LSE Estates Division
Facilities Management

Campus Clock Procedure

Background

Currently the clocks on campus fall into two categories – battery operated independent clocks and radio clocks with a battery back up controlled by a remote radio signal. By our latest count we have approximately 147 standard battery clocks and 80 radio clocks in public areas, class rooms, meeting rooms and open plan offices. This does not include clocks in individual offices, which we are not responsible for the changing of time, however we will upon request assist the occupier if there are any problems with access etc.

Radio clocks

For the past few years we have been trying to phase out the standard battery clocks and replace them with radio clocks as their maintenance is less labour intensive due to the clocks adjusting their time by receiving a signal four times a day. However, having used this clocks for some time now we have observed several issues:

- the reception of a radio signal can be affected by various factors such as weather conditions, building works, etc and this affects the reliability of the accuracy of the clocks as there are occasions when the clocks do not pick up the signal and we are not always aware of this.
- Another issue with those clocks is that one cannot manually adjust them, they can only be corrected by receiving the signal, hence if the reception is not good then the clock does not show correct times. If we find that a radio clock is experiencing problems with signal interference we would firstly try and relocate it to a better position, however if this does not solve the problem we would replace it with a standard independent battery operated clock.

When the radio clocks are fitted they are tested on site and we ensure that they work accurately at the time of the installation. However if changes take place that may affect the signal to the clock we would not necessary be aware of them. We rely on feedback from customers/colleagues to correct any issues. Once the feedback is received we attend to the clock immediately.

Standard battery operated clocks

We use those in areas where we have inherited them or where radio clocks do not work. If they stop working we will try and replace them with a radio clock but if this is not feasible we will replace with a new standard clock. These clocks are reliable however, due to their numbers on campus we have experienced problems such as:

- It is extremely time consuming to correct the time on the clocks en mass.
- Twice a year when the time change takes place we have staff coming on Saturday to adjust the clocks before the time change takes place but there have been occasions when the occupiers re-adjust the clocks back to the current time. Ideally, we would do this work on Sunday however, it is difficult to get sufficient number of volunteers to come to work on Sunday and there is also an implication in the overtime rates paid.

The problems are further exacerbated by the fact that there is a mix of standard battery and radio clocks in the same building. To manage the workload, we attend to battery clocks on Saturday and to radio clocks on Sunday, with additional complication of access which can be an issue sometimes.

Proposal

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Having used the above scenario of managing the clocks for several years it is easy to conclude that the current arrangement is not ideal. Due to the amount of interference we are currently getting, our aim to replace all standard clocks with radio clocks does not look feasible. Keeping the standard clocks and maintaining them is also not feasible as they are very laborious to keep working accurately.

We are therefore, beginning to question our reliability on those clocks. Ideally what we would like to do is to unify the clocks we use and have one type of clock across all buildings.

We need to do an in-dept research of what alternatives exist. We are aware of one possibility currently being used by Universities in America. It is a clock system that is operated by a local signal generated by the maintenance staff (our own wireless wi-fi control) that is enhanced by various boosters located in each building and it is all controlled by a master clock. It is only the master clock that needs adjusting when time change takes place. This makes the clocks more reliable. The batteries last 5 years. This is similar to the impulse hard wired clock systems that used to be installed in 5 of the original LSE buildings, which worked perfectly but was decommissioned during refurbishment works (one of the main problems was that builders undertaking refurbishments were cutting through the cables and eventually make the system unusable). With the wi-fi alternative this will not be a problem.

We are going to look into this and various other systems in order to propose an alternative – case studies, cost and feasibility and will report further in the near future.

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Current procedure for altering clocks twice a year

Until a new solution is found we are working with the existing system. The Head of Maintenance instructed for a comprehensive survey of the current clock position in public areas (meeting rooms, classrooms, common areas, open plan offices) to be carried out. This is currently well on the way, one of our electricians has been assigned to the task and he is updating the existing schedule of clocks and amending as necessary. This is a time consuming task and the technician who is working part time has so far taken 4 weeks to complete, this will include any installations that have been identified.

There are many reasons why the existing schedule was in need of updating and they can be summarised as:

- Throughout the year customers put numerous requests for installation of new clocks across campus and it is easy to miss the new locations of the list. To deal with this issue one technician has been assigned to deal with any future requests for clocks and his responsibility is to keep the clock log up to date with any new locations or changes.
- Change of use of rooms which we are not always made aware of. To address this issue the Space Management Manager and Teaching & Learning Spaces Technology Support Manager would be encouraged to keep the Maintenance Section up to date with the changes.

Twice a year when time changes take place (Spring and Autumn) we have the following procedure to attending to the clocks.

Time of action	Action	Person responsible
A week before the time change	Ask for volunteers to come over the weekend on overtime to check the clocks.	Elec. Supervisor or Deputy Head of Maintenance in his absence
On the Friday before the change	A comprehensive schedule by building will be given to the technicians specifying the location of the clocks and if the clock is standard or radio. The list will also show when the last scheduled bulk battery change took place and when the next one is due. Special access requirement will be listed. A tick box will be completed to show that a clock has been checked. We will attend to all public areas, class rooms, meeting rooms and open plan offices. See appendix 1.	Electrical supervisor or Deputy Head of Maintenance in his absence
Saturday, the day before the change + Monday	**Standard battery clocks** - our staff (usually 6 people) will come in on overtime to work through the list of battery clocks and alter the time. If access was not available the clock will be attended to on Monday.	Volunteer technicians
Sunday, the day after the change + Monday	**Radio clocks** - Our staff (usually 2 people) will come on overtime to check the times on those clocks, this continuous on the Monday as well. If there are any problem with the clocks we will try and move them to a different position	Volunteer technicians

	in the same area and if this does not work we will replace with a standard clock and update the list accordingly, the remedial work will be done on a repeat visit on Monday as depending on the numbers we may be short of time to complete the work on Sunday. If access was not available the clock will be attended to on Monday.	
First thing on Monday morning	To go through the log book and ensure that any clocks that have not been attended to or need further attention are picked up immediately.	the Deputy Head of Maintenance with the electrical supervisor
Monday during the day	10% audit of the clocks chosen randomly will be carried out.	Director of Facilities and Head of Maintenance
On going, as a request is put through @ Help Desk.	All installations of new clocks or clock problems throughout the year will be given to a dedicated electrician so that the log book can be kept updated.	Ged McCormack or another nominated electrician
Each year, beginning of October	To arrange for a technician to audit the list once a year and update as necessary. This will involved checking the list against room changes (Space Management) and requests received via Help Desk. The only risk remaining after that is the odd clock that may have been installed without our knowledge.	Deputy Head of Maintenance

- Exceptions: Currently we do not attend to clocks in individual offices unless requested by the office user. Those requests are logged via Help Desk using the Service request form and the Help Desk Technicians will be prioritizing them.
- Space Planning Manager will notify the Deputy Head of Maintenance to any changes in teaching/ public /office areas.
- Help Desk will provide copies of Job Instructions received for installation of clocks to assist the annual audit.

NB: From time to time we have a problem getting enough volunteers to complete the clock checks over a weekend. This may be due to various reasons for example the staff has been working long hours the week before dealing with emergencies or working volunteer late shifts and need the weekend to recover. If we are experiencing problems such as this in the future we will prioritise the clocks by importance of their location and attend to these over the weekend, continuing on the Monday with the rest of the schedule.

Appendix 1

List of clocks in public areas,
classrooms and meeting rooms

kept on P: drive