



**The 12th Meeting of the Department of Computer Science and Technology
Buildings and Environment Committee**

Friday, 22 November 2019, Room SW00, William Gates Building

Minutes

Present:

Dr Piete Brooks (PB) (in attendance
from item 5d)

Mr Ian Burton-Palmer (IBP)

Ms Celia Burns (CB)

Dr Richard Mortier (RMM)

Mrs Caroline Stewart (CS)

Dr Graham Titmus (GT) (acting Chair)

1. Apologies for Absence

Apologies were received from Simon Moore (SWM) and Martin McDonnell (MJM).

2. Minutes

The Minutes of the meeting held on 3 October 2019 were approved.

3. Matters Arising

There were no matters arising.

4. Reducing Energy Consumption

a) New Chiller

The new chiller is working well, with some remediation work required to ensure cooling to GN09. Once these works are complete, the new system should run well.

5. Building Matters

a) Internal/Atrium window installation in SW02

The lighting in SW02 is now satisfactory and it was felt it is no longer necessary to keep the matter of internal windows under review. If the issue is raised again, it will be considered again once we have been able to trial the new lighting.

b) Fixing mains extensions from the projection booth to power cameras

Extra sockets fitted with USB ports, along with data points, have been fitted in both LTs. This project is now complete.

c) Lighting

i) Atrium lighting

EM are planning to update the William Gates Building lighting in 2023/24. In the meantime, various makes and designs of lighting have been explored, some of which have been on test in the Central Corridor and Atrium:

1. *Thorlux lighting unit*: at £265 each unit, this option is too expensive as over 100 would be needed in the atrium.
2. *Medium-price LED conversion*: approx. £120 each; although this option allows for retention of the existing lighting and a lower running cost, feedback from the trial was that the light was too bright and left a white circular footprint.
3. *A simple LED lamp*: approx. £13 each; runs on a 230v connection; uses 11 watts (vs. 42 watts with the existing lamps) and provides 1000 lumens; allows for the retention of the existing lighting units (requires only removal of the ballast unit from each lamp and fitting of the LED replacement lamp, which can be done by Building Services). Several of these have been on test for a while and feedback is that the light is uneven, with the lamps creating a bright circular rim of light with a dark centre.

Committee members discussed how lighting requirements differed depending on the area concerned. For example, evenness of light is less important in open areas (such as The Street and the second floor landing) than in areas where people might be reading or holding meetings (such as the café, SW00, and the hangout area).

It was agreed that the existing fluorescent lamps would be retained, or where they had already been changed, reverted back to, in the café as well as the low level lamps in the Street. The Committee felt it was very important these areas have evenness of light. It was agreed that the lamps on the second floor landing and the high level lights in The Street (approximately 80) could be converted to the simple LED lamp (option 3 above). This strategy would provide reductions in both energy and expenditure and provide spares for the areas where evenness of light is important. In addition, the Library conversion would also provide spare fluorescent bulbs sufficient for a few years.

Action: IBP

ii) *Lighting in the LTs*

Committee members discussed the issue of the lighting control system in the LTs, which is at risk of failing. It was agreed that IBP would approach EM with a view to the works being carried out during the summer break, 2020. This should provide enough time to get the works done in both LTs, with room for slippage; however, IBP reported that in terms of EM arranging the funding, the lead-time might not be long enough. Committee members agreed that the specification should be for a simple lighting control system, if possible, with the ability to turn off separate rows of lamps for a dimming effect but it was felt that dimmers would not be required.

Action: IBP

iii) *Emergency Lighting in the Atrium and LTs*

EM are currently running an investigation into the inverter controlling the emergency lighting in the Atrium and LTs. The large number of LEDs in the Atrium upset the harmonics of the current when the emergency lighting is activated and cause the lighting to strobe or flash on or off. Failure of the emergency lighting is naturally a concern and it was agreed that IBP would enquire with EM as to when the problem would be fixed.

Action: IBP

d) Intel Lab ceiling (bowing panel)

Since there has been no movement during the last year, the building surveyor has recommended that monitoring of the panel can now be discontinued. It was agreed that this should be dropped from the agenda for future meetings; however, the Health and Safety Officer requested that IBP report to the H&S Committee on a six monthly basis.

e) Vent leaks

The two vent leaks (over the lifts and Reception) are due to warped frames. New frames will be installed, but the time-frame for these works is currently not known.

f) Fire strategy for the William Gates building

IBP reported that the relocation of the smoke detectors in every office (from the chilled beam to the concrete ceiling) is underway and should be complete by Christmas. The drilling works will take place before 10.30 a.m. in order to minimise the period of noise disturbance. Fixing works will take place during the rest of the day.

Tenders are currently requested for the refurbishment of the doors to the courtyards.

g) Office recycling

Since the new signage from EM is still not available, it was agreed that bins with commercial signage would be purchased by the Department (for GC and FC only to start with) and the experiment would be run as previously outlined. The bins are expected to arrive in December, and an update on the recycling experiment will be provided at the next meeting.

Action: IBP

h) Solar panels (PVs) for the roof

Works on the roof are complete and the roof is now suitable for the installation of solar panels. This is an EM project, and a works schedule is currently not known.

i) Verex security system

Chubb have carried out their inspections and we are expecting in mid-December to receive a quote for the maintenance contract and software updates.

j) Microwaves

Two 5–50-minute timers were trialled but it has proven too easy to over-ride the 5-minute setting. It was agreed that a ticket would be raised for EM to install a microwaves, hard-wired and with a fused spur and a push-button timer switch.

k) Building management system (cooling and heating)

The heating and cooling systems are running well and the new chiller means there is now capacity to cool the building and the GN09 Machine Room without any failures when the outside temperature reaches 30 degrees or more. Some remedial works are required to ensure that a better flow of chilled water is supplied to the Rittal Machines in GN09.

The previous minutes referenced to Trend and Honeywell related to the desire by researchers to access the building's control data. This is possible for Trend but not for Honeywell.

I) Treatment of Sound in the Atrium

The actions proposed at the October meeting were approved by the Head of Department. The additional moveable panels have already been received, and the other additional panels will be installed on 12 and 13 December 2019.

6. AV Matters

a) Projection booth in LT2

Committee members discussed options for increasing the seat capacity in LT2 in response to the increase in student numbers. Although exact student numbers are not known, it was thought that 10-20 extra seats are required. Removal of the projection booth had been proposed. The following options were discussed:

(i) Removing the booth completely

There would still be a need for somewhere to mount and control the projectors. Without the booth's soundproofing, there would be noise from the projector (from both the high-intensity projection and the cooling function). Whether the noise level would be disrupting would be hard to gauge without actually mounting a projector outside the current booth (the closest representation being to listen to a lecturer with the projection booth door open).

(ii) Producing a minimal booth

This option would entail reducing the size of the current booth to allow space for additional seating, possibly by fixing the projector to the ceiling.

(iii) Leaving the projection booth as it is

It was noted that the row of seats that had been removed from the back of the LT some time ago had been reinstated, resulting in 13 more seats. However, this option limits the access to and from that area and does not provide adequate additional seating.

It was noted that any works carried out must leave the LT in a usable state. If works are to be carried out, EM will require a feasibility study to be done by a third party. Timing of any works was also considered.

It was agreed that IBP would feedback the Committee's views to Prof Beresford, who is overseeing the space management exercise.

Action: IBP

b) Projector in FW26

The FW26 projected image is small, so the projector is to be moved further away and the screen is to be moved up. A support bracket has been ordered and works are in hand.

7. Any Other Business

There was no other business.

8. Date of Next Meeting

The next meeting is planned for mid to end of Lent term, to be arranged by Doodle poll.