Information Technology Department Management Information Pack

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1 Executive Summary

There has been a continued progression across the majority of the key projects and activities of the IT department. However, there has been a significant service disruption as below:

1.1 Service availability
Registration system, Online Renewals, Online Register outage:

On Saturday 16 January at approximately 19:30 a power circuit supplying the server room at 184 Kennington Park Road (KPR) tripped cutting power to one third of the IT services. The Uninterruptable Power Supplies (UPS) maintained power to the servers until 22:45 at which point servers powered down. The 24 hr monitoring service subsequently alerted the outage.

All virtual services automatically moved to alternative servers and the HCPC data lines also failed-over to backup services successfully. However, the services that are delivered with physical servers became inoperable. The services affected were the registration system (NetRegulate), Online Renewals, Online Register and the Domino environment which includes the intranet. The Online renewals and Online Register are dependent upon elements of the registration system to function fully.

The power outage also damaged internal disks in the registration system which delayed the recovery of the service.

1 - Registration system outage:

The registration system was unavailable from 22:45 Saturday 16 January until 15:15 Monday 18 January, a total of just over seven working hours.

The system needed to be partially recovered for which we engaged our external support partner to support the procedure.

2 – Online Register outage:

The Online Register was unavailable from 22:45 Saturday 16 January until approximately 08:00 Sunday 17 January, a total of nine hours and fifteen minutes.

The Online Register was repointed to the HCPC disaster recovery standby facilities while the registration system was being recovered. Once the registration system had been recovered the Online Register was repointed back to the primary database.

3 – Online Renewals system outage:

The Online Renewals system was unavailable from 22:45 Saturday 16 January until approximately 09:15 Tuesday 19 January, a total of approximately fifty eight and an half hours.

To maintain the integrity of the primary database the Online Renewals system was turned off while the primary registration system database was being recovered. This reduced the complexity and the risk of the recovery procedure. Following the recovery of the registration system, the Online Renewals system recovery was further delayed by a corruption of a connection configuration.

4 – Domino system outage:

The Domino system was unavailable from 22:45 Saturday 16 January until 08:00 Monday 18 January. This did not affect the business during working hours.

Once power had been restored to the server room, the system was brought successfully online before the start of the working day.

Registration system outage:

Separately, for eighteen minutes on Thursday 17 December 2015; one hour twenty nine minutes on Tuesday 22 December 2015 and thirty three minutes on Tuesday 5 January 2016 the NetRegulate registration system was unavailable.

The outages were caused by an issue with a single form within the NetRegulate system causing the entire system to hang. A work around has been agreed with EnergySys who will now execute that function on demand safely after working hours. They believe the issue will be resolved by the upgrade of the application delivered through the NetRegulate system refresh project.

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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 MP78 - HR and Partners systems build

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

The project is now in its implementation stage. A series of meetings has taken place between HCPC and the technology vendor to address shortcomings in the technologies ability to deliver elements predominantly of the Partner requirement. The vendor has demonstrated how the existing product can deliver the majority of the gap and has committed to developing the product to meet the remaining areas. A proposed two stage delivery has been accepted by the vendor. This will allow the earlier delivery of the HR elements of the system while the project waits for the agreed developments to complete.

A plan for the migration of the data from the current HR system has been agreed with the incumbent supplier and is proceeding. The required changes for the HR element of the project are in development and although delayed are expected in January 2016. Test script writing is progressing well. An audit by our ISO27001 auditors of the vendor payroll bureau service has been carried out and we are waiting on a full report.

The Partners system technical design to address the functional shortcomings in the system has been agreed.

2.2 MP85 – Registrations transformation and improvement project

This project aims to implement the recommendations of the Registration system review project. It will be structured into three main phases starting with the implementation of a continuing professional development (CPD) online system.

The business case and project initiation document has been reviewed and agreed by EMT. The project has engaged with an external technical specialist company and has developed a 'rule book' for the development of the system which will be referenced by any implementer. The same company will be used to provide independent assurance of any development through audits and as part of a Technical Design Authority (TDA).

An implementer has been selected and contracts signed. The first project kick-off meeting is due to be held in late January.

2.3   MP80 – Stakeholder relationship project

This project aims to provide a single central management system for contacts not managed through a current business system and where several departments have a shared interest in the relationship held at an organisational level.

A final round of workshops to assess any impacts with the current implementation of the Education system are being arranged. Following this an updated project initiation document will be presented to EMT for a decision whether to progress to the next stage.

2.4   Skype for Business and Outlook Web Application

This activity builds upon the successful implementation of Office 365 and the move to the Microsoft Outlook client. The aim is to improve employee collaboration and flexible working.

This is achieved by the use of Microsoft's Skype for Business service which provides presence information i.e. whether someone is away from their desk or available for a call; instant messaging and video conferencing. Separately by enabling access to the Outlook Web Client, employees will be provided with an additional method to gain access to email, calendar and contacts remotely.

This went live in December 2015 and the project is completed.

3   Strategic objective 2

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

3.1   MP64 - Education systems build (second phase)

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

The project has successfully gone live with the first stage in March 2015. The project aims to deliver the second phase that incorporate integrations with the corporate web site, and the registration system, as well as a series of small changes to the core application. The functional design documents have been signed off with the third party implementers and they have started the integration development. User acceptance testing completed successfully but issues during the release process prevented going live on 21 November.

Following the failed release, a new technology has been employed to make an exact copy of the production environment to allow a full deployment to be made to this 'pre-production' environment during office hours. This is being used to diagnose the issues observed before making another attempt.

Due to a dependency with the NetRegulate system refresh project, the integrations with NetRegulate will not be activated until the delivery of that project, which is anticipated to be March 2016.

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 now been combined with the NetRegulate refresh project 2015-16 to incorporate additional areas of the technical infrastructure. This decision has been made following testing in January 2015, to reduce the risk of issues being caused from incompatibility of dependent technologies.

User acceptance testing run during November identified a significant performance issue. The root cause has now been identified and corrected. Further testing is being performed to validate the system performance and integrity. The revised anticipated go-live date is March 2016.

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 has been extended for the use of the new Education system as well as for other specific groups of users.

A test environment for the FTP case management system has been created and deployed; the Education environment is also created and live. The FTP case management system interface has been changed to work with the new version and is in system test.

The user acceptance testing is combined with a larger maintenance release of the FTP system and both the upgrade and the maintenance release will be deployed together. The vendor has now tested the upgrades in their own environment and in January 2016 has upgraded the HCPC test environment; user acceptance testing has started. It is anticipated that there will be several iterations of testing.

3.4   MP84 - 405 Kennington road fit out

The aim of this project is to complete the refurbishment and fitting out of the new building at 405 Kennington road following the decision by the Council. There will be a significant technology impact with the extension of the network, implementation of video conferencing facilities, Wi-Fi network and the provision of office space.

The IT element of this project is progressing well. All of the IT provision is complete except for the redundant data line to the office. Until we have the redundant service operational we will experience a loss of data connectivity if the primary data circuit is interrupted; the risk is very low.

4   Strategic objective 3

"To protect the data and services of HCPC from malicious damage and unexpected events."

4.1   MP74 - Financial systems upgrade

This major project aims to upgrade the two core financial systems that maintain the HCPC financial ledger and purchase ordering systems. The upgrades will enable the continued support of the applications as well as the implementation of a number of bug fixes and service improvements.

The project has completed the main deliveries of the upgrade of the Sage financial system and the PRS purchase order system. Implementation of the electronic invoice approval system was completed in August 2015.
The project has completed user acceptance testing the disaster recovery implementation of the financial systems, in January 2016.

The project is completed.

4.2   MP82 - Secure telephone payment service

The aim of this major project is to review the current secure telephone payment service and migrate it to a more resilient platform either with the current supplier or to a new supplier. This follows the current supplier giving notice of the end of life for the current service.

The current service was stopped at the end of May 2015 following the withdrawal of key telephony services by Talk Talk Business (TTB).

Alternative arrangements have been made to manage the processing of credit cards while the project implements an alternative service. The selected new secure credit card payment telephone service requires the transfer of the HCPC's voice services from Talk Talk Business to Gamma Telecoms ltd. which will also be delivered by the project.

The technical designs of the service have now been agreed and contracts signed. The services have been made available for user acceptance testing in January 2016 with a target switch on of the Semafone service and switch over of the telephone service provider by the end of February 2016. As part of the move to a new telephony provider the main contact telephone numbers have been migrated to 03 numbers. This project is on plan.

4.3   Service availability

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5 Strategic objective 4

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

5.1 Information Technology survey 2015

The IT department aims to run a customer satisfaction survey every two years. The survey helps the department to identify what is working well and where we need to focus, to improve.
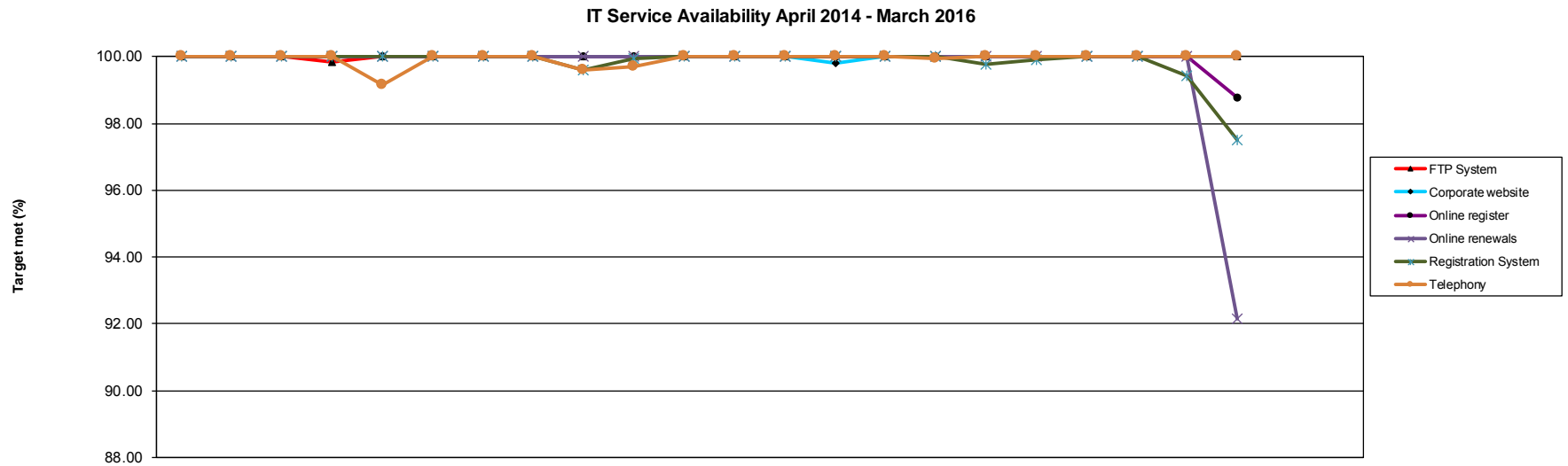
The last survey helped shape improvements over the last two years and we hope to use the feedback from this survey to help define the next two years.

The survey consists of fourteen structured questions that focus on key elements of the IT service and include both multiple choice and free text responses. The survey results were very positive with 34% of employees regarding the overall service as 'Excellent', 45% as 'Good', 16% as 'Neutral', 6% as 'Requires improvement' and nobody regarded the service as 'Poor'; just over half of the organisation responded.

Following the survey the following actions have been taken:
- A report of the findings of the survey has been published and presented in a number of intranet articles;
- Launched Outlook Web Access (OWA) for home device use;
- Upgrade of the Wi-Fi has been procured and should be launched in February;
- IT ticket system categories have been updated;
- Issues about notification of IT ticket updates has been raised as an issue with the supplier;
- A new IT support telephone intelligent call queue has been procured and is planned for implementation in February;
- Call recording of IT support telephone calls has been procured and is planned for implementation in February;
- A post ticket 'satisfaction survey' feature has been investigated. This is planned to be released in February;
- IT support ticket escalation process has been clarified and published via an article on the Intranet;
- Bespoke customer experience training for the IT team is being designed and planned for early 2016/17;
- A video 'how to guide' is being created by the communication department to support logging tickets;
- The asset list on the IT ticketing system has been corrected and updated; and
- Notifications of service disruption is now posted to the intranet as well as sent via email.

6 Service availability statistics

IT Service Availability April 2014 - March 2016

Service availability	2014 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2015 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2016 Jan	Feb	Mar	11/12 FYE	12/13 FYE	13/14 FYE	14/15 FYE	15/16 YTD
FTP System	100.00	100.00	100.00	99.83	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				99.97	99.99	99.99	100.00
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	99.80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			100.00	100.00	100.00	100.00	99.98
Online register	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	98.76			99.86	99.87	99.96	100.00	99.88
Online renewals	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	92.14			99.86	99.93	99.97	100.00	99.21
Registration System	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.60	99.95	100.00	100.00	100.00	100.00	100.00	100.00	99.77	99.92	100.00	100.00	99.41	97.51			99.77	99.97	99.99	99.96	99.66
Telephony	100.00	100.00	100.00	100.00	99.16	100.00	100.00	100.00	99.59	99.70	100.00	100.00	100.00	100.00	100.00	99.94	100.00	100.00	100.00	100.00	100.00	100.00			100.00	99.56	99.99	99.87	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