Veterinary Laboratories Agency

IS/IT Strategy

2006 - 2007

An Executive Agency
of the Department for
Environment, Food and Rural
Affairs

Contents

Version 1 (Released)

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1. Introduction

1.1 Purpose of this document

1.1.1 This document provides an overall IS/IT strategy for the Veterinary Laboratories Agency. The document links the Agency's business plans and corporate objectives with the deployment of Information and Communications Technology, thus providing a clear link between IT activity and the business needs. As well as the strategy, this document also highlights key IT systems, critical IT projects, technical standards as well as recognising external influences and factors likely to affect the Agency's use of IT in the next five years.

1.1.2 The strategy document is reviewed and updated on an annual basis. Sections are included to provide a "stock-take" in the form of an annual review of previous strategy objectives. The strategy notes key IT developments over the past year as well as proposing a portfolio of projects (both business focused and infrastructure investment) to form the basis of future workload. The future direction will reflect major external influences likely to impact VLA over the next five or so years and also indicate major IT infrastructure investment to form part of a three year rolling capital investment programme.

1.1.3 This strategy is published under the auspices of ITSC as the steering committee for IT in VLA.

1.2 VLA Business and e-Business Strategies

1.2.1 The VLA's corporate and business plans are articulated in the form of a number of aims and objectives. VLA's Corporate Plan for 2006 – 2011 recognises:

- The importance to Defra of "evidence based policy making" and the role VLA plays underpinning delivering scientific evidence.
- The world-wide recognition of the VLA as a deliverer of leading edge veterinary science.
- VLA's key role in Defra's emergency response capability.
- Through a commercial strategy, greater emphasis on new sources of funding and income through commercial work.
- Reduction in funding of TSE programmes.
- Continuing drive for efficiencies and cost-cutting.

1.2.2 A new element in the 2006 Plan notes the potential for alternative business models as a result of VLA/IAH options appraisal.

1.2.3 Whilst the application of IT to help meet these objectives will be achieved through individual, discrete projects, an IS/IT strategy must also set out a number of higher level "core principles" or aspirations which must influence the "what", "why" and "how" of IT delivery. The principles for the VLA are set out in section 1.3 below.

1.3 Core IS/IT principles

Forward looking and business focus

1.3.1 Deployment of IT and IT resources must be aligned with the VLA's business objectives and priorities. In considering allocation of resources ITSC and ITEC will use the VLA's stated aims and objectives as a key prioritisation criteria.

Flexibility for changing needs

1.3.2 The VLA's Corporate Strategy (Appendix D, Ref 4) recognises the fact that "as a Government laboratory, VLA is not entirely a master of its own destiny since its overriding function is to meet Government's changing requirement for veterinary laboratory-based services". Flexibility must be built into systems to enable IT to assist the Agency's ability to react to changing Defra priorities, disease outbreaks and organisational change.

Reliability

1.3.3 Ongoing veterinary surveillance and the IT systems that support these activities must be robust and reliable. Accuracy and turn-around time are noted in the Agency's corporate plan as being critical to UK international trade and many of VLA's core surveillance responsibilities. Resilience must be designed into all IT systems and used as key criteria in the choice of hardware and software components.

Value for money

1.3.4 VLA is a Government body and therefore public accountability demands that we make best use of taxpayer's money. IT systems must be justified and measured through documented, robust business and project management processes. IT services are costed as an overhead to the Agency's core activities, though efficient use of IT funds will minimise the scale of these overheads. Ensuring VFM will also enable VLA to be competitive, thus increasing the opportunity to develop private sector customers and income.

Safe and secure

1.3.5 As a Government body, VLA does not invest or rely upon high-risk or unproven technologies. Only in areas of groundbreaking scientific research will the use of new or unproven technologies be contemplated. Partnerships with sound technology suppliers will be critical in evaluating the value and mitigating the risk associated with such IT investments.

Follow Defra/UK Government strategy

1.3.6 Although this is an internal strategy defining the architectures, standards and software to be used internally by VLA, increasingly Defra, UK Government and European standards are emerging in many technical areas. VLA's use of IT will pay due regard and adopt these wider standards where mandated or sensible.

2. VLA Science strategy

2.1 Communication and collaboration

2.1.1 The Agency's Science Strategy recommends that: "the VLA should continue to review and expand its collaborative links with research organisations working in related fields". VLA Departments will seek to develop closer associations or partnerships with organisations, such as research institutes and veterinary schools, as a means of strengthening capacity and accessing complementary skills and resources.

2.1.2 The primary barrier to effective external IT based collaboration is VLA's continuing reliance on Defra and GSi IT networks. Whilst IBM/Defra management of network security is a major benefit, this barrier continues to inhibit close electronic collaboration with partners and external organisations. Improving external IT links will therefore continue to be the focus for IT development and investment this year and will include further discussions with IBM and a financial appraisal of separate VLA managed Internet systems.

2.2 LIMS

2.2.1 Thermo SampleManager (SMS) is deployed as VLA's LIMS and was originally introduced to Laboratory Testing and Virology at Weybridge back in 1995. The amalgamation of the Veterinary Investigation Centres (VIC's) with the CVL to form the Veterinary Laboratories Agency offered the opportunity to further develop SMS to enable samples received at these Regional Laboratories to be booked in at their source – thus "FarmFile" was developed.

2.2.2 VLA's LIMS Vision has progressed through 2005/6 with a series of steps agreed at ITEC and ITSC, e.g. Serology rationalisation and LIM for Avian Virology. These steps maintain and gradually extend the Agency's use of LIMS in a coordinated and strategic manner. The VLA's use of LIMS faces a number of key issues which will need to be addressed in order to meet the demand for VLA-wide IT support within laboratories. These include:

- Sample tracking incorporating sub-samples, aliquots and pooling (also euphemistically known as "exploding body parts") ;
- VLA-wide sample numbering regime;
- LIMS for bacteriology laboratories.

2.2.3 The Defra funded LIMS Challenge Fund project has provided resources for a major R&D exercise developing and demonstrating the capability of transferring submission information from external customer systems safely and securely into VLA's SampleManager LIMS. This has been an excellent learning process and enabled VLA to be better placed to consider further electronic links to external laboratories and customers.

2.2.4 The growing list of LIMS requirements and immediate response required to Avian Influenza outbreak has highlighted the limited ITU LIMS programming capacity to meet demand. Investigations into the new industry standard (.NET) based version of SampleManager (version 9) offers an opportunity to significantly increase the ITU's capability, take on more LIMS related projects and reduce LIMS programming bottlenecks.

2.2.5 The success of the Regional Laboratory Reporting project and Defra demands for electronic reporting of negative Avian Influenza results has generated wider interest in electronic reporting to customers. This trend may influence VLA's future strategy and approach to LIMS deployment.

2.2.6 Avian influenza and roll-out to Virology will represent the priority LIMS projects for 2006/7. The focus on an effective response to AI and supporting surge capacity demands is likely to take precedence and delay other important LIMS projects such as Gamma Interferon and Scrapie Surveys, particularly in the first half of the financial year.

2.3 Data Standards and Knowledge Management

2.3.1 Outline Data Standards and Knowledge Management strategies were presented to ITSC during Summer 2005. These strategies generated a number of IT projects progressed through the year.

2.3.2 Development of VLA's Information Asset Register (IAR) was completed with a number of key data assets now recorded. The IAR system includes a Thesaurus component reusable in future .NET based VLA systems. Development of data standard and quality thresholds have been progressed through small, informal projects but these have identified useful technologies (e.g. Datanomic) that could potentially revolutionise VLA's approach to data standards and quality control. This work will continue and a wider, more formal data standards project involving CERA will be considered along with limited investment in Datanomic technologies.

2.3.3 Recommendations for IT projects to support VLA's emerging Knowledge Management Strategy included wider use of Opentext Livelink software. Formal piloting and evaluation of the Livelink Communities of Practice (COP) module has been delayed due to software version compatibility issues and Avian Influenza IT priorities. This project will now be addressed this year.

2.3.4 Investment in Livelink web content management (WCM) has resulted in a project to replace VLA's intraVet pages hosted by Defra/IBM with an up-to-date content management system to be supported by the ITU and CPCU. Cutover to the new WCM-based intraVet is planned for summer 2006. Extension of WCM to VLA's external web presence is likely to be considered on completion of intraVet migration.

2.3.5 Research into Rich Site Summary (RSS) news feed internet technology resulted in a low-cost news "Monitor" application being developed in collaboration with SfW. Implementation of Monitor proved to be timely with the outbreak of Avian Influenza in April 2006.

2.4 EU-wide Surveillance

2.4.1 EU driven collaboration initiatives such as MED-VET-NET and Epizone will expand with a number of DG(SANCO) and DG(Research) funded projects. These include FLU-LAB-NET, FLUBIRD and Collection of AI data. All these projects have significant IT components and will need to be addressed to re-enforce VLA's position as Community Reference Laboratory.

3. Defra e-Business and IT Strategies

3.1 IBM and e-Nabling Defra

3.1.1 Significant progress has been made to formalise the contractual and working relationship between IBM, Defra/CIOD and the VLA. This has resulted in a formal statement of working practice (SWP) which will be signed-off in summer 2006. As well as a documented SWP, the work should enable better definition of work commissioning process and composition of the VLA block charge for IT services. Discussions have also covered IBM e-Nabling contract changes to enable VLA to take a wider range of IBM services such as application development and delivery services where required.

3.1.2 Work to formalise the IBM relationship should hopefully solve problems experienced with the IBM aspects of a number of VLA IT projects such as Collaboration systems (DWA/eSF), Challenge Fund and Johnes disease surveillance IT systems.

3.1.3 VLA will continue to negotiate short-term contracts with suppliers and avoid any long-term lock in which could potentially inhibit future use of the Defra outsource supplier. Where appropriate the ITU will also carry out cost comparisons on services where IBM may offer a more cost-effective solution.

3.2 Service Orientated Architecture and process modelling

3.2.1 Defra and IBM are continuing to develop a target architecture based on web services to deliver a "services orientated architecture" (SOA). However, proposed changes in the underlying technology used within Defra include the adoption of IBM Websphere, Java and Unix rather than Microsoft dotNet. This is a significant change to the Defra e-Business Technical Architecture (eBTA) and will need to be closely monitored.

3.2.2 In order to provide an effective service to Defra, VLA must ensure that the Agency's technical strategy fits with that of our parent Department. Discussions with Defra CIOD will continue to ensure web services and the emerging concepts of an "Enterprise Bus" will provide efficient and effective IT systems.

3.3 RADAR and Defra repositories

3.3.1 Further VLA input into RADAR has been limited, however CERA and ITU staff have been involved in a RAC development looking at interactive reporting and use of BSE data.

3.3.4 The review and scaling back of Defra IT investment in April 2006 has left a degree of uncertainty regarding the future of a number of major Defra IT programmes including RADAR and the Customer, Land and Livestock registers. The ITU had instigated regular meetings with Defra/CIOD and SVS to ensure a clear understanding of the implications of these programmes. Although lack of funding may cause further delays, the VLA must continue to remain in close contact and monitor developments in the core Department.

3.4 IAH and Pirbright relocation

3.4.1 The redevelopment of IAH Pirbright including relocation of around 80 VLA Virology staff is progressing and will require continuing IT involvement during 2006/7.

3.4.2 As well as contributing to the Virology Redevelopment Programme IS workstream, the wider IAH/VLA Agency review may generate further significant work depending on the outcome and proposed organisational changes.

4. Provision and governance of VLA IT services

4.1 ITSC and ITEC

4.1.1 The IT Steering Committee (ITSC) and IT Executive Committee (ITEC) provide an overall structure for the governance of VLA's IT and thus ensure all IT resources are firmly directed and aligned with VLA business need. The ITSC own, support and enforce this IS/IT strategy with recourse to the VLA Strategy Management Group (SMG) as appropriate. ITSC meet quarterly to:

- identify the key business objectives of the VLA and the IT functions needed to support their delivery;
- review recommendations for inclusions or changes to the strategic plan as proposed by ITEC;
- monitor the adequacy of existing and planned systems again current and emerging business needs.

4.1.2 ITEC continue to provide a bottom-up view of IS/IT requirements and manage requests for variations from and additions to the strategic plan arising from the user community. The committee recommends changes to the IS/IT Strategy to ITSC and communicate the strategy to members of their Department/end-users. ITEC also act as a management board for IS/IT developments.

4.1.3 The representation and organisation of ITEC will be maintained during 2006/7 and continue to fully represent all Agency Departments and Units as well as ensuring all VLA staff are aware of ITEC's role and purpose. A diagram showing the interaction between the governance bodies including ITSC, ITEC and the ITU is included as Appendix C,

4.2 Technical Strategy, governance and enforcement

4.2.1 IT "governance" in VLA is concerned with accountability and responsibility – how IT policies, standards and processes are specified, carried out and monitored for the common good of the Agency. The key objectives of governance are to:

- ensure that VLA IS/IT is exploited effectively, with due regard to business objectives, corporate interests and value for money;
- improve the quality of service delivery, by the adoption of common, agreed, standards and by ensuring effective checks and controls are in place;
- clarify central IT and business area responsibilities;
- underpin the VLA Accounting Officer's governance responsibilities.

4.2.2 ITSC will enforce the framework with the agreed standards as outlined in Appendix B. This framework will include a number of components both process related and technical. Further discussion of the Technical Strategy components is detailed in Section 7 below.

4.2.3 Each entry in the table in Appendix B notes a policy or standard within the VLA, including future direction or imminent change where applicable. The importance of

governance will vary depending on the standard. For some (corporate email for example), strong governance is critical to ensure effective business communications. For others a lighter touch would suffice and mandated standards are unnecessary.

4.2.4 The VLA's technical strategy will need to be maintained and adapted to integrate laboratory equipment procurement processes as the convergence of IT and laboratory continues. Close cooperation with CERA IT colleagues will also continue to ensure VLA technical standards meet the widest Agency needs.

4.2.5 Post Implementation Reviews (PIR) will continue to be used as a mechanism to evaluate the success of IT projects, identify issues and possible improvements as part of the ISO9001 quality system. During 2005 a lighter, less resource intensive checklist approach has been adopted for PIRs. This approach has proved to be a success on the PIR carried out for the Regional Laboratory Reporting project (Gertrude).

4.3 Other governance bodies

OGC e-GIF, e-GMF and SPRITE

4.3.1 The Agency's IT strategy will continue to be driven by external cross-government standards. Technologies and standards for UK Government Departments are mandated by the Government Interoperability Framework (e-GIF) – see http://www.govtalk.gov.uk. These standards are being extended to include metadata, XML schemas (via the e-GMF) as well as statements regarding the adoption of Open Source Software (e.g. Linux).

4.3.2 Mandated Government standards will be embedded into VLA's governance arrangements as appropriate. ITU staff will represent VLA on relevant bodies where new standards of particular concern are being considered – however in most cases ITU will liase closely with Defra and IBM staff leading in each area.

4.4 IT provision - the IT Unit (ITU)

4.4.1 The ITU provides and maintains a modern IT infrastructure that supports all VLA's IT requirements, from office applications to LIMS. 30 internal staff supplemented as required by external consultants and contractors form the core Unit resource. Over 100 systems ranging from VLA-wide LIMS systems to small standalone Microsoft Access applications are supported by the ITU.

4.4.2 The IT Unit design, implement and support systems that improve business efficiency and quality of data, provide management information and workload monitoring features, and aid collaboration in VLA's dynamic project and team structure. IT developments help VLA to minimise bureaucracy, and allow scientists and vets to concentrate on their specialist skills.

4.4.3 In support of the above, a key objective for the IT Unit is to maintain an in-depth understanding of all aspects of the VLA's business. Thus the ITU can be as much experts in the work of the VLA, as in the use and delivery of new technology. ITU will always need to plan for and maintain capacity to support VLA's emergency response capability. In general this will involve responding rapidly to requirements for new laboratory systems.

4.4.4 A revised set of IT service levels and monitoring arrangements were implemented in June 2005. These arrangements closely aligned to IT industry best practice and follow recognised ITIL standards. They enable better links to corporate scorecard, staff objective setting and overall ITU performance management. Service reporting has now been introduced at quarterly ITEC and ITSC meetings.

4.4.5 The majority of service levels for the period June 2005 to March 2006 were met. A number of network problems involving Regional Laboratories and external Internet links were reported to IBM for resolution. IBM performance supporting VLA's critical IT network infrastructure will continue to be carefully monitored. The most significant internal service problem resulted from an outbreak of the Zotob-B virus in September 2005. This had a significant impact on Weybridge operations for two days as PCs had to be manually patched. Revised improved PC patching procedures have been introduced to help prevent future problems.

4.4.6 Alternative funding methods, including ITU delivery via a "resource centre" arrangement were investigated during 2005/6. No fundamental change was adopted, ITSC agreed that:

- corporate funds continue to be reserved for support of corporate-wide IT infrastructure and systems with ITU development capacity continuing to be focused on systems – both departmental and corporate - based on ITEC/ITSC governance, scrutiny and prioritisation;

- VLA Departments must budget for and fund significant changes to existing ITU supported business systems unless these can be justified as of wider corporate benefit and therefore funded from corporate budgets. Additional ITU funding will be via financial transaction using journal entries to move funds from Departmental/project to ITU cost centre codes;

- the ITU account management role will be strengthened to ensure early indication of IT requirements and enable efficient funding of additional resources both external and internal staff;

- IT "charging" for IT work will be at cost. There will be no profit margin or contribution target element added

4.4.7 The Gershon cost saving initiatives will demand a reduction in IT overheads and greater efficiency of support services. The ITU will need to continue to reduce corporate IT costs or demonstrate the delivery of wider efficiency savings across the VLA.

4.5 IT provision - CERA

4.5.1 Although the VLA's Technical Strategy Group did not meet in 2005/6, the 2004 CERA reorganisation and close cooperation between the ITU and CERA 3 Data Systems has provided an effective alternative to maintaining a coherent technical strategy. Sharing of development procedures and knowledge between the ITU and CERA will become increasingly important for the effective and efficient delivery of web based systems within the Defra Service Orientated Architecture.

4.5.2 The redevelopment of the TB Case Control Study database represented a major highlight for CERA during the year and received plaudits from senior Defra customers. TSE Data Warehouse and SNDWeb projects represent key projects underway in early 2006.

4.5.3 CERA have noted a greater data demands and an increasing focus, e.g. from the EU, for electronic data provision. This focus on technologies such as XML and wider data quality aspects will demand continuing focus on data standards and Internet technology training. Greater investment in Business Objects skills and knowledge will become a CERA priority as use of BO as a reporting tool across VLA becomes more widespread.

4.6 IT provision - partnerships

4.6.1 The delivery of IT services to VLA will require a wide range of technical and business skills as well as a level of resource not available from in-house staff. Therefore VLA use a range of partnerships to ensure IT can meet future business needs. These partnerships include:

Core-Defra/IBM

4.6.2 IBM continue to be used for provision of IT network (WAN, LAN and network gateways), ad hoc Oracle support and web hosting (Web and intraVet). These services provided via Defra "e-Nabling" contract.

ThermoElectron

4.6.3 ThermoElectron provide the VLA's strategic LIMS software. The current SampleManager version used across VLA is 2004r2. Limited use of Thermo's Nautilus LIMS to support Biomics and specifically TB microarray production is in live use, though further Nautilus use is not currently planned.

4.6.4 The long-term strategy for VLA LIMS is being progressed under the LIMS Vision initiative. The latest version of SampleManager version 9 is of particular interest to VLA as the underlying technology is based on Microsoft dotNET rather than proprietary Thermo software. This has significant positive implications and should offer VLA the opportunity to integrate current and planned dotNET systems with the LIMS and increasing LIMS delivery using internal and partner dotNET skills.

SfW Ltd

4.6.5 For the past four years SfW have provided an increasing level of technical skills to the ITU on an ad hoc basis via standard S-Cat arrangements. Use of SfW resources through 2005/6 has been extensive and included project management, fixed price application development, consultancy and system support contracts. The use of SfW has significantly increased the ITU's capability to meet demand for IT systems and contributed to successful projects such as Challenge Fund, Master Test Schedule, intraVet (Web Content Management) and Monitor.

Fujitsu

4.6.6 Use of Fujitsu Services has been restricted to S-Cat provision on consultancy service to assist with VLA's Microsoft Exchange and Active Directory upgrade. However, their knowledge of VLA continues to make them an important potential partner for delivery future IT projects via OGC framework contracts.

Other IT manpower contracts

4.6.7 Additional resources required by VLA will be procured via standard Government S-Cat arrangements or existing VLA-wide arrangements, such as Hays Personnel. External organisations would be expected to have the full range of accreditation, e.g. IIP, BS7799 and ISO9001:2000. The ongoing need for security clearance – CRC and CTC - has dictated that contract staff must be obtained through a small number of employment agencies.

5. Business support systems

5.1 Finance and management accounting

5.1.1 Finance processes are computerised using the Integra system from IB Solutions. Integra provides basic financial ledgers as well as other components such as purchasing and stock/stores. FPS and PACT are used for management accounts.

5.1.2 The Finance hardware based on Sun hardware has been replaced by a new Sun Starfire server. The old server has been retained as development/test platform.

5.1.3 The VLA e-procurement project has made steady progress rolling out the system to all requisitioners at VLA. This system implements a remote requisition entry for all VLA locations using the Integra Web Basket module and remote Goods Received Note (GRN) entry using the Integra E-Buyer module. A small number of support Units, e.g. Personnel and ITU remain to be implemented and will completed through the Summer/Autumn 2006.

5.1.4 Finance have set a departmental objective to develop and rollout Crystal reports, although there is a dependency on iB-S software development. The ITU and Finance will carry out a review of Business Objects with a view to rationalising the number of versions in use.

5.2 Human Resources (HR) and payroll

5.2.1 HR IT services based on Oracle e-HR continue to be hosted and supported by Defra. The e-Payfact payroll system is provided via the Treasury framework contract for payroll provision negotiated with CMG/Logica.

5.2.2 The move to a sophisticated e-HR system has provided VLA with the potential to introduce further HR administration improvements, although sharing a system with Defra demands that VLA follows Defra implementation priorities and timetable. The “4Me” enhancement provide an on-line self-service system enabling staff to securely update personal information held by VLA and was introduced in May 2005. Online training administration was subsequently added with future developments including competency based appraisals to follow the self-service approach during 2006/7.

5.3 Proficiency Testing

5.3.1 As part of VLA’s focus on developing further commercial income, the potential for increasing sales of proficiency testing was identified by the Interact partnership. The ITU with assistance from SfW carried out a scoping study to review potential technical solutions for both web based sales and IT support for internal QA Unit processes. This study was carried out in Spring 2006 and considered the potential of the CSL “Jukebox” system and other commercially available software solutions.

5.3.2 Following on from the Study, a business case and project costs for a Proficiency Testing system for Sutton Bonington will be presented to ITSC and SMG during summer 2006.

5.4 Office systems and communications

Office systems

5.4.1 The VLA's office systems continue to provide a critical business support tool. Key upgrades planned include a move to Microsoft Active Directory and Exchange 2003. Significant preparation for these upgrades has been necessary to ensure seamless transition and minimal impact on VLA's day-to-day business. Domain migration planned for early 2006 had been delayed due to AI priorities but completed successfully during May 2006.

5.4.2 Further projects to keep step with new Microsoft technologies, e.g. Phase II of the major infrastructure upgrade incorporating Exchange 2003 will also continue. No major investment in desktop hardware is planned in the near future as local Units continue to fund there own equipment.

Electronic Document Management (EDM), Web based "virtual teams"

5.4.3 The VLA continues to use Opentext Livelink EDM to handle UKAS Testing Group procedures, documentation and Standard Operating Procedures (SoPs). This system provides an EDM to manage all the UKAS group SOPs, implements electronic signatures and provides the single source for all UKAS Group members. Many further uses of Livelink have been identified – e.g. Species Group collaboration and various "communities of practice". Implementation of the Livelink Communities of Practice module has been delayed due to compatibility issues with the current live UKAS SOP system.

Internet and external collaboration

5.4.4 Limited progress on external data sharing has been made since the summer 2004 IT collaboration software evaluation. Negotiation for use of the Defra e-Science Fora (ESF) system, although appearing to offer the most obvious option for VLA, has been stalled due to contractual issues with IBM. Resolution of these issues and provision of a more sophisticated web presence for VLA is a growing priority for VLA. Evaluation of VLA managed Internet systems will be considered as an alternative if no suitable, cost-effective solution via Defra/IBM can be offered.

intraVet

5.3.5 Following lack of progress towards content management systems within Defra, VLA embarked on our own Content Management project based on the implementation of Opentext Livelink WCM (Web Content Management) software. Preparation for roll-out of WCM was well advanced at the end of the year. Migration of existing intraVet content will take place over the summer 2006 and enable cutover to the new system in late summer.

5.3.6 Application and web page templates will need to be developed to enable the new intraVet page layout/structure to be reused. The intraVet style should provide a standard for all future web based systems developed within the VLA.

Flexible working

5.3.7 The ITU have continued to work with Defra and IBM on the adoption of VPN technologies. A suitable robust solution has been piloted and successfully rolled-out to over 50 VLA staff. Further extension to other VLA staff will continue as required although potential IT support overheads will be carefully monitored.

5.4 ISO9001:2000, BS7799 & business continuity planning

5.4.1 Formal accreditation to the ISO9001:2000 standard was a key objective for the ITU and Agency as a whole during 2005/6 and critical for the VLA status as a leading veterinary laboratory world-wide. The ITU have successfully implemented the standard as part of the Agency-wide quality programme by introducing internal standards, procedures and documentation for the operation of the Unit and to be used by other IT specialists (e.g. CERA) as appropriate. In consultation with the QAU, consideration of auditing against ISO20000/BS15000 IT Service Management standard will be given, though formally accreditation is unlikely to be an objective.

5.4.2 BS7799 remains a target for all government organisations. VLA will continue to review this target and consider plans for accreditation. These plans will need to consider remaining recommendations from the 2003 gap analysis carried out by Insight Consulting.

5.4.3 The IT Business Continuity Plan (BCP) adopted in March 2005 was tested during early 2006 with a number of significant issues surrounding the configuration of hardware provided by DR contractor (HP/Synstar). A retest will be scheduled in late 2006 and the BCP document updated as required. Long-term plans remain to integrate the IT plan into wider Agency BCP work.

5.4.4 As part of the Agency's ISO9001 accreditation a formal Agency Procedure (AP065) was issued in March 2006. This document provides a wide range of guidance and procedures on the use of IT systems.

5.5 EDRM

5.5.1 The Agency developed plans, business case and cost estimates for EDRM back in 2003. Work to develop electronic record inventories, and publication schemes has taken place as preparation for Freedom of Information (FoI) legislation. Development of an Information Asset Register (IAR) has been completed as part of the Data Sciences project. Capture of data for the top 100 critical assets commenced and will be completed during 2006.

5.5.2 Once again, sufficient funding is unlikely to be available during 2006/7 to progress ERM. The cancelling of Defra's EDRM programme (Catalyst) makes significant VLA investment unlikely at this time.

6. New technologies

6.1 As new technologies emerge which are of interest to VLA, R&D projects will be defined and submitted to ITEC for consideration. As part of the annual IT/IS strategy review process, key emerging technologies likely to be of interest to the Agency will be identified. VLA will also continue to use IT partnerships with Defra's IT supplier as well as with colleagues in other Defra Agencies to keep up-to-date with new technology.

7 Technical strategy

7.1 Introduction

7.1.1 VLA's technical strategy is increasingly driven by external standards such as the e-GIF. The e-GIF standards are mandated across government and are based on the principles of:

- Interoperability
- Market Support
- Scalability
- Openness

7.1.2 The VLA's **Technical Strategy Statement** contained in Appendix B brings together individual technical components used by Agency and the governance that applies to each. The strategy is structured in four key areas covering:

- Business processes
- Architecture
- Applications
- Infrastructure

7.1.3 Governance statements relating to technical components will be agreed by ITEC/ITSC and published on intraVet. In many areas these statements will represent mandated policies for the use of IT in the Agency and be incorporated in the relevant VLA Agency Procedures.

8. IT Cost

8.1 The Agency's corporate IT costs for financial years 2003/4, 2004/5 and 2005/6 were as follows:

Heading	**2003/4 cost £k**	**2004/5 cost £k**	**2005/6 cost £k**
Staff costs – pay + overtime	£873k	£924k	£984k
Non-pay ITU costs	£139k	£99k	£100k
Corporate IT hardware Maintenance (Fujitsu)	£151k	£156k	£0
Corporate IT maintenance (other)	£414k	£357k	£561k
Corporate IT consultancy	£170k	£565k*	£471k
Other costs – fixture, hospitality, professional services	£7k	-	£46k
IT Capital	£360k	£360k	£360k
Defra IT (soft charge)	£357k	£357k	£230k
Total for year	**£2,471k**	**£2,818k**	**£2,734k**

*an extra £400k consultancy was allocated during 2004/5 to cover e-HR, Payroll and collaboration projects.

8.2 These represent a cost of:

- £2,254 per employee (1213) for 2005/6
- £2,171 per employee (1298) for 2004/5
- £1,809 per employee (1366) for 2003/4.

8.3 The £360k capital investment represented a three year rolling investment programme with less funds (£212k) allocated in 2006/7 for capital IT.

8.4 Project IT costs allocated directly to science programmes and projects are excluded from these figures.

9. Strategic plan 2005/06– Look Back

9.1 As part of the quality review process for VLA IT and the ITU, the annual strategy review documents a set of objectives to be reviewed in the following year. The table below notes 2005/6 objectives. The Strategy Reference column refers to the 2005/6 IS/IT Strategy document.

2005/6 Strategy Ref.	Objective	Timescale	Progress
Para 2.2.3	Deliver VLA LIMS to extend emergency response capabilities and disease coverage as part of VLA's overall LIMS Vision.	2005/6	**Achieved.** Emergency response project based on CSF completed.
Para 2.2.3	Complete the implementation of electronic reporting of results to Regional Labs thus meeting a key Admin Review recommendation.	2005/6	**Achieved.** Regional Laboratory Reporting project (Gertrude) successfully completed and a PIR carried out.
Para 2.2.4	Configure VLA LIMS to support serology rationalisation at Weybridge. Cover both serology at Weybridge and backup serology capabilities at Lasswade.	2005/6	**Achieved.** IT LIMS support provided for Serology rationalisation in line with business plans.
Para 2.2.5	Complete live implementation of Nautilus LIMS for TB microarrays and investigate use of Nautilus for microarray experiments.	2005/6	**Partially achieved.** Nautilus TB microarray system implemented but no further investigation into further use of this LIMS carried out.
Para 2.2.7	Evaluate and develop a strategy for the use of Electronic Lab Notebooks (ELNs) and emerging technologies to support research scientists.	3 year	**Achieved.** Evaluation conducted and discussed at ITEC. Strategy is to await further developments in this technology.
Para 2.3.2	Set up a Data Standards project to progress metadata and data standards issues within VLA.	2005/6	**Partially achieved.** Component projects initiated (e.g. IAR/Thesaurus). No overall Data Standards strategy exists as yet.
Para 2.3.2	Plan and document VLA's emerging needs for a Surveillance Data Warehouse.	3 year	**Partially achieved.** Investigations underway, however a formal project structure involving CERA needs to be created.
Para 2.3.4	Create an VLA Information Assets Register (IAR)	2005/6	**Achieved.** System developed by SfW and key asset data capture underway.
Para 2.3.5	Implement a robust data archive infrastructure	2005/6	**Achieved**. Netapps filers and central backup regime implemented.
Para 2.3.5	Build up XML and Schema knowledge and expertise to support emerging collaboration and data exchange requirements.	3 year	**Achieved.** XML training course conducted with both ITU and CERA attendees
Para 3.1.3	Negotiate with Defra and IBM changes to the e-Nabling contract to provide greater flexibility and clarity of costs and service levels.	2005/6	**Not achieved.** Contract changes identified, documented but not implemented. Some progress on cost components. Further work is ongoing.
Para 3.2.2	Support Defra RADAR programme and extension of data	3 year	**Achieved.** CERA and ITU continued participation in RADAR

	sources to cover TB and BSE data.		programme.
Para 3.2.4	Monitor Defra's development of Customer, Land and Livestock registers.	3 year	**Achieved.** Through meetings with SVS and RADAR representatives. Progress may be limited in future years due to Defra funding cuts.
Para 3.3.2	Contribute to Defra's replacement to the suspended ExDCS.	3 year	**Achieved.** ITU assistance provided to consultants engaged by SVS.
Para 3.4.2	Contribute to the Pirbright Relocation programme and the potential provision of shared services to IAH and VLA, particularly IT and LIMS.	5 year	**Achieved.** IT representation on the IS workstream.
Para 4.2.4	Maintain VLA's technical strategy and fully integrate laboratory equipment procurement and processes.	3 year	**Partially achieved.** Technical strategy maintained. Ad-hoc guidance provided on equipment purchases though full integration in quality processes not yet achieved.
Para 4.2.5	Carry-out two PIR's based on the revised lighter checklist approach.	2005/6	**Not achieved.** One PIR (Regional Laboratory Reporting) carried out
Para 4.4.4	Implement revised set of IT service levels, reporting and SLA monitoring arrangements to enable better ITU performance management.	2005/6	**Achieved.** Implemented in June 2005.
Para 4.4.5	Consider alternative ITU funding methods including ITU development staff organised as a VLA "resource centre" to provide an additional income route for the Unit.	2005/6	**Achieved.** Approach agreed at ITSC in October 2005 meeting
Para 4.4.6	Contribute to Gershon cost saving initiatives by reducing corporate IT costs, and particularly maintenance costs.	2005/6	**Achieved.** Through reduction in the Defra block charge for IT. Reduced from £350k to £230k
Para 4.6.5	Review Thermo's long term vision for LIMS and SampleManager in order to assess implications and positioning of both SMS and Nautilus within VLA's technical strategy.	2005/6	**Achieved.** Positive indications with SMS v9 based around Microsoft dotNET technologies.
Para 5.1.4	Roll-out the e-Procurement system VLA wide.	2005/6	**Achieved.** Though small specialised support units (Personnel & IT) still to be completed.
Para 5.2.2	Progress implementation of further e-HR modules to provide efficiency savings, starting with the personal details "4Me" system in 2005/6.	3 Year	**Achieved.**

Para 5.3.2	Continue with Microsoft infrastructure upgrades, e.g. Exchange and Active Directory.	3 Year	**Achieved.** Planning underway and fist phase upgrade scheduled for May 2006.
Para 5.3.5	Resolve contractual issues to enable a pilot of the ESF system to be implemented.	2005/6	**Not achieved.** System costs still awaited from IBM. Contractual changes not yet implemented.
Para 5.3.7	Assist with VLA plans to migrate both external website and internal intraVet to new content management technology.	3 year	**Achieved.** Migration of intraVet to Livelink WCM underway.
Para 5.3.8	Support a Defra broadband pilot for a small number of VLA staff . Based on a successful pilot, develop a strategy and implement flexible remote access solutions for key VLA staff.	2005/6	**Achieved.** Over 50 users implemented by April 2006.
Para 5.4.1	Ensure all IT processes are ISO9001 compliant and pass external audit during 2005/6.	2005/6	**Achieved.**
Para 5.4.2	Contribute to Agency wide Business Continuity Plans and integrate IT plans as appropriate.	2005/6	**Not achieved.** VLA-wide plan still awaited. Test of IT plan highlighted issues an need for a retest.
Para 5.5.2	Assist VLA Library staff create an Information Assets Register as part of the Data Sciences project.	2005/6	**Achieved.**

10. Business plan 2006/07 – Look forward and objectives

10.1 IT project demand will continue to outstrip resources and available funding. Prioritisation by ITEC and ITSC will be critical to ensure the most effective use of the limited resources.

10.2 Funding allocations for the ITU and corporate IT for 2006/7 are as follows:

IT Unit (Cost Centre 625)	
- Pay	£1,054,476
- Non-pay	£134,900
Total	£1,189,376
Corporate IT (Cost Centre 704)	
- IT Consultancy	£356,000
- IT equipment/maintenance	£585,181
Total	£941,181
Corporate IT total	**£2,130,557**

A complete portfolio of IT projects and workload agreed for by ITEC/ITSC for 2006/7 is contained in Appendix E.

10.3 Summary of 2006/7 objectives

10.3.1 The table below summarises the objectives included in the strategy text in addition to discrete projects identified in the 2006/7 projects portfolio. The objectives below will be used as a basis for the review of the year to be included in next years strategy.

2006/7 Strategy Reference	Objective	Timescale
Para 2.1.2	Improve external IT links by evaluating IBM solution against a financial appraisal of separate VLA installed and managed Internet connection.	3 year
Para 2.2.4/ 4.6.4	Investigate into the new industry standard (.NET) based version of SampleManager (version 9).	2006/7
Para 2.2.5	Consider further potential for LIMS electronic reporting to customers.	2006/7
Para 2.3.2	Setup a formal data standards project involving CERA and consider investment in Datanomic technologies.	2006/7
Para 2.3.3	Resolve Livelink Communities of Practice compatibility issues and pilot collaboration groups within VLA.	2006/7
Para 2.3.4	Complete intraVet WCM migration and consider WCM for VLA's external web pages.	2006/7
Para 2.4.1	Support VLA input and delivery of AI projects as part of VLA's CRL remit.	3 year
Para 3.1.1	Sign-off Statement of Working Practice (SWP) with Defra CIOD and IBM thus formalising VLA/IBM contractual relationship.	2006/7
Para 3.1.1	Implement IBM e-Nabling contract changes to allow greater VLA use of the contract if required.	2006/7
Para 3.1.1	Identify separate component cost and breakdown of the Defra/IBM block charge.	2006/7
Para 3.1.3	Carry out cost comparisons between current desktop service provision and via IBM e-Nabling.	3 year
Para 3.2.1	Clarify the future of Defra's eBTA and IBM support for dotNET technologies.	2006/7
Para 3.2.2	Collaborate with Defra CIOD and technical architects to ensure VLA strategy fits with Defra SOA and "Enterprise Bus".	3 year
Para 3.3.4	Remain in close contact with Defra technical architects and monitor RADAR, Land, Livestock and Customer developments in the core Department.	2006/7
Para 3.4.2	Contribute to the IAH Redevelopment Programme and VLA/IAH Agency review.	2006/7
Para 4.2.4/	Maintain close collaboration between ITU and CERA staff on technical strategy and standards issues.	2006/7

4.5.1		
Para 4.2.5	Carry out two Post Implementation Reviews during the year.	2006/7
Para 4.4.5	Monitor IBM performance on critical IT services – WAN, LAN and external IT gateways.	2006/7
Para 4.4.7	Identify areas for reducing corporate IT costs or demonstrate the delivery of wider efficiency savings across the VLA.	2006/7
Para 4.5.3	Greater investment in Business Objects skills and knowledge as use of BO as a reporting tool across VLA becomes more widespread.	3 year
Para 5.1.3	Complete roll-out and sign-off e-Procurement project.	2006/7
Para 5.1.4	The ITU and Finance to carry out a review of Business Objects with a view to rationalising the number of versions in use.	2006/7
Para 5.3.2	Present business case and options for QA Proficiency Testing IT systems to ITSC.	2006/7
Para 5.4.1	Complete Microsoft Active Directory and Exchange 2003 migration.	2006/7
Para 5.4.3	Pilot Livelink Communities of Practice and progress wider use of Livelink for controlled documents/SOPs.	2006/7
Para 5.3.5	Complete intraVet migration to Livelink Web Content Management.	2006/7
Para 5.3.6	Redevelop IT system style guidelines to match new intraVet look'n feel.	2006/7
Para 5.3.7	Continue deployment of broadband access to VLA staff on demand.	2006/7
Para 5.3.8	Formalise ITU support for Dragon Dictate voice recognition software.	2006/7
Para 5.4.1	Consider IT auditing against ISO20000/BS15000.	2006/7
Para 5.4.2	Maintain conformance to BS7799 Information Security although formal accreditation is not a target this year .	2006/7
Para 5.4.3	Retest IT BCP and integrate plan in wider VLA continuity planning activities.	2006/7
Para 5.5.1	Capture required metadata to populate the IAR with VLA critical information assets.	2006/7

Appendix A - Glossary of terms

Appendix B –Technical strategy and Corporate Governance Framework

Appendix C – ITSC/ITEC governance relationship

Appendix D - References

Appendix E1 – 2006/7 projects portfolio – Work In Progress (WIP)

Appendix E2 – 2006/7 projects portfolio – To Be Done (TBD)