Committee(s)	Dated:
IT Sub Committee – For Information	14 July 2017
Subject: IT Division – Member Update	**Public**
Report of: The Chamberlain	**For Information**
Report author: Sean Green, IT Director	

Summary

The IT Division has maintained a focus on service availability whilst seeking to progress the transformation programme that will uplift the overall quality of IT services at the Corporation and City Police. Core updates:

- Service performance for the Corporation (CoL) and City of London Police (CoLP) was good with no P1's for CoLP and 2 P1 incidents for CoL.
- With the recent national incidents CoLP have had to enact the Casualty Bureau at short notice with the IT Service Desk and the IT Division providing IT support out of hours. The IT VIP team have also provided extended support to the newly established Westminster office for John Barradell who is leading the Grenfell Tower task force.
- The procurement activities for the LAN Hardware and services design, build and support was issued on the 7th June with a final submission date of 19th July. A decision on the tender award is expected by the end of July. Communications, presentations and roadshows are accelerating to support IT transformation, in particular the roll out of new devices and Office 365 with the CoL desktop transformation. Current IT change restrictions could impact the roll out timetable.
- CoLP Programme updates are provided in the body of this report. A business case will be prepared shortly for CoLP desktop transformation.
- A complete review of IT risks has been completed with a new heatmap presented in the risk report.
- Questions raised at the previous IT Sub Committee concerning:
  - The division of responsibilities between Facilities staff and IT staff with the Network remediation work currently underway covered in this report.
  - The division of responsibilities between Communications and IT for the management of the internet and development of the internet covered in a separate report for the IT Sub-Committee.
- A workshop with Members was held to review the approach and outcomes expected from the Agilisys contract extension negotiations.

Recommendation(s)

Members are asked to:
- *Note the report.*

Main Report

IT Service and Support

1. Customer satisfaction with City of London and City of London Police Service Desks is consistently very high and feedback from users achieved scores in excess of 90% each month. The Service Desks resolve over 75% of all calls and consistently ensure that calls are answered within target.
2. There were 2 P1 incidents in City of London which impacted internet access and Office 365 at London Councils. These were both caused by issues following security patching which required server restarts. Actions have been completed to ensure that there is no risk of repeat.
3. In June users in City of London were unable to send email outside of the organisation following a migration of the Office 365 platform. The incident report is being prepared by Agilisys and Microsoft but early indicators point to a Microsoft licensing issue which applied incorrect sending limits.
4. There were no P1 incidents in City of London Police.

IT Transformation Summary

5. Rollout of Office 365 will begin with the IT team in July followed by Comptroller's and Remembrancer's. This is subject to modifications with as a result of a current IT change freeze.
6. Of the 297 applications required, 60% of packaging is complete and a third of applications have passed User Acceptance Testing (UAT) and ready for Windows 10 deployment.
7. IT Business partners are working with Corporation departments on device selection with a mobile first policy.
8. Regular engagement across different Corporation sites to prepare colleagues for the desktop transformation and devices that will be available.
9. First 22 sites fully remediated including Guildhall.
10. Plan in place for remaining 90 sites to be complete by October 2017
11. LAN design, build and support tenders will be submitted by 19th July.

Police IT Programmes Update

12. Automatic Number Plate Recognition – It has been agreed that an ANPR work stream will be set up under the new Secure City Programme. There is a launch of the National ANPR Service on the 27th June 2017. Milestones delivered in this period include: Setting up the infrastructure and testing a secure PSN connection for the service.
13. Niche Programme (Note The NicheRMS™ Police Records Management System is an incident-centric tool that manages information in relation to the core policing entities: people, locations, vehicles, organizations, incidences and property/evidence). Milestones delivered in this period include: The Virgin Connectivity into Bishopsgate implemented; configuration and testing of

the desktops already in place for connectivity and access; roles and responsibilities, process mapping and SLA's will be completed during the next period.

14. Network Transformation - The Hardware supplier contract has been awarded and the programme is in the process of on-boarding. The GJR Exit Solution proposal has been approved and project delivery is underway. The outstanding Agilisys security clearances have now been received, and so remediation of CoLP sites can start.
IMS-DRS (Integrated Management System and Driver Rectification System linked to the CCTV network) The segregated LAN has now been installed into Wood Street and is functioning. This will provide a Disaster Recovery Build to ensure in the event of a catastrophic failure of the IMS-DRS system, the Force Control Room at Wood Street will be provided with adequate IMS-DRS CCTV Station to support on-going operation.

15. Office 365 - Work is continuing on the preparation of the CoLP Office 365 business case. The time lines that individual police forces will be able to roll out Office 365 will be guided by the National Productivity Services Programme, led by the National Police Technology Council. Indications are that pilots will start in early 2018. In order to secure appropriate funds a business case will be presented in October /November 2017.

Risk Actions

16. Risk remains a key focus for the IT Division and we are continuing to ensure this drives the priority for project works and Change Management decisions. A Deep Dive exercise, Risk Workshop and the appointment of the IT Business Manager (who will own Division Risk) have moved the Corporation to a better position with regard to understanding its risk landscape and the on-going management of IT Risks.

17. Following further assessment, the IT Division currently holds 19 risks, of which 3 are RED. These risks are tracked in Covalent. All risks have actions, with target dates to enable tracking and management.

18. IT Corporate Risks that remain are:
   o CR16 IT Security - Update - 10 steps assessment has highlighted specific priority areas which are managing user privilege, remote access and user education and awareness. Delivery of Privilege Access Management solution begins to roll out throughout June and July)
   o CR19 IT Service provision - Update - expected to move to Amber by December 2017). For a summary of the status of these risks see Appendix A.

Memorandum of Understanding (MoU) between the IT Division and City Surveyor

19. A question was asked at the last IT Sub-Committee about the division of responsibilities for IT Data Communications rooms between Corporate IT and

Facilities Management. From a meeting held with the City Surveyor and Corporate IT since the last IT Sub Committee it was confirmed:

- The current state of the cabling supporting the IT infrastructure is a Corporate IT responsibility
- The remediation is the responsibility of IT and cost to resolve is within the Corporate IT budget
- All works will comply with relevant standards especially Health and Safety Standards
- IT will be responsible for all electrical cabling from the distribution board to the communications cabinet and all IT infrastructure cabling
- We will communicate on a site by site basis directly with the end users
- Corporate IT would provide advance notice to your Facilities Management of any works being undertaken
- Once fully remediated new processes will be enforced to ensure consistent good practice and management of IT assets and data communications rooms across the Corporation and City of London Police estate. The detailed MoU agreed is attached as Appendix B.

Corporate IT and Agilisys Contract Extension

20. Preparation for contract negotiations with Agilisys for the extension of the existing IT contract has begun. The expectation is that negotiations will start in July 2017 and be completed by October 2017. A recommendations report regarding changes and improvements to the existing contract will be brought back to the IT Sub-Committee after this date.
21. A Workshop held with Members on 28th June 2017 to review the negotiation approach with Agilisys.
22. It is expected that the workshop will help officers understand Members' priorities regarding any enhancements to the contract and the extended richer Key Performance Indicators (KPI's).
23. The slides and any actions from this meeting will be circulated to Members as a late paper.
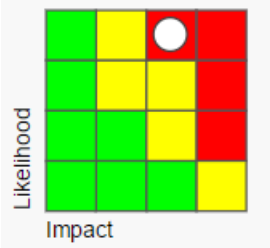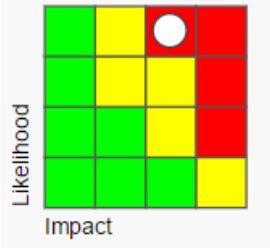
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Appendices

Appendix A – IT Corporate Risks Update
Appendix B – Memorandum of Understanding IT Division and City Surveyors

Appendix A: Update on IT-related Corporate Risks

Risk	Score	Heatmap	Latest update
CR16 – information Security	Likelihood: 4 (Likely) Impact: 4 (Major)		10 steps assessment has highlighted specific priority areas which are managing user privilege, remote access and User education and awareness. Delivery of Privilege Access Management solution begins to roll out throughout June and July; Secure reconfiguration of remote access solutions is underway; HR training lead working with CISO on user education and awareness campaign with a view to launch in July.
CR19 – IT Service Provision	Likelihood: 4 (Likely) Impact: 4 (Major)		The primary focus of the team is on stabilisation, a more robust approach to managing change has been adopted, reducing the risk of service interruption. Team level approach to risk management is now aligned fully to the top level approach. The risk is expected to reduce to Amber by December 2017 followed by steady progress to Green in the following months.

Appendix B – Memorandum of Understanding IT Division and City Surveyor

1 Purpose

The purpose of this Memorandum of Understanding (MoU) between the IT Division and City Surveyors is to define the standards required for IT Communications (Comms) rooms in the future, ownership of the Communications rooms and the split of responsibilities between the IT Division and the City Surveyors department.

2 Communications (Comms) Room Standards

2.1 Hosted Equipment

It is agreed the all Comms rooms hosting IT equipment are the responsibility and are under the ownership and supervision of the IT Division (IT Director or a delegated member of the IT team). No changes in these rooms or access provided (outside emergencies) can be made without the agreement of the IT Division.

A Comms Room will typically host the following hardware:

- Active network equipment
- UPS
- Cabinets
- Patch panels
- Servers. (NB. There should be no Servers on remote sites, but there are currently 10 on remote sites which will be required until they can be safely decommissioned.)
- Air conditioning

Comms Rooms must be tidy and there must be no old equipment, boxes, cabling or other items on the floor.

2.2 Location & Other Building Services

The location of the Comms Room shall comply with the requirements specified below and where any retrospective changes are required it is the IT Division responsibility to seek appropriate funds and oversee the works

2.2.1   The Comms Room must not be located adjacent to fixed spaces such as lift shafts or toilet blocks;

2.2.2   To maintain the integrity of the Comms Room the room should be designed and constructed to resist water ingress, there must be no risk of flooding the Comms Room from sprinkler systems within the rooms or elsewhere in the building. A doorsill should be provided where needed.

2.2.3   Building services not supplying the Comms Room itself will not run through it. Ideally this would also apply such that they are not directly beside, above or below it but where this cannot be avoided the building services shall be installed in a manner such that in the event of a leak it will not cause direct damage to the server equipment. The services that this includes:

- Water mains, water storage, supply/waste pipes and drainage

- Gas mains

- Electrical supplies (not relating to the Comms Room)

- Air Conditioning Services (not relating to the Comms Room)

- Sewage pipe work

- Sprinklers should not be provided in the Comms Room.

2.3 Physical Requirements

2.3.1   Minimum height of the rooms should be 2.6m from the finished floor to any overhead obstructions or ceiling **and where any retrospective changes are required it is the IT Division responsibility to seek appropriate funds, identify a new location and oversee the works**

2.3.2   The floor construction should be suitable for heavy Server, Telecommunications and Power Supply Systems, the floor should able to support up to 6 cabinets each weighing up to 500Kgs;

2.3.3   The main and intermediate door[s] leading from the circulation space, through to the Server or Hub Rooms shall be a minimum of 900mm wide and 2130mm high, with doorsills to be provided where required to prevent adjacent sprinkler water entering the Comms Room, hinged to open outwards (building regulations permitting).

2.3.4   The door[s] shall be secured by the building access control system. Where this is not possible, a combination security locking mechanism such as Digi locks should be used;

2.3.5   The entrance to the Comms Room should be finished floor level except for the doorsill where provided to prevent water ingress;

2.3.6   Room decor – finished in light, easy to clean non static finish.

2.4   Power in Comms Rooms Standards

2.4.1   Clean circuits must be designed to minimise the possibility of a trip in another part of the building affecting the power supply to the Comms Room;

2.4.2   Cable routing must be provided so that electrical cables are not trailing on the floor and do not obstruct full access to the rear of the racks;

2.5   Earthing Standards

2.5.1   Earthing is to be provided on a dedicated earth bar to current building standards. The IT infrastructure maintenance provider is responsible for ensuring all equipment including the cabinets is earthed correctly to standards detailed below:

2.5.2   BS6701 – Telecommunication cabling and equipment installations;

2.5.3   BS7671 – Requirements for electrical installations: IEEE wiring regulations.

2.6   Communications (Comms) Room Environmental Standards

The Comms Room will be designed and constructed to meet the following environmental specifications and where any retrospective changes are required it is the IT Division responsibility to seek appropriate funds and oversee the works:

- Dry Bulb Temperature: 20°C to 28°C;
- Max temperature rate of change: 5°C per hour;
- Humidity levels as achieved by well-maintained air conditioning systems;
- Windows should not be provided in the Comms Rooms, where this is unavoidable, windows should be secured with security grills or bars;

- Air cooling by way of air conditioning or other acceptable mechanical means must be provided. The room heat load will be calculated using equipment lists and / or the CIBSE guidelines;

2.7 Comms Room Additional Standards

2.7.1 Physical Standards

2.7.1.1 The Comms Room must have minimum internal dimensions between finished walls of 6500mm x 3500mm **and where any retrospective changes are required it is the IT Division responsibility to seek appropriate funds and oversee the works**;

2.7.1.2 The walls should be of suitable construction for heavy Mechanical servicing systems (the type that ordinarily would be expected to be found in a Comms Room) to be wall mounted;

2.7.1.3 Lighting shall be a minimum of 300 lux in the horizontal plane and 150 lux in the vertical plane, measured 1000mm above the finished floor.

2.7.2 Power Standards

The following requirements apply unless there is a bespoke need to exceed them due to the nature of the equipment being housed in the Comms Room and where any retrospective changes are required it is the IT Division responsibility to seek appropriate funds and oversee the works:

2.7.2.1 Dedicated Comms Room 3 phase Distribution Board with internal stop switch located within Comms Room;

2.7.2.2 Up to 7kVA total power requirement for each Cabinet;

2.7.2.3 Each cabinet will be provided with a resilient pair of dedicated 32 amp, 230 volt three phase, clean supplies through an IEC 60309 connector;

2.7.2.4 A minimum of 12 x 230V13A sockets as per the Environmental Schedule are required within the Comms Room for use with non-Server related power requirements (i.e. technician's laptop or test equipment). The final position of these outlets will be determined by the design and consultation process;

2.7.3 Heat Gain Standards

The table below provides the indicative heat output required for the cooling / air conditioning design. Final configuration may vary but output figure will remain. Note that these figures are for a single rack and do not include additional output that may be required to allow for other thermal gains and support any other systems required by the construction, M&E or FM provider, such as additional devices to run control software or additional PoE switches to power BMS or access control points. Exact cooling requirement in each Comms Room may vary.

Description	Thermal (Watts)	BTUs/Hr
Typical Network Rack	3625	8334

Comms Room Heat Gain

2.7.4 Environmental Standards

The Comms Room will be designed and constructed to meet the additional environmental specifications:

2.7.4.1   Humidity levels as achieved by well-maintained air conditioning systems;

2.7.4.2   DX Air Conditioning Units installed (N+1 Configuration) the position of which shall be agreed;

A gas suppression fire extinguishing system is required to be installed in the Comms Room; this should be capable of being activated from outside the Comms Room.

2.7.5 Environmental Sensors

An environmental sensor will be installed in each Comms Room by the IT infrastructure maintenance supplier. The sensor should have the following characteristics:

- Rack mountable
- RJ45 port(s) for Ethernet connection
- DHCP support for IP address assignment
- Remotely configurable using secure protocols such as HTTPS and/or SSH
- Role-based access control (e.g. view, control, administer)
- Temperature monitoring

- Remote temperature sensors for monitoring multiple cabinets in a single comms room. There should be a temperature sensor in every rack.
- Humidity monitoring
- Multi-level information, warning, and alarm generation.
- Full SNMP management information base (MIB) for monitoring and alarm trap generation
- Email alarm generation (SMTP/POP support)
- SMS alarm capability
- Ability to export logs and debugging information to a Syslog server
- Built-in display
- Accurate internal clock with power backup
- Expansion ports for additional sensors and web cams

Optionally, it is desirable for the environmental monitors to support additional features such as the following:

- Centrally-installed, dedicated software for the management of all sensors.
- Air flow monitoring
- 'Dew point' monitoring
- Water sensor
- Water leak rope
- Smoke detection and alarm
- Power failure detection and alarm
- Sound monitor
- Light level monitor
- Cabinet door sensor
- Audible alarm
- Analog ports

2.7.6 Split of Responsibilities between the IT Division and City Surveyors

- The current state of the cabling supporting the IT infrastructure is a Corporate IT responsibility

- The remediation is the responsibility of IT and cost to resolve is within the Corporate IT budget
- All works will comply with relevant standards especially Health and Safety Standards
- IT will be responsible for all electrical cabling from the distribution board to the communications cabinet and all IT infrastructure cabling
- We will communicate on a site by site basis directly with the end users
- Corporate IT would provide advance notice to the Facilities Management of any works
- Once fully remediated new processes will be enforced to ensure consistent good practice and management of IT assets and data communications rooms across the Corporation and City of London Police estate
- Any facilities changes that impact IT will be communicated to the IT Change process
- IT own and are responsible for any equipment that are in IT communications rooms
- IT are responsible for agreeing access to all IT communications rooms

Agreed By:

_____Date:
(Paul Wilkinson - City Surveyor)

_____Date:
(Sean Green – IT Director