# Information Technology Department Management Information Pack

Guy Gaskins, Director of Information Technology

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# 1      Executive Summary

## 1.1     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.

The service has been security tested and a medium severity risk identified. The vendor has been informed and is developing the software to address the issue. While a software improvement is being developed the service has been moved to our higher security hosting facility and another security test is being scheduled to validate whether the risk has been mitigated before any wider implementation.

## 1.2     External penetration security testing
This activity is run approximately every quarter 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. The results from this testing cycle were very good with only four medium and low risk observations made. One of the medium observations related to a non-production service that is being tested prior to implementation. The NGS conclusion was:

*"No serious vulnerabilities were identified in the web applications or the external network infrastructure. Some medium risk issues were noted, which require corrective actions in order to bring the HPC (sic) environment in line with good security practice. …Beyond these items, all security findings were of a low severity and are unlikely to cause serious problems in a realistic scenario."*

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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. This has been delayed to allow development of a bug fix in the live system; combined user acceptance testing is scheduled for early May with release on 21 May.

### 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 project is currently working through the public procurement tendering process which is planned to in September 2014. A Pre-Qualification Questionnaire (PQQ) has been published and the responses have been scored; the Invitation to Tender (ITT) has been distributed to the selected suppliers with responses to be received by the end of May and presentations early August.

### 2.3 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. The new storage has been received and installed and the hardware has been commissioned. The configuration and training is planned to complete in early May after which it will be production ready.

### 2.4 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. The project is expected to formally initiate in October 2014.

# 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 fourth 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 has been installed 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. User acceptance testing is now scheduled for June 2014.

**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.

A test environment for the FTP case management system has been created and deployed; the Education environment is created and waiting to be deployment by our Sharepoint partner. The FTP case management system interface has been changed to work with the new version and is in system test; user acceptance testing and deployment will be scheduled to coincide with a planned maintenance release.

**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 the end of April 2014.

### 3.6    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. A second version of the software has been released for user acceptance testing which is scheduled to conclude at the end of April.

### 3.7    Upgrade to the Microsoft Office suite

The aim of this project is to upgrade the Microsoft Office suite of applications from version 2010 to 2013.

The software has been packaged for deployment and includes a number of additional improvements identified during the Windows 7 upgrade project. A pilot group of sixteen employees have been using the new software for a month and have given very positive feedback. The pilot has been extended for another month to validate additional changes at which point a wider phased deployment will begin.

# 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 were upgraded on the weekend of 15 March and failover testing was performed successfully. This is now complete.

## 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.

The service has been security tested and a medium severity risk identified. The vendor has been informed and is developing the software to address the issue. While a software improvement is being developed the service has been moved to our higher security hosting facility and another security test is being scheduled to validate whether the risk has been mitigated before any wider implementation.

## 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. There has been a delay while an issue was rectified. Penetration testing is being scheduled for May to confirm the new environment is secure with an anticipated go-live in June 2014.

**4.4      External penetration security testing**

This activity is run approximately every quarter 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. The results from this testing cycle were very good with only four medium and low risk observations made. One of the medium observations related to a non-production service that is being tested prior to implementation. All issues are being addressed and are in the plan for future web releases. The NGS conclusion was:

"*No serious vulnerabilities were identified in the web applications or the external network infrastructure. Some medium risk issues were noted, which require corrective actions in order to bring the HPC (sic) environment in line with good security practice. …Beyond these items, all security findings were of a low severity and are unlikely to cause serious problems in a realistic scenario.*"

**4.5      Internal penetration security testing**

This activity has been run for the first time this year. Unlike the external security testing this exercise identifies any issues with IT security from the perspective of someone connecting directly to the HCPC internal network rather than via the internet. The testing is performed by an independent security company who attempt to gain access to the HCPC Information Systems mimicking several scenarios including that of a member of the public with their own laptop; a disclosed user account and an unlocked HCPC PC.

The tests were performed on the 17 and 18 March. Although the verbal feedback was very positive we have not yet received the formal report.

**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 now in review with changes being made incorporating feedback.

# 5     Strategic Objective 4

*"To meet internal organisation expectations for the capability of the IT function".*
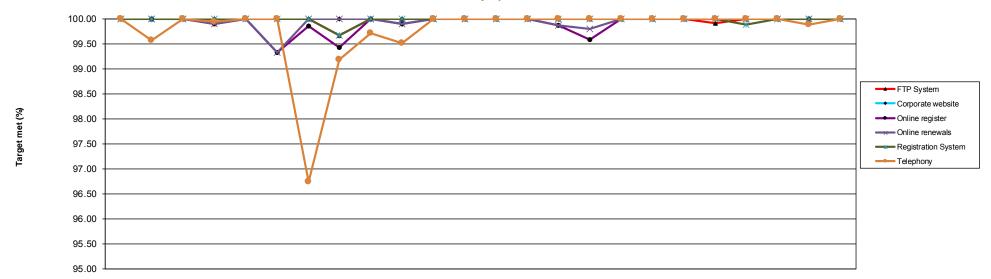
**5.1     Service Desk tool review**

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 completed in the week of 14 April and included the upgrade to the most recent version of the software. This is now complete.

## IT Service Availability April 2012 - March 2014



| Service availability | 2012 Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 2013 Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 2014 Jan | Feb | Mar | 09/10 FYE | 10/11 FYE | 11/12 FYE | 12/13 FYE | 13/14 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 | 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 | 99.99 | 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 | | 99.51 | 99.86 | 99.87 | 99.96 |
| 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 | | 99.51 | 99.86 | 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 | 99.89 | 100.00 | 100.00 | 100.00 | 100.00 | 99.98 | 99.96 | 99.77 | 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 | 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

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