



**The 23rd Meeting of the Department of Computer Science and Technology
Buildings and Environment Committee**

**Monday, 24 April 2023, 14.00
Room GC22, William Gates Building**

AGENDA

Membership

Prof Richard Mortier, Chair (RMM)
Dr Pieter Brooks (PB)
Celia Burns, Secretary (CB)
Thomas Bytheway (TB)
Dr Andrew Caines (APC)
Ali Digby (AJD)

Martin McDonnell (MJM)
Daniel Porter (DRP)
Luis A. Saavedra del Toro (LAS)
Malcolm Scott (MAS)
Caroline Stewart (CS)

1. Apologies for Absence

Apologies have been received from Luis A. Saavedra del Toro.

2. Minutes

The minutes of the meeting held on 18 January 2023 are attached.

3. Matters Arising

4. Estates Division

CS was going to report the concerns about Estates Division to the Head of Department, with a request that she raise this further with the appropriate University authorities. CS to report.

5. William Gates Cycle Parking and Landscaping of JJ Thomson Avenue

Works to the secure cycle parking area had been completed but the rest of the landscaping had been delayed. AJD to report.

6. Reducing Energy Consumption

(a) Monitoring energy consumption: AJD had lost access to the Trend data after having been able to access it only twice. AJD to report.

7. Building Occupancy

CS was going to discuss the issue of building occupancy further with the Head of Department, including what data would be useful to collect. AJD was going to do a physical count of the offices to gain a rough idea of occupancy levels. CS and AJD to report.

8. Building Matters

a) Lighting

i) *Lighting in the Lecture Theatres and The Street*

AJD had been unable to get any information from Estates about the timescale for Phase 8 of the programme of LED whole-building upgrades. AJD to report.

b) Fire strategy for the William Gates building

An external assessment had produced actions for Estates and MJM. MJM to report.

c) Verex security system

The current system is working but running on old software, at significant risk of failure, and needs to be replaced. DRP, MAS and AJD are working together on a way forward. DRP to report.

d) Building management system (cooling and heating)

i) **Heating problems:** The heating issues are long term, with the building not capable of producing a comfortable working environment for some areas even when it is working as optimally as it can. A solution will require a big infrastructure change.

AJD to report on any ongoing concerns.

ii) **Ventilation:** After having been set to run 24/7 to increase fresh air flow during the pandemic, the ventilation had been set to switch off overnight to help with the heating issues. AJD to report on any ongoing concerns.

e) Refit of the WGB Library

The aim is to have these works done in the 2023 vacation. AJD to report.

f) Cleaning service

With the current cleaning service contract ending in August, AJD was going to begin the process for a new contract. AJD to report.

g) Clearing of FN11 Machine Room

MJM had volunteered to drill out and smash the experimental CPUs. MJM to report.

MAS was going to find out whether anyone wanted to salvage any of the remaining machines. This would still leave a lot of hardware that would require disposal. MAS to report.

h) Office Floor Boxes

Once the electrical shut-down had been scheduled, AJD was going to contact Chris Cornell (electrician) about the reduced reliability of the power supply in some offices. AJD to report.

i) Downpipe Leaks

AJD was going to chase Estates about this ongoing issue of leakages alongside the downpipe entrances through the roof surface. AJD to report.

j) Portable Appliance Testing (PAT)

AJD was going to approach two recommended companies for information about PAT testing. AJD to report.

k) Generator Provision for GN09

An auto transfer switch had been installed and the electrical maintenance and testing required by Estates had been planned for the first quarter. AJD to report.

MAS was going to raise with the IT Strategy Committee the issue of what level of reliability and risk-mitigation we should aim for with regard to having a permanent generator. MAS to report.

AJD was going to contact the University surveyors to enquire whether it would be possible to place a permanent generator in the area outside GN19. AJD to report.

l) Improvements to the Ventilation and Extraction in SE17

TB was going to follow up on the suggestions he had received relating to his proposal for a better ventilation system in the hardware lab. TB to report.

m) Security Cameras

AJD was going to talk to the Cavendish project manager about whether their security camera(s) will cover the extended bike park. AJD to report.

n) Visitor Car Park Barriers

AJD to report.

9. AV Matters

a) Projectors in FW26

Mark Cresham has reported that the projectors and ceiling mounts have now been received. Mark hopes to carry out the installation before the end of the Easter term.

10. Electricity Devolution Project (EDP)

(a) Solar panels

Following the tender for installation of panels and battery storage, AJD had been copied on emails indicating that one of the companies had requested a meeting in January with the Building Energy Manager. AJD had not received any further information and was going to follow this up. AJD to report.

11. Cambourne to Cambridge (C2C) Busway

To discuss: the busway's route over the West Cambridge campus.

Links: [Greater Cambridge Partnership project summary](#), [Greater Cambridge Partnership March 2023 Update](#), and [Screenshot of proposed route across the campus](#).

12. Any Other Business

13. Date of Next Meeting



**The 22nd Meeting of the Department of Computer Science and Technology
Buildings and Environment Committee**

**Wednesday, 18 January 2023, 11.30 a.m.
Room GC22, William Gates Building**

MINUTES

Present

Prof Richard Mortier, Chair (RMM)
Dr Pietie Brooks (PB)
Celia Burns, Secretary (CB)
Thomas Bytheway (TB)
Dr Andrew Caines (APC)
Ali Digby (AJD)

Martin McDonnell (MJM)
Daniel Porter (DRP)
Luis A. Saavedra del Toro (LAS)
Malcolm Scott (MAS)
Caroline Stewart (CS)

1. Apologies for Absence

There were no apologies for absence.

2. Committee Membership

(a) *PhD Representation.* The Committee welcomed Luis A. Saavedra del Toro, the new PhD representative.

(b) *Postdoc Representation.* The Committee welcomed Dr Andrew Caines, the new Postdoc representative.

3. Minutes

The minutes of the meeting held on 13 October 2022 were approved.

4. Matters Arising

There were no matters arising.

5. William Gates Cycle Parking and Landscaping of JJ Thomson Avenue

AJD reported that the secure cycle parking area was now open, with a card reader for entrance and exit. The rest of the landscaping has been delayed because the site entrance

first needs to be moved to Cavendish, which cannot happen until the Cavendish works are completed. This was meant to happen before the end of last year. AJD had not received any updates about this, nor about what is happening with the new Whittle Laboratory.

6. Reducing Energy Consumption

(a) **Monitoring energy consumption:** AJD reported that she had been given direct access to the Trend data from the Building Management System (BMS), and a Honeywell expert had visited the building and shown AJD how to use the system. However, AJD has now lost access to the data after having been able to access it only twice.

7. Building Occupancy

The Head of Department had asked the Committee to do some work to better understand building occupancy usage post-pandemic, in terms of office allocation. (Records show offices are full, yet in reality, many offices are not being used to capacity.) The Committee discussed this issue, including suggestions for how to collect relevant data, bearing in mind ethical and confidentiality issues, as well as the effects of the building temperature on current usage.

Suggestions included:

- Using the data from the CO₂ sensors. However, there was concern about using the data from the sensors in the case of single occupancy offices (where the occupant could be identified) and, in any case, there are not currently enough sensors (with most of them being on the first floor).
- Asking people about their office occupancy. The Committee noted that the response rate would probably be low and questioned whether the responses would be accurate (noting how people's understanding of the goal of a survey can affect how they respond to the survey).
- Using the card locks data. This data was not considered to be accurate.
- Using the Verex database to run an SQL query.
- Have a member of the Committee do a physical count by walking around the rooms, once a day for a week, for example. AJD offered to do this.

The Committee agreed that CS would discuss this further with the Head of Department to find out what data would be useful. In the meantime, AJD would do the physical count.

Action: CS and AJD

8. Building Matters

a) Lighting

i) *Lighting in the Lecture Theatres and The Street*

AJD reported that she had been unable to get any information from Estates about the timescale for Phase 8 of Estates' programme of LED whole-building upgrades. This led to a discussion about the current status of the Estates Division and the concerns

about the difficulty of getting any response, information or assistance from them (see item 11, Any Other Business).

b) Fire strategy for the William Gates building

An external assessment had taken place, where MJM had pointed out various issues to the assessor including the courtyard doors, vents, and fire breaks in adjoining rooms. The resulting action plan included actions for Estates (some for issues which had been reported to Estates three years ago) as well as actions for MJM.

The lock mechanisms on the courtyard doors have now been changed to Maglocks and are working correctly. The 16 roof vents, however, are still broken.

c) Verex security system

The current system is working but running on old software and at significant risk of failure and needs to be replaced. DRP, MAS and AJD have not yet had an opportunity to plan a way forward but will do so and report back to the Committee.

Action: DRP, MAS, AJD

d) Building management system (cooling and heating)

i) **Heating problems:** AJD reported that, since the last meeting, a representative from BMS had shown AJD how to use the system (how to make adjustments, set things to auto or to shut down overnight, etc).

LAS noted that he had joined the Forum as Rep for research students, where the feedback was that the temperature in his colleagues' corridor was far too cold, with some people not coming into the office because of the cold. LAS enquired whether there was a long-term plan to avoid using individual heaters. AJD confirmed that the heating issues are long-term, with the building not capable of producing a comfortable working environment for some areas even when it is working as optimally as it can.

A solution would require a big infrastructure change.

ii) **Ventilation:** The ventilation had been set to run 24/7 to increase the fresh air flow during the pandemic. AJD reported that the ventilation has now been set to switch off overnight which may help with the heating issues.

e) Refit of the WGB Library

AJD reported that it was still her aim to have the works done in the 2023 vacation and will contact the Building Surveyor to progress these works.

Action: AJD

f) Cleaning service

AJD reported that she is starting the process for a new contract now (the current one ends in August). There was a discussion about whether to go with the University contractor. The performance of Estates was one of the reasons why the Committee had a

strong preference for continuing to manage its own cleaning contract. AJD noted that she was very pleased with the current contractor and hoped they would give a competitive tender so that they could continue with the contract.

Action: ADJ

g) Clearing of FN11 Machine Room

RMM reported that he had contacted Ian Pratt for advice about whether any items needed to be destroyed. Ian had confirmed that the experimental CPUs would need to be destroyed. The CPUs would need to be drilled out and smashed, and photos taken as evidence for Intel, should it be required. MJM volunteered to take on this action.

Action: MJM

MAS reported that there was still a lot of hardware requiring disposal. The remaining historical artefacts were duplicates and therefore not of interest, but people might want to salvage a couple of the remaining machines. MAS agreed to work out what to do with the remaining machines. He also noted that, after all the IT equipment had been removed, work would still need to be done to make the room into an office.

Action: MAS

h) Office Floor Boxes

Electrical works carried out towards the end of 2021 had reduced the reliability of the power supply in offices. AJD reported that she had not yet approached Chris Cornell (electrician) about this issue as she had been waiting for the electrical shut-down to be scheduled first. AJD to contact Chris Cornell.

Action: AJD

i) Downpipe Leaks

AJD is going to chase Estates about this ongoing issue of the leakages alongside the downpipe entrances through the roof surface.

Action: AJD

j) Portable Appliance Testing (PAT)

PAT Testing is now the Department's responsibility. AJD reported that she had spoken about this issue to people from other departments and they all use outside companies for their PAT testing. AJD is going to approach two recommended companies for further information.

Action: AJD

k) Generator Provision for GN09

MAS reported that an auto transfer switch had been installed the previous week, which would allow power from a generator to be connected when required. The switch allows for a permanent generator connection in the future if required, but for now a temporary generator could be connected (following some preparatory work done by an electrician). The connection had been installed in GN19, which meant that a generator could be parked outside, and a cable run through to GN19. All this meant a relatively

straightforward switchover for the planned electrical maintenance and testing required by Estates. AJD reported that this was planned for the first quarter, and that Chris Cornell (the electrician) was happy the testing was finally being done.

The Committee discussed the benefits and possibilities around having a permanent generator outside GN19 and MAS agreed to raise with the IT Strategy Committee the issue of what level of reliability and risk-mitigation we should aim for. AJD agreed to contact the University surveyors to enquire whether it would be possible to place a generator in the area outside GN19.

Action: MAS and AJD

l) Improvements to the Ventilation and Extraction in SE17

TB reported that he had received some suggestions as to what to do regarding his proposal for the installation of a better ventilation system in the hardware lab but had not yet had an opportunity to do anything further. TB to follow up.

Action: TB

m) Security Cameras

The Committee discussed the cameras around the building. It was agreed that none of the cameras inside the building were of any use and should be removed, especially since the software we use to view footage was now out of date and not useable. Since there were also University cameras covering the cycle parking areas (the footage of which could be accessed whenever necessary), it was agreed that there was no need for the same coverage by Department cameras (especially as they are not monitored). AJD agreed to talk to the Cavendish project manager to ask what security cameras were planned as it was felt important that our extended bike park had full coverage.

It was agreed that a webcam would be set up to replace the current camera covering the Goods-In door.

Action: AJD

9. AV Matters

a) Projector in FW26

RMM reported that Mark Cresham had received three quotes for projectors and ceiling mounts. Mark had recommended one of the quotes to RMM and CS, who had given their approval for him to go ahead and make the purchase.

10. Electricity Devolution Project (EDP)

(a) Solar panels

AJD reported that, following the tender for installation of panels and battery storage, she had been copied on emails in December indicating that one of the companies had requested a meeting in January with the Building Energy Manager. AJD had not received any further information and will follow this up.

Action: AJD

11. Any Other Business

(a) Estates Division

There was a continued discussion about the disarray of Estates Division and how it is very difficult to get any information or assistance from them. A recent example was in mid-December 2022, when the leak occurred in the air handling unit which caused an emergency for the cooling in GN09. The immediate emergency eventually was dealt with, by shutting off the air handling unit cooling to the rest of the building but Estates have still not been in contact to fix the fault. The leak remains, and the issue is now very urgent.

Committee members expressed serious concern about the capability of the new contractors, Equans, to whom Estates have outsourced all maintenance. It was highlighted that 'failure to have a building that is fit for purpose' has a red risk status on the Department's risk register. For instance, we have been told that the roof vents must be locked in the closed position, which leaves them non-operational in the event of a fire.

It was agreed that CS would report these concerns to the Head of Department with a request that she raises this further with the appropriate University authorities.

Action: CS

(b) Visitor car park barriers

AJD noted that she had only recently been copied on an ongoing enquiry about installing barriers to the visitor car park. CS and AJD will discuss this further.

Action: AJD and CS

12. Date of Next Meeting

The next meeting is scheduled for Monday, 24 April 2023 from 14.00 – 15.30, in GC22.