

Council, 26 March 2014

Information Technology Report

Executive summary and recommendations

Introduction

This report sets out the main activities of the Information Technology Department since the last meeting of Council. It includes statistical information and highlights key work undertaken.

Decision

The Council is requested to discuss the document.

Background information

None

Resource implications

The resources for the Department are set out in the annual workplan and budget 2013–14.

Financial implications

None

Appendices

Information Technology Report

Date of paper

17 March 2014

Information Technology Department

Management Information Pack

Guy Gaskins, Director of Information Technology

March 2014

1 Executive Summary

1.1 Core switch replacement

The project objective is to replace the existing core switch network to increase capacity and provide an infrastructure capable of supporting a virtual desktop and streaming media.

A supplier for the new core switch has been selected following the tender exercise and purchase orders raised. A new cabinet has been purchased and installed with additional structured cabling. An Uninterruptable Power Supply (UPS) has been bought and a new power supply provisioned. The core switch is now installed and configured; the migration to the new switch was completed successfully on the weekend of 8 March.

1.2 Service Availability

Telephone outage:

- On February 4 between 08:00 and 08:20 the registration team could not receive any external telephone calls due to a failed backup process consuming all the resources on the call queue server. The operating procedure for management of the backup service has been re-affirmed to the infrastructure team.
- On February 24 from 09:11 until February 25 10:28 no outgoing calls from the landlines were able to be made from the HCPC, although incoming calls were unaffected.

This was caused by damage to the British Telecom fibre network following an attempted theft of copper cabling. The outage affected over 700 area codes and was not fully rectified until February 26. However, on February 25 at 10:28 the IT support team redirected all calls through an alternative network provider enabling full functionality whilst BT completed the repairs after which the call routing was reverted to the original network provider.

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2 Strategic Objective 1

“To drive efficiencies within the organisation by the use of Information Technology and Information Systems.”

2.1 NetRegulate improvements 2013-14 major project

This project aims to implement a number of smaller changes to the registration system combined into a number of phased releases. The second deployment has been delivered successfully on 30 July 2013. The third deployment has now been successfully implemented on 6 March. There is one final release for the project to support the professional indemnity changes which is not expected to happen before the end of March.

2.2 HR and Partners systems and process review

The project objectives are to assess the current processes within the Human Resources and Partners teams; determine revised operational processes where required; assess the effectiveness of the current IT provision and if necessary run a tender for new services.

The operational As-is and to-be process maps have been completed as well as the requirements gathering exercise. The project is currently working through the public procurement tendering process which is planned to complete after June 2014. A Pre-Qualification Questionnaire (PQQ) has been published and the responses have been scored; the Invitation To Tender (ITT) is being prepared and the successful applicants from the PQQ stage will be invited to complete the ITT.

2.3 Core switch replacement

The project objective is to replace the existing core switch network to increase capacity and provide an infrastructure capable of supporting a virtual desktop and streaming media.

A supplier for the new core switch has been selected following the tender exercise and purchase orders raised. A new cabinet has been purchased and installed with additional structured cabling. An Uninterruptable Power Supply (UPS) has been bought and a new power supply provisioned. The core switch is now installed and configured; the migration to the new switch was completed successfully on the weekend of 8 March.

2.4 Expansion of Storage Area Network (SAN)

The project objective is to select, purchase and install an additional SAN to increase the capacity of storage available and to address issues concerning the reclamation of free space for reuse.

We currently have three Storage Area Network devices that support the majority of the production environment as well as the test environment. A selection exercise has completed and orders placed with delivery and installation scheduled for the end of March.

2.5 Registration systems review

This activity is to support the initiation of a project in the 2014-15 fiscal year to review the registration systems and processes. A project initiation document is being developed and representatives of the HCPC are meeting with similar organisations to learn through their experience of running registration functions and specifically how they support the function with information technology.

3 Strategic objective 2

“To apply Information Technology within the organisation where it can create business advantage.”

3.1 Education systems build

This project will deliver the technology elements and the business process change as identified in the Education systems and process review project.

The project is now in implementation and the first development cycles have begun. The project is currently in the third of nine cycles of development and testing. It has an expected completion date of March 2015.

The server infrastructure is now purchased and being implemented; this is phased throughout the project with a test environment already available, the database infrastructure is being ordered now and the pre-production environment will be built ready for the user acceptance testing at the end of the year. The last environment to be created will be for disaster recovery which will be ready two months prior to the new system going live.

3.2 NetRegulate system refresh

This project aims to upgrade key elements of the NetRegulate technical environment to improve the ability to support the system and to create a more flexible technical environment.

This project has been postponed due to an outstanding technical issue which has been referred to the vendor by our third party supplier.

We have been given confirmation that the vendor has started their testing and are confident of a successful outcome; HCPC have also resolved the infrastructural issues. A revised schedule will be agreed following the vendor test cycle.

3.3 Upgrade of Microsoft Sharepoint

The project objective is to upgrade our current implementation of Sharepoint 2010 server that primarily supports the document management functionality of the FTP case management system. The system is being extended for the use of the new Education system as well as for other specific groups of users. The aim is to upgrade the current environment before the Education system goes live in 2015.

Our Sharepoint partner is engaged in creating an upgraded environment to support the Education project and to re-develop the interface for the FTP case management system in preparation for a later phased transfer to the new environment.

3.4 Replacement of data line supplier

The project aim is to reduce the total cost, increase the capacity and performance while improving the resilience of the HCPC data connectivity.

A tender has been completed and a preferred supplier selected. Contracts have now been signed and the site survey has completed successfully. A schedule is now being agreed to support the dependencies of the Core Switch replacement project and the business renewal cycles. It is expected that the switch over of services will happen in early May following the renewal of Physiotherapists.

3.5 Migration of Email server

This activity supports the major project currently prioritised for delivery during the 2014-15 fiscal year, to migrate the corporate email server from IBM Lotus Domino to Microsoft Exchange and Outlook. This is an enabling change that supports interoperability between a number of Microsoft technologies that the HCPC currently use and expect to use in the future.

The work to be completed prior to the major project is a technical analysis of all of the services and applications that the IBM Domino environment currently supports and an assessment of the methods for migration as well as the complexity, risk and effort involved.

The analysis and review is expected to complete by April 2014.

3.6 Expansion of office space

This activity supports the expansion of office space in 186 Kennington Park Road adding an additional twenty two desks for an increase to the registration team.

Twenty two additional PCs and telephones have been purchased, built and configured awaiting deployment to the office space. The network has been extended to the new office. The telephone system is being reconfigured to account for the team expansion.

This is now complete.

3.7 Temporary Registration database

This project aims to add extend functionality of the Temporary Registration Database.

The first delivery into the testing environment has been made and feedback received. Additional reporting requirements have been identified. This is now unlikely to go live before the end of March 2014.

4 Strategic objective 3

“To protect the data and services of HPC from malicious damage and unexpected events.”

4.1 Telephone system capacity expansion

Following the expansion of the Registration team the telephony system requires a hardware upgrade to support the increased capacity.

The telephony controllers are being physically upgraded on the weekend of 15 March.

4.2 Remote access project

The project objective is to investigate options to deliver a remote access technology that allows users to connect to the HCPC network using non-HCPC equipment. The project will deliver a pilot for any proposed technology solution.

A proof of concept has been created and an initial pilot is being run with IT employees and a number of business users. Positive feedback has been received to date with a number of issues and features being identified. Changes have been made following the feedback and the service is expected to go live in May 2014 following the upgrade of the HCPC internet connection.

4.3 Upgrade of the web internet platform

The project aim is to upgrade the current Internet site platform operating system to retain vendor support. Although Microsoft will de-support the current version of the operating system in July 2015 the upgrade will be completed prior to July 2014 in order to maintain support service levels at our external hosting provider where the services are located.

A test environment for the upgraded platform has been created and the business users are currently testing the most recent web development on the new platform. A pre-production environment has been created in our off-site hosted environment in

anticipation of a migration in April 2014.

4.4 Backup capacity review

This activity is to review the current magnetic media backup (tape) device and identify whether a replacement device is needed to achieve backup capacity and performance levels.

A review of the backup strategy as well as the technology solution by an external consultant has identified that the current device will no longer be capable of supporting the expected growth of data. A replacement device has been identified and purchased. Installation and configuration of the new device is scheduled for completion in February 2014.

This is now complete.

4.5 Penetration security testing

This activity is run approximately quarterly and is typically scheduled to follow changes to the HCPC internet services such as remote access or the web sites. The testing is performed by an independent security company who attempt to gain access to the HCPC Information Systems by imitating the actions of a malicious hacker.

A four day security test was completed in the week of 17 February; we are waiting for the report to be distributed.

4.6 Development of capacity plans

This activity is to review the capacity planning for the IT Infrastructure, building capacity plans for key systems ensuring availability during operating hours.

The review began in January 2014 and will work through the major components of the underlying infrastructure to forecast capacity and to identify upgrade and refresh cycles. The work is expected to conclude in March 2014.

4.7 Service Availability

Telephone outage:

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5 Strategic Objective 4

“To meet internal organisation expectations for the capability of the IT function”.

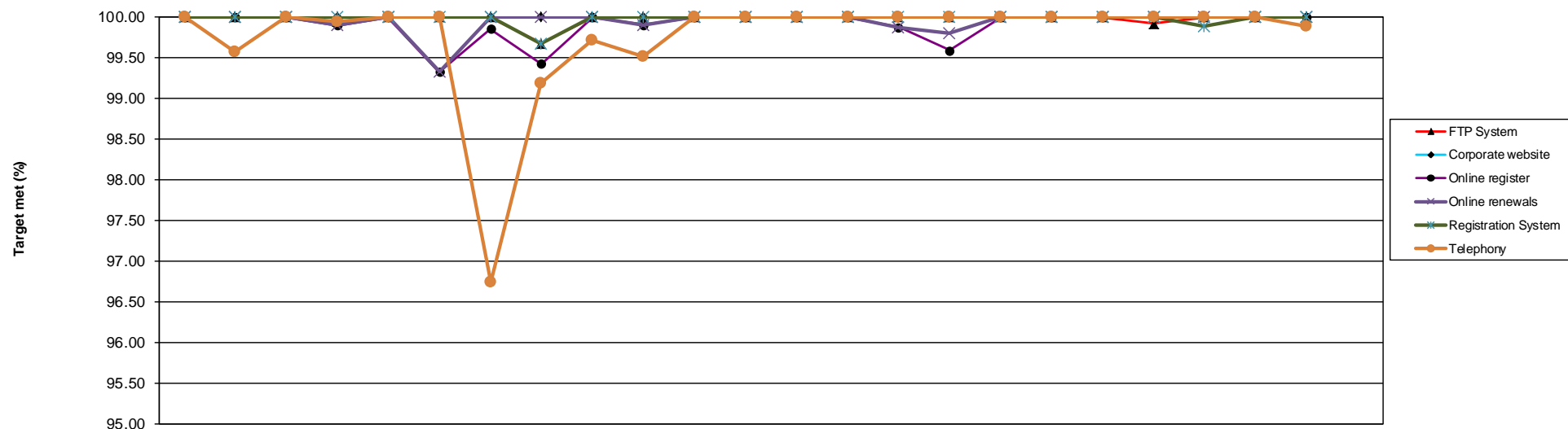
5.1 Service Desk tool review

This activity is to refine the service desk processes and develop the reporting for the service desk tool.

An initial review of the current reporting was performed in December 2013 with a technical consultant from the software tool vendor. A second session is being scheduled for February 2014 to develop further reports to help in the running of the function.

The second consultation was to include an upgrade to the most recent version of the software. However, the release of latest version has been delayed for our operating platform and so the expected completion of this activity will be in May 2014.

IT Service Availability April 2012 - March 2014



Service availability	2012			2013									2014									09/10	10/11	11/12	12/13	13/14			
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	FYE	FYE	FYE	FYE	YTD
FTP System	100.00	100.00	100.00	99.94	100.00	100.00	100.00	99.68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.92	100.00	100.00	100.00				99.97	99.99	
Corporate website	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Online register	100.00	100.00	100.00	99.90	100.00	99.33	99.86	99.43	100.00	99.91	100.00	100.00	100.00	100.00	99.88	99.59	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00				99.87	99.95
Online renewals	100.00	100.00	100.00	99.90	100.00	99.33	100.00	100.00	100.00	99.91	100.00	100.00	100.00	100.00	99.88	99.80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00				99.93	99.97
Registration System	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.68	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.89	100.00	100.00				99.97	99.99	
Telephony	100.00	99.58	100.00	99.94	100.00	100.00	96.75	99.19	99.72	99.52	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.89	100.00	99.98	100.00	99.56	99.99	

Performance targets	Uptime target*	Period
FTP System	98.45	10 hr X 5 days
Corporate website	98.30	24 hr X 7 days
Online register	98.30	24 hr X 7 days
Online renewals	98.30	24 hr X 7 days
Registration System	97.85	10 hr X 5 days
Telephony	98.45	10 hr X 5 days

*excludes planned maintenance