

Sustainable Information Technology Group (SITG)

Monday 16 September 2019, 2pm

Ochil Room, Charles Stewart House

AGFNDA

1	Minute To <u>approve</u> the minute of the previous meeting on 11 April 2019 and <u>raise</u> any matters arising	A
2	Sustainable IT Implementation Plan – Progress Report To <u>receive</u> an update from the Engagement Manager	В
3	Video Conferencing Tools To <u>discuss</u> and <u>agree</u> a paper from SRS Projects Coordinator Siôn Pickering	С
4	PC Reuse Project Update & Blancco Case Study To <u>receive</u> an update from IT Reuse Assistant Bradley Richards	Verbal
5	Sustainable ICT Procurement - Cloud Services & Solid State Drives To <u>receive</u> an update from the ITI Enterprise Services Manager	Verbal
6	IT Energy Footprint & Prioritised Projects for Energy Savings To <u>receive</u> an update from the Deputy Director of IT Infrastructure	Verbal
7	Personal Computing Policy To <u>receive</u> an update from the Director of IT Infrastructure	Verbal
8	Any Other Business To <u>consider</u> any other matters from Group members including:	Verbal
	Sustainable IT paper going to University Executive on 23 September	

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Potential project to display SRS messages as screen savers on UoE computers



UNIVERSITY OF EDINBURGH

MINUTE OF A MEETING of the Sustainable IT Group held in Room 2.01,

Geography (Old Infirmary) on Tuesday 11 April 2019.

Present: Michelle Brown, Head of SRS Programmes (Chair)

Fiona Carmichael, Computing Support Officer, Literatures, Languages & Cultures

Fraser Muir, CAHSS Chief Information Officer Andrew Arnott, Interim SRS Engagement Manager

George Reid, Procurement Manager, Procurement Office

Ruaridh Stern-Mackintosh, Students' Association Kate Fitzpatrick, Waste & Recycling Manager

Mark Hay, IT Manager, College of Medicine and Veterinary Medicine (for Sheila Fraser)

David Jack, Energy Manager, Estates Department Fraser Muir, CAHSS Chief Information Officer

Graeme Wood, Enterprise Services Manager (for Graham Newton/Tony Weir)

Apologies: Dave Gorman Director of Social Responsibility and Sustainability

Victoria Dishon, IT Liaison Officer, College of Science and Engineering

Jennifer Milne, Deputy CIO, Director Applications Development & Operations Euan Murray, Development Team Manager, Learning Spaces Technology Sheila Fraser, Head of College IT, College of Medicine and Veterinary Medicine

Graham Newton, Desktop Services Team Leader, ITI Desktop Services

Tony Weir, Director IT Infrastructure

1 Minute A

The minute of the meeting held on 27 November 2018 was approved as a correct record. Actions outstanding:

A1 - Action: VD to discuss data capturing with CPAG and feedback to the group – carried forward.

A5 - Action: SRS/ISG to work up a business case for making solid state drives (SSD's) the default option for the PC replacement programme. There are issues with the charging mechanism behind the scenes which mean this isn't a seamless process. Ideally SSD's would not only be the default option but the only option, however this change needs to be agreed at a higher level. First step will be putting a recommendation to the Select PC Group.

Action: George Reid put the case forward to the Select PC Group that SSD's should be the default purchasing option.

2 Sustainable IT implementation plan – progress report

The group heard from the Interim SRS Engagement Manager that there was good progress overall. There were few items on Amber status or which warranted further discussion:

A1 – Original outlined timeline missed. Meeting with Graham Newton to agree scope on 18 April 2019.

A2 – No new IT project applications to UWG since mid-2018.

В

A6 – Energy efficiency currently only taken into consideration on large scale cloud-based projects.

A7 – removed.

B2a – WEEE contract extended for another year, retendering to take place at the end of 2019.

B4 – DG to progress with Tracey Slaven. AA to link printing into Energy Co-ordinators guidance.

B5 – logistically difficult. Previous discussions have included a one day amnesty where students bring electronic waste and CCL North would collect. MB suggested the space outside the Boilerhouse/ECCI as a potential drop off point.

C2 – Fairphones are now an IS Managed Mobile Service.

C4 – Work with the Turing Trust to promote their work reusing IT equipment in Africa - carried over.

D4 – HR are in the process of file digitation and use of electronic forms as opposed to paper. There was a pilot in the Business School, which is being extended where all contracts for staff in the Business School go through a digital signing process, where nothing is printed out. The contract is generated electronically, signed with Adobe Sign, using two factor authentication and the turnaround time is 48 hours as opposed to two weeks.

Following discussions around cloud based services – GR suggested we should have a "Cloud Team" that takes responsibility for procurement of cloud services.

Action: FM to coordinate with GR, GW/TW to pull together some thoughts and ideas around the procurement of cloud services to bring to a future meeting.

3 PC Reuse Project Update

The project is currently piloting a scheme with Remade in Edinburgh where 20% of donations are passed on to other charitable organisations: People Know How, Turing Trust and Cyrenians.

The group discussed the recent approach by Blancco regarding a case study. Blancco is our secure data wiping software and the case study would encompass the use of Blancco in its current local deployment to a university wide cloud based deployment. There isn't a formal mechanism for proceeding with case studies but the SITG agrees with progressing the case study subject to some conditions. Before the case study is published a draft will need to be presented to SITG members for approval and CaM should provide input.

Action: Bradley Richards to liaise with Blancco regarding commencement of case study with a view to presenting a draft report to a future meeting of SITG.

It was noted that the PC Reuse Project could be better promoted as some IT managers are not aware of its existence, particularly at the BioQuarter.

Action: MH has noted some suggestions for promotion of the PC Reuse Project at the BioQuarter and will liaise with AA if he requires a member of the SRS team to present to IT meetings to promote the project.

С

The Windows 10 rollout will require additional space as there are larger batches being donated to the project. Currently FC has freed up some space in 50 George Square, however more permanent space would be helpful and reduce the amount of desktops that are sent to CCL North.

With reference to point 4 of next steps/implications on the paper - ITI will be undertaking a Cloud deployment of the Blancco management console – FM says this is not strictly correct. FM is talking with TW to try and progress this, it's not at the deployment stage yet.

4 Actions taken on energy efficiency in IT

GW has drafted a spreadsheet for people to fill in with details of IT equipment and the energy usage. This has been passed to TW who has come back with some comments. GW has approached Sheila Fraser to trial with a school of building in MVM but hasn't received a reply yet. MH will take this up with SF at his next one to one meeting.

Action: MH to speak to SF regarding the baseline energy efficiency audit in MVM.

All three colleges are going to be asked for this information but the idea is to pilot with one group first to make sure we are asking for something that is difficult or impossible to provide and identify what is required in terms of support such as energy meters and measuring devices.

The original timescale for the baseline audit across the University was July 2019 which may be difficult to achieve. It was agreed that this item will be added as a standing item to future SITG agendas.

Action: Actions taken on energy efficiency in IT to be added to future SITG agendas.

5 Any other business

A student group approached SRS six months ago asking if the University change their default search engine to Ecosia. SRS asked students on the master's course *Case Studies in Sustainable Development* is they could find out the environmental benefits of using Ecosia over other search engines. The students who carried out the research produced a report which MB will circulate to the SITG members.

Action: MB to circulate report from master's students on the environmental benefits of Ecosia

In order to change the default search for the University, this would need to be taken to the Desktop Change Advisory Board. MB to liaise with GN to progress this.

Action: MB to speak to GN to put the case forward for changing the default search engine at the Desktop Change Advisory Board.

AA raised a scenario and asked the group for input. At ECA there was a building being refurbished, with a new design including lighting which could be controlled by an app which used Wi-Fi. That lighting control system was overruled due to concerns about security given the app was controlled via Wi-Fi. AA asked the group if Wi-Fi control of anything within a building or building services is always going to be a problem.

The group discussed the question and whilst there is always going to be concern about the security of any building management system, Wi-Fi isn't inherently unsecured. If Wi-Fi is configured correctly it should not provide any issues. An internet enabled device which could save energy and carbon shouldn't be excluded based on being Wi-Fi dependent.

AA had another question regarding a piece of software which uses radio frequency between sensors, meters and the cloud – is there a security issue with that or can we continue to look into this? As Wi-Fi is also a radio signal the same principles would apply as the previous discussion. It's not inherently insecure, it's just making sure the software is appropriately configured and the right level on encryption is used. The permissions security team in IS should be able to assist with such queries in the future.

Next meeting: 23 July 2019, from 2pm, venue TBC

Sustainable IT Group

Monday 16th September 2019

Sustainable IT Implementation Plan

Description of paper

This paper updates on progress against the Sustainable IT Implementation Plan 2018-19.

Action requested

SITG is asked to note progress and contribute suggestions for next steps.

Resource implications

There are no resource implications beyond how Sustainable IT fits within core business.

Equality & Diversity

Although due consideration has been given to equality and diversity as a key element of the SRS agenda and we do not currently think that an Equality Impact Assessment is required, we will continue to monitor issues within our work.

Next steps/implications

Following feedback from the Group activities will be taken forward in 2019 and beyond.

Consultation

This paper has been developed by the acting SRS Engagement Manager.

Further information

Author

Andrew Arnott, acting SRS Engagement Manager

Presenter

Chris Litwiniuk, SRS Engagement Manager

Freedom of Information

This paper may be included in open business.



Sustainable IT Implementation Plan 2018/19

Following review of progress against the Sustainable IT Implementation Plan 2017/18 and taking account of other relevant governance, including the ongoing work of the Utilities Working Group and the recent launch of the University of Edinburgh Climate Strategy, below is detailed the Sustainable IT Implementation Plan 2018/19.

Sustainable IT Group is asked for feedback and confirmation of actions assigned.

A Energy	Maximise energy efficiency in IT across the University
B Resource Efficiency	Maximise resource efficiency in IT across the University
C Social Responsibility	Ensure Social Responsibility risks are identified and managed within IT at the University
D Communications & Engagement	Ensure resources on Sustainable IT are available and communicated to all staff and students, with good practice communicated to external stakeholders and relevant networks activated

A Energy: Maximise energy efficiency in IT across the University						
Objective	Colleague(s) responsible	Timeline	Outputs	Progress	RAG status	
A1 Continue to develop an understanding of the energy consumption of IT infrastructure and equipment to establish scope for future measuring, monitoring and targeting	Tony Weir, Dave Gorman	scope established in time for 2017/18 Revised timeline TBC at SRS meeting with Graham Newton.	Scope for energy consumption of IT infrastructure and equipment reporting established	Missed the outlined timeline. Ongoing Graham Newton has developed an energy footprint for managed computers (desktops and laptops) across the estate of 700,000kWh electricity, or c. £70,000. This excludes servers, un-managed desktops etc. Graeme Wood is undertaking a survey to cover a wider IT estate. Confirmation of power distribution / end use for metered supplies at ACF/JCMB/AT data centres in progress by Estates. PUE calculation for each site to be confirmed by Estates. Monitoring of PUE and reporting of exceptions from target by Estates through 2019/20.	Green	
A2 Promote the Sustainable Campus Fund	All	Ongoing	Projects developed and	Campus Fund promoted, two IT projects submitted with one funded. Awaiting	Amber	

to all IT practitioners across the University			submitted to Utilities Working Group for funding	decision on trialling PowerMAN software. No progress since May 2018. The fund has ca. £2m funding available this year. No IT related SCF applications since last meeting in Nov 2018.	
A3 Report actions taken on energy efficiency to the group and make report available to Utilities Working Group	Include as standing agenda item to be collated and reported to Utilities Working Group	Include in ongoing business	Reports to Utilities Working Group to align with 10% energy reduction goal and projects tracking	Link made with Utilities Working Group and energy efficiency actions Two project proposals developed by Estates to scope out pathway to a PUE of 1.1 across all data centres. Funding potential via SFC Universities for the Future Fund.	All to report actions during meeting 16 th September 2019.
A4 Carbon Scope – SRS to develop with Climate Strategy Implementation Plan	Dave Gorman, Liz Vander Meer	November 2019		SRS to report back with policy recommendation by November 2019 Some progress was initially made on developing an idea of carbon emissions (c.3% of the total emissions excluding super computer), but has since stalled.	Amber
A5 Select devices with the lowest consumption	IS	Next PC framework	Clear options to buy energy	Energy efficiency considered in kit	Green

possible for the performance required e.g. Laptops, PC desktops, Raspberry Pi.		negotiated and IS Select PC list collated	efficient equipment. Default device most efficient in its class?	specification. – Nov 2018 Update April 2018: Ongoing promotion of/adherence to this. Possible note to communicate / flag this up to people who purchase	
A6 Ensure cloud software service providers are taking steps to improve energy efficiency. Ensure a substantial proportion of energy consumption in IT is from renewable sources.	IS, Procurement	Ongoing		Graeme Wood has circulated draft procurement tender questions for cloud services	Green
A7 Align increase in resilience with energy efficiency.	Estates, with support from IS and SRS where suitable	Ongoing	Clear strategy for improving energy efficiency of IT equipment.	Investigation into potential for reusing heat from ACF. Project proposal developed to scope out pathways to a PUE of 1.1 across all data centres. DD to seek consultancy support Q1 2019/20 and seek external funding.	Green

B Resource Efficiency: Maximise resource efficiency in IT across the University							
Objective	Colleague(s) responsible	Timeline	Output	Progress			
B1 Establish sustainable systems for internal and external reuse of IT equipment	Information Services, SRS to advise	March 2017	Sustainable model for IT reuse with process for review in place	Process established for internal and external reuse to Edinburgh Remakery (former Remade). Exploring options for widening external reuse to other organisations.	Complete		
B2 Work with Waste to identify new routes for reuse and (where needed) recycling of IT equipment	SRS, Waste	Ongoing	Ensure joined up University of Edinburgh approach to IT reuse and (where needed) recycling	Ongoing. Waste an active partner in IT Reuse. Laptops, servers and AV equipment now reused where possible. Printing equipment now possible to reuse	Green		
B2a Continue to work with WEEE contractor to increase external reuse of machines and equipment.	Waste	Ongoing		PCs to CCL North 2018/19 Sent overall 2,599 25.02t Out of which reused 1,275 (12.42t) (49%) This exceeds the target of 30%	Green		

B3 Report IT waste figures quarterly, including internal and external reuse, recycling, and carbon and cash value	SRS	Quarterly	Quarterly report to SITG	PC Reuse TOTAL 2018/19 • Collected 1137 ○ Total carbon 332Tco2e ○ Total weight 11.3t • Internal 559 PCs (est. £224k) • External: 578 PCs (est. £40k)	Green
B4 Establish scope for reporting on printing/paper use and monitor, including usage of MFDs	Information Services	TBD	Understanding of printing behaviours and paper usage across the University, starting point for reducing paper use	Update April 2019: Bob O'Malley might be involved in this. Policy approved by IT committee but unsure where it should go after. Encourage use of biggest MFDs. Encourage duplex by default. Monitored overall use of printers, showing that much of what is printed is immediately discarded/not collected – so set up a system where have to swipe card to get your print out.	No update received before paper submission 23 rd August 2019.
B5 Provide drop-off point for electronic waste for students to use.	Waste	TBD	Easy to use drop-off points for students	This has not been discussed further but logistically this would be very difficult (management, location, space, etc.)	Amber/ Red
B6 Discourage purchase of new equipment when	IS, SRS	Ongoing	Communication campaign	New action, carried over from	Green.

refurbished equipment is available, and continue internal and external reuse of equipment to enable this.			delivered in 2018/19.	Sustainable IT Vision. IT Forum list contacted twice a year. Quarterly Resource Efficiency newsletter to ca. 1000 colleagues. – Nov 2018 Recent consultation on the Personal Computing Devices Policy ("one person, one device") has communicated the aspirations in draft form.	
B6a Explore leasing options as they become available to reduce purchasing and enact Circular Economy principles.	IS, SRS	Ongoing	Increase in share of leased vs. owned equipment.	New action, carried over from Sustainable IT Vision. – Nov 2018	No update received before paper submission 23 rd August 2019.

colleague(s) esponsible iz Cooper, Dave Gorman	Timeline Ongoing	Output	Progress Make ICT Fair Project now in progress.	0
Gorman	Ongoing		Make ICT Fair Project now in progress.	0
D : 1				Green
Seorge Reid	Complete		Fairphone procurement approved.	Complete
			Device now promoted, and now on IS Managed Mobile Service.	
nformation ervices, SRS	Ongoing		Resources available online	Green
ony Weir, SRS	Ongoing	Increased local and global engagement on sustainable IT	Assisted in promotion of Turing Trust through as part of other reuse activities (events, etc.). – Nov 2018 The Edinburgh Remakery, who take our external donations as part of the PC Reuse project, have agreed to use 20% of either income or items to help other	Green
er	vices, SRS	vices, SRS	ny Weir, SRS Ongoing Increased local and global engagement on	Ongoing Ny Weir, SRS Ongoing Increased local and global engagement on sustainable IT Assisted in promotion of Turing Trust through as part of other reuse activities (events, etc.). – Nov 2018 The Edinburgh Remakery, who take our external donations as part of the PC Reuse project, have agreed to use 20%

	Trust is one of these organisations	
	though have yet to receive a donation yet	
	but are due soon.	

D Communications & Engagement: Ensure resources on Sustainable IT are available and communicated to all staff and students, with good practice communicated to external stakeholders and relevant networks activated Colleague(s) Timeline Output RAG Objective **Progress** responsible D1 Promote 'Fairphone now listed on University's IS website Green / **SRS** Case study Ongoing of Fairphone (https://www.ed.ac.uk/information-Complete? usage of services/computing/comms-and-collab/is-managed-Fairphones usage through mobile/available-devices-plans), as a managed option, University and was promoted through social media (https://twitter.com/EdSust/status/1084864771768360961) contract and develop a case case study up online study with a https://www.ed.ac.uk/sustainability/what-we-do/supply-Fairphone user chains/case-studies/staff-experience-of-fairphone-trial And there is information about Fairphones on the IS website (although I think that is already noted in your paper) - https://www.ed.ac.uk/informationservices/computing/comms-and-collab/is-managedmobile/help-support D2 Ensure **SRS** Ongoing Be Energy communications materials are being updated Green twice a year and are consulted with relevant stakeholders. information Sustainable and tips on Available on website and Be Sustainable online course. resources sustainable IT and other information (energy saving, resource Winter Shutdown and Summer Chillout campaigns both

efficiency,

social responsibility) are up to date and available through SRS staff and student facing channels				had ICT energy saving messaging. Channels included physical posters, social media and further information on the website. Existing materials (switch energy and Warp It stickers/tip cards) continue to be distributed through the Sustainability Awards, coordinator networks, and through the PC reuse project, on items.'	
D3 Draw on existing Circular Economy network currently in development to ensure opportunities are applied within IT	SRS, Business School/Sustainable Business Initiative	Ongoing	IT aligned with Circular Economy development	Good progress on widening reuse of computers (not only PCs). Research into other possible routes for reuse. Paper on further 'equipment' reuse/resale procedure going to University Executive in October.	Green
D4 Encourage paperless systems and reduction in printing.	IS, Procurement, SRS	Ongoing		Ongoing. Encouragement through existing channels, e.g. Sustainability Awards. TBD for other actions. – Nov 2018	No update received before paper submission 23 rd August 2019.



Sustainable IT Group

16 September 2019

Assessing University Virtual Collaboration Tools (VCT)

Description of paper

This paper outlines the recommendation to set up a short-term working group to evaluate existing virtual collaboration tools (VCT) and associated resources across the University, as well as to explore possible complimentary VCT options.

Action requested

Sustainable IT Group is asked to consider establishing a working group to explore virtual collaboration tools.

Recommendation

It is recommended that a short-term working group, consisting of a range of stakeholders from across the University is established in order to examine:

- 1. Existing VCT, supporting resources, and service models at the University
- 2. Complimentary VCT and their associated costs

Background and context

The University offers a range of VCT to all staff, students, and visitors as follows:

- **Skype for Business**. Accessed either through desktop browsers or Desktop App. Available via the Office 365 portal. Designed for 1:1 meetings and small group meetings, however can host up to 200 attendees.
- **Blackboard Collaborate**. Accessed via MyEd. Suitable for small interactive group meetings or lecture style presentations to groups up to 500 attendees, with reduced functionality with larger groups.
- V-Scene. Accessed either through desktop browsers or dedicated video conferencing suites located across the University Estate. Offers permanent Virtual Rooms and Virtual Conferences, as well as repeating events. Dedicated suites can hold larger group meetings (up to 20 individuals) in a single location.
- **Conference Calls**. Accessed through any phone, up to three participants calling from standardised VOIP phones, or a specific dial-in for multiple people set up in advance.

Although existing VCT cover a range of scenarios, feedback received from colleagues across the University through the business travel project note that these VCT are often not suitable for their needs, especially when hosting larger groups or workshops with external partners. Common concerns include difficulty in accessing the VCT for external contacts, poor reliability of audio or video feeds, as well as lack of in-software tools manage a group or to aid collaboration within groups.

Because of this, University Staff and Students admit to disregarding VCT as an option. This leads to an increase in financial costs, time spent travelling, and associated carbon emissions, or the use of other systems which are not widely supported across the University (including Facetime, Zoom, or Adobe Connect).

In part it is possible that individuals are more familiar with using these alternate VCT either when collaboration is arranged by other institutions or in their home lives, or they are considered by the individual to be more reliable. However, it is possible that University staff and students chose these alternative VCT as they offer an additional service provision to that currently supported by the University.

Discussion

In order to establish whether VCT offer a suitable alternative to travel, it is proposed that the University examines whether:

- Current VCT supported by the University are suitable for the needs of staff and students and, if so, how to increase use of VCT across the University
- Additional VCT would complement the current services supported by the University, leading to increased usage of VCT and a reduced requirement to travel.
- The current service model across existing VCT is fit for purpose for current and future use, and to review the standard equipment provided within meeting rooms, with an analysis of costs to provide VCT equipment to such spaces by default for all new developments and redevelopments.

In order to achieve these objectives, it is recommended that a short-term working group is convened. The group would be led by SRS and include participation from across the University, with support from relevant teams within ISG. As such it is recommended that this working group consists of:

- Chair: Member of staff from SRS
- Representative of College of Medicine and Veterinary Medicine (CMVM)
- Representative of College of Arts, Humanities and Social Sciences (CAHSS)
- Representative of College of Science and Engineering (CSE)
- Representative of Information Service Group (ISG)
- Representative of University Secretary's Group (USG)
- Representative of Corporate Services Group (CSG)
- Group to be supported the Department of Social Responsibility and Sustainability (SRS)

This group should also look to gather feedback from a range of end users.

It is proposed that the working group convenes between October 2019 and February 2020, and reports back to the Sustainable IT Group no later than May 2020.

Next steps/implications

Following support from the Sustainable IT Group for the paper, SRS would lead on the recruitment and delivery of the proposed working group.

The recommendations from the working group will be brought forward to the Sustainable IT Group for consultation and approval. Further outcomes, along with associated timescales, will be discussed by the Sustainable IT Group once the working group report has been completed.

Consultation

This paper has been developed by the Department for Social Responsibility & Sustainability following discussions with the Heads of College IT for CMVM, CAHSS, and CSE.

Further information

Author & Presenter

Siôn Pickering | SRS Project Coordinator, Department for Social Responsibility & Sustainability

September 2019

Freedom of Information

This paper is open.