Research,
- Papers,
- Statistics,
- Public Information,
- Education facilities

Direct ICT Services (PICT Service Desk & Members’ Computer Officers)
- Estate & Constituency Connectivity & equipment
- Mobile PDA Devices
- IT Training
- Fault Reporting

Corporate Services (Serjeants, Refreshments, Works, Finance & HR)
- Accommodation & Repairs
- Security
- Refreshments
- Expenses & Finance
- Occupational Health, HR
  (Refreshment & Accommodation Committee outcomes)

Provided by ICT applications:
- Framemaker,
- Hansard Application,
- Microsoft Templates
- Web Apps for PQs

- PIMS, Lexis Nexis,
- Internet website

- Network, PCs, Laptops,
- MS Desktop, Printers,
- VPN, Citrix, Telecoms

- PAD, Archibus,
- Access Control System,
- Agresso
Parliament in Context

- Old Institution
  1295 Edward 1 - Model Parliament (711 year old business processes)

- Structure
  Commons
    - Clerks
    - Library
    - Serjeant at Arms
  Lords
    - Clerks
    - Library
    - Black Rod

- PICT = 9 IT & IS departments into 1

- PICT ‘central’ but Business ‘federal’

- Some parliamentary procedure in “Norman” French
What Braithwaite said….

- “IT – a source of considerable dissatisfaction…”
- “Quality of IT Service has a direct and increasing influence on the ability of the house administration to perform effectively…”
- “…Difficult to deal with issues of organisation, given the constraints of the federal structure”
- “The current management arrangements are complex…”
- “Progress has been painfully slow under the federal structure”
Parliamentary ICT – The timeline

1999
1. Decentralised provision of Desktop Equipment

2001
1. Centralised provision of kit
2. Extended Helpdesk Hours

2003/4
1. Windows 2000 Upgrade
2. ISP/VPN - Broadband

2004
1. E-mail Spam Filtering
2. Web casting
3. SSL/VPN – via Internet
4. Members IT PC/Laptop refresh

2005/6
1. Mobile computing Wireless Network

2006
1. Extended hours support constituency services

2007
1. Strategic management at a Board level
2. Model acceptable for Both Houses
3. Unification of Departmental and Central Systems
4. Therefore... the need for the Cummins Review

... and what happened until today
Problems for IT in Parliament

- Duplicate, re-keyed & redundant data
- Everyday language v parliamentary language - not intuitive
- Search for information problematic – ‘where do I look?’
- Inadequate & difficult search capability on intranet & internet
- Everyday language v parliamentary language - not intuitive
- Metadata patchy, incomplete and from different schemas
- Many ‘stovepipe’ systems – each bit of the stovepipe solving a different problem
- Internet infrastructure 5yr old SW & HW
- Non existent or inadequate & inappropriate documentation
- Inadequate knowledge spread – too much in few individuals
- Inconsistent user interface design
- Lack of appropriate resources
- Unpredictable effects of change
- Poor communications
- Little standards compliance
- Immature configuration management
- Inadequate development environment
I. To provide the advice and services that enable the House and its committees to conduct their business effectively.

II. To provide the advice and services that enable individual Members (and their staff) to perform their parliamentary duties effectively.

III. To promote public knowledge and understanding of the work and role of Parliament through the provision of information and access.

IV. To maintain the heritage and integrity of the House’s buildings and collections.
I. To provide the advice and services to the House and its committees

II. To provide the advice and services to individual Members (and their staff)

III. To promote public knowledge and understanding of the work and role of Parliament

I. To meet the needs of the House and its committees.

II. To meet the parliamentary and judicial needs

III. To make the House and its work accessible to the public.

IV. To maintain the heritage and integrity of the House’s buildings and collections.

... creating flexibility
What we need to know:

- Is the current architecture supporting and adding value to Parliament?
- How might our architecture be changed to add more value to Parliament?
- Will the current architecture support or hinder what Parliament wants to accomplish in the future?
As-Is Model

PICT – The Starting Point...

- As-Is Model
- PICT – The Starting Point
- EDMs in PQs in HoL
- Hansard text
- Bills
- Written Ministerial Statements
- Amendments to Bills
- Lords Amendments to Bills
- Government Amendments to Bills
- Bills
- Government Amendments to Bills
- Bills
- Committee Lists
- Divisions
- The Minute Text
- PQs in
- HoL Hansard Text
- Commons Amendments to Bills
- Commons Amendments to Bills
- E-Tabling System
- Questions Database
- Order Paper System
- Table Office PIMS
- HOC Division Scanning System
- HOL Division Scanning System
- MS Word
- Frame-maker
- Hansard Reporting Suite (MS Word)
- Hansard Scanning System
- PIMS
- Table Office PIMS
- HOC Division Scanning System
- HOL Division Scanning System
- E-Tabling System
- Questions Database
- Order Paper System
The Future Model

- Untangles the Spaghetti

- Shows requirements being met using tested components from the EA component portfolio, each of which delivers business value

- Demonstrates increasing maturity of the capability to deliver what is required
The Migration Plan:

- A road map from As-Is to the Future Model
- Implement incrementally
- Deploy technical infrastructure as needed to meet business requirements
- Implement across all 4 architectures

Which way to go?
Improving the Infrastructure...

Technical Infrastructure Strategy
- 2006: Initial Strategy in Place
- 2007: Strategic Planning and Initial Rollout
- 2008: Continued Service Take-up

Constituency Network & Support
- 2006: First Phase Rollout Commences
- 2007: Resilient Parliamentary Voice Network in Place
- 2008: Continued Service Take-up

Wireless Network (inc RD Wi-Fi)
- 2006: Strategic Planning
- 2007: Resilient Parliamentary Voice Network in Place
- 2008: Continued Service Take-up

Rationalisation Project
- 2006: Rationalisation Pilot Completed
- 2007: Telephony Switch Recovery Contract in Place
- 2008: Desktop AC & Server Rationalisation Complete

Telecommunications Dual Parenting
- 2006: Server Virtualisation Work Commences
- 2007: Commence Procurement of Remote Data Centre
- 2008: Disaster Recovery Solution in Place

Telecommunications Resilience Contract
- 2006: Server Virtualisation Work Commences
- 2007: Commence Procurement of Remote Data Centre
- 2008: Enhanced Services Available

Server Virtualisation
- 2006: Server Virtualisation Work Commences
- 2007: Commence Procurement of Remote Data Centre
- 2008: Enhanced Services Available

Remote Data Centre & Full Disaster Recovery Solution
- 2006: Initial Upgrades to Parliamentary Cabling Complete
- 2008: Further Services Monitoring - Continuous

Remote & Mobile Enhancements
- 2006: New Voicemail & Operator Bureau Solutions in Place
- 2007: Basic Service Monitoring in Place
- 2008: Further Services Monitoring - Continuous

Parliamentary Estate Cabling
- 2006: New Voicemail & Operator Bureau Solutions in Place
- 2007: Basic Service Monitoring in Place
- 2008: Further Services Monitoring - Continuous

Voicemail & Operator Bureau
- 2006: Initial Upgrades to Parliamentary Cabling Complete
- 2008: Further Services Monitoring - Continuous

Service Monitoring
- 2006: IT Asset Management in Place and up to date
- 2007: Commence Enhancements to Remote & Mobile Solution
- 2008: Enhanced Services Available

IT Asset Management
- 2006: IT Asset Management in Place and up to date
- 2007: Commence Enhancements to Remote & Mobile Solution
- 2008: Enhanced Services Available

PN3 Stage 4
- 2006: Complete
- 2008: Enhanced Services Available

Single PN
- 2006: Complete
- 2008: Enhanced Services Available

Proposed Roadmap of transition
We’re undertaking a big re-organisation…

Parliament is complex
Disjointed ICT across Parliament
Working in silos within Departments & Houses
A confused matrix of responsibilities

But… with a clear vision of implementing ICT Excellence and Efficiency
Parliament’s Architectural Principles

- Principles are relevant to the business objectives and strategy
- They are constantly evolving, evaluated and refined
- The Enterprise Architecture will be built in accordance with our values:

  Respect, Excellence, Accountability and Learning
What is a Principle?

- A principle has a name and description
- A principle has a rationale to be adhered to
- A principle has implications to be considered if followed
- A principle supports our values
Key Parliamentary Business Information Requirements

- Business Processes
  - Agile and flexible output
  - Cater for required timeliness
  - Highly diverse but low volume
  - Facilitate exposure of knowledge from silos

- Data
  - Single point of entry
  - Local representation catered for
  - Value appreciated

- Application
  - Interactive capability especially for facilities and asset management
  - Intranet based transactions
  - Timely and transparent transactions
Key Parliamentary Business Information Requirements

- **Skills**
  - Cater for skills and support availability
  - Facilitate the management of knowledge

- **Others**
  - Ensure value for money
  - Ensure legal compliance
  - Exploit the niche of Parliamentary business and processes
Parliamentary Information Technology Requirements

- **Platform**
  - Open standards based
  - Legacy adaptors for integration services
  - Web services
  - XML metadata
  - Publishing framework
  - Development and test environment

- **Functionality**
  - Coherent and consistent security
  - In excess of 95% availability
  - Validated and timely access to data, anytime, anywhere
  - Requirements management
  - Data replication and warehousing
...and then something happened

- Business Information Requirements
- Information Technology Requirements
- Principles
- Good practice, patterns & common sense
Mainframe
Multi-applications

A bit of computer history...

1990+
A bit of computer history...

Mainframe
Multi-applications

“Shrink-wrapped” applications

Data entry/forms
Business rules
Data
Hardware

Data entry/forms
Business rules
Data

network

1990+
2003+
Mainframe
Multi-applications

“Shrink-wrapped” applications

Service Orientated Architecture

A bit of computer history...

1990+

2003+

web

Data entry/forms

Services (Business rules)

Data

Hardware

Data

Business rules

Data entry/forms

Business rules

Hardware

network
What is Service Oriented Architecture?

- A business process delivers combinations of services in pursuit of business objectives
- Some of these services involve the use of IT systems
- Usage of IT services may be made:
  Person to person (e.g. by telephone – service desk)
  Person to machine (e.g. over the internet)
  Machine to machine (e.g. a scheduled file upload)
- Services are the components of a business process
- SOA – An architecture that manages & supports the service lifecycle
- SOA enables delivery of the EA – it is built with components from the EA portfolio
- SOA services monitor themselves and supply performance metrics - enables Business Activity Monitoring
- SOA facilitates Business Process Management
Parliament, EA & SOA

Putting it all together …

Business
Values, Objectives, Strategies

Enterprise Architecture

Service Oriented Architecture
Vision & Timescale

2007
- Key EA Infrastructure & Artefacts
- Requirements Management
- Key Web Services
- Initial Technical Services

2008
- SOA Business System Integration
- Enterprise Service Bus – Specification, selection, migration & deployment
- Services identified & specified

Mid 2009
- Complete SOA technical infrastructure
- Service lifecycle management
- EA integrated into the planning lifecycle
- An ‘actionable architecture’
- Maturing EA, SOA & development capabilities
… application’s resilience improvements

- Understanding the inherited organisation
- Evaluated the need to bring the teams together
- Managed a transition project
- Created a functional based model
- Creating a flexible future proof applications layer

Developed a Business Case* based on the Voice of the Customer, segmentation of audiences, usability research and Customer satisfaction tracking studies.

Designed a programme of agile service delivery with a flexible and clear project governance structure.

Identified and implemented Short Term Benefits to respond to the most immediate needs and planned Interim Improvements.

We worked in close partnership with other Parliamentary teams to develop a vision and a long term process of continuous improvement.

We proactively keep looking for ways to explore new trends and technological advances such as Personalisation, and User knowledge management including acceptable channels to Listen to the Public.

We have implemented a plan of Measurements and continual review of objectives, risks, evolving priorities, audience research, flexibility of releases and Management of Benefits.

*http://pdvnsco.parliament.uk/webcentre/documents.htm @ Nov 2006
Governance, People, Performance, Plan

The Plan

Business plan 2006/2007
Business plan 2007/2008

Identify what to do first:

- Develop Programme
- CSII: Improve customer service
- CSII2: Improve service response
- Improve PICT internal processes
- Design Architecture
- CSII3 – ITIL, Change Control
- Business Continuity
- Disaster Recovery
- Internet
- Strategy for Members’ services
- Inventory
- Procurement
- 24/7 Support

Priorities:
- Completing the structure
- People into posts
- Construct budget
- Monitor, Learn, Improve
PICT’s Vision

PICT aims to attain best practice in delivery, support and exploitation of ICT in Parliament

Enabling Parliament to work effectively and connect with the Public
Parliamentary ICT

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Thank You