

Data Specification for RAM and TAG – Space Cost Driver

(Post 4/9/15 Programme Board)

1. Data specification and source

Units

Space utilisation as represented by gross internal area (m²), incorporating:

- Space occupied;
- Share of balance space on a building-by-building basis;
- Share of centrally allocated/managed space pro rata to bookings;
- Share of internal walls on a building-by-building basis.

The space will be grouped according to the cost categories used in TRAC (T1 to T4) to enable weightings to be applied, and shown by School/College and Support Groups.

Source of data

The space occupied data snapshot will be extracted from the University's facilities management application, Archibus, via EBIS (the front-end for the system). The Archibus database and its applications are owned by Estates Department and are used widely in their operation. Data from it is also used for:

- full economic costing (for TRAC);
- measuring strategic plan target 5.0 (total income per square metre of gross internal area);
- the HESA Estate Management Record (EMR), which is standardised property information to aid understanding of performance, promote sharing of best practice and drive improvements.

Currently there are a number of issues with the data and structure of the database which need to be addressed before this cost driver can be fully implemented. An IS project will be starting in August 2015 (Estates and Buildings Strategic Reporting Model) the stated purpose of which is to “produce management reporting information for strategic purposes such as the yet to be defined Resource Allocation Model (RAM) and the HESA Estates Management Record (EMR)”. In the interim we will use as a placeholder the data extract in excel used for investigation in the course of developing this proposal (February 2015 extract from Archibus), which we have been able to manipulate and prove the approach can in principle be implemented.

Details of clarification

Section 3 of this paper covers discussion of space excluded from the cost driver, how balance space, centrally allocated/managed space and internal walls will be dealt with in the cost driver, and the treatment of mothballed, rented and embedded space.

Appendix 1 shows a diagrammatical representation of the cost driver data.

Frequency of snapshots

Currently quarterly snapshots are produced but only one annual snapshot is circulated to all space contacts. (These snapshot reports are downloads of a large dataset to excel, from which pertinent information is not easily extracted without a degree of knowledge.) Quarterly reports would be produced for use in RAM and TAG, and made widely available. The benefits of quarterly snapshots being used are (a) to produce an average annual position to be more representative of changes across the year and (b) to encourage the validation and correction of data as a continuous process throughout the year.

Since in RAM we need an actual baseline figure to be fixed early in the academic year at the start of the planning round, the figure used for any given year will be the average of the four quarterly snapshots leading up to 31 October of that year e.g. for 2015/16 the actual figure would be the average of the snapshots at 31 Jan 2015, 30 April 2015, 31 July 2015 and 31 October 2015. The averaging of quarterly forecasts is the same approach as for the staff data, and the key date of 31st October is in common with the both the staff and student cost drivers, helping simplicity of the model;

It may be more appropriate for TAG to average over the four snapshots within the given academic year, ending with the 31 July snapshot.

[Programme Board amended this to be that just one snapshot per year would be used, rather than averaging over four snapshots.]

Production of forecasts

Together with the current position, capital project planning will be the main information used to produce forecasts (produced by Estates Department in liaison with Colleges/SGs), which will be at a relatively high level. This could be supplemented by the annual space audit forward look presentations in the autumn.

2. What behaviours are we aiming to incentivise?

The behaviours that the approach aims to incentivise are:

- Efficient use of space as measured by occupation;
- Specifying new buildings with efficient use of space as part of the design;
- Flexible use of space as far as feasible including consideration of internal walls;
- The release of contingent space to allow for re-assignment or disposal;
- The booking of centrally allocated/managed space to match needs;
- And it does not disincentivise the use of externally leased space where this is strategically beneficial.

The desirable behaviours that the approach doesn't address, and need to be picked up through other management processes, are:

- Suitability of accommodation;
- Most strategically suitable use of space (e.g. address student satisfaction with having a social space);
- Reduction in unoccupied space through disposal;
- Minimisation of the cost of mothballed space;
- Maximising utilisation of centrally allocated/managed space;
- Value for money in leased/embedded space for University use.

3. Clarifications on dealing with different types of space

3.1 Space excluded from the cost driver (subsidiary companies and let property)

Archibus holds details of all university-owned estate, a significant amount of which (approximately a quarter) is not used for the activities of Colleges/SGs, but used by subsidiary companies, or let to external organisations etc. It is assumed that the scope of RAM (and TAG) includes self-funded/trading units and excludes subsidiary companies, reflecting the budget-setting decisions that the model and associated processes will support. Therefore we need to exclude the space used by subsidiary companies and external organisations from the cost driver as these units are outwith our resource allocation decisions. Also excluded would be the share of the balance space and internal walls of the buildings attributed to these organisations.

In analysing the Archibus data, this excluded space has had to be manually identified as the dataset does not yet include classification of subsidiary companies (principally as the organisational hierarchy does not reflect the legal entity of the University, but also due to the existing hierarchy being inappropriately used within the data). A further particular issue, also with the organisational hierarchy, is that there is no differentiation between Accommodation Services that belongs in CSG and UoE Accommodation Ltd, the subsidiary company, and Accommodation Services occupies a significant amount of space. These issues need to be addressed to enable transparency between UoE's core activity (the Colleges and SGs), its subsidiary companies and external organisations. The BIMl strategy co-ordination project "Organisational Hierarchy: the Way Forward" includes recommendations to address these issues, therefore implementation of the space cost driver depends on the implementation of elements of this project.

There are a number of different types of legal/financial arrangements and agreements for this excluded space, and Appendix 2 outlines the range of these.

Thinking beyond cost drivers but related to this, for our approach to be transparent we need to treat separately the costs incurred for the space which is included in the cost driver and for that which is excluded, as Colleges/SGs should not be contributing to the costs of the excluded space. These costs would include (but are not restricted to) maintenance, utilities, development and management of the excluded space. Also the models need to include as directly earned income all income received by Estates Department/the University for the excluded space, whether for rental or charges for utilities/maintenance etc. Both the separation of incurred costs and the identification of the direct income will require work and potentially system changes and this will need to be led by Finance colleagues.

3.2 Balance space

Balance space is space that is unassigned to any organisational unit on the system and includes circulation space, toilets, plant rooms, cleaners' cupboards etc. Note that some corridor space is assigned if its majority use is not for circulation, and therefore this is not classed as balance space. Balance space amounts to approximately a quarter of all space on Archibus.

The balance space will be shared across the occupiers of each building pro rata to the assigned room area on a building-by-building basis. This would apply to all assigned space on the system whether occupied by Colleges/SGs, self-funded units or subsidiary companies, or if the assigned space is let property or centrally allocated/managed, and would be included/excluded from the cost driver in line with the occupied space to which it is added.

Benefits:

- Transparent as based on objective information;
- Driven by actual data, therefore updates automatically;
- Simple process (applied successfully on data used in investigation);
- Discourages internal charging (which may be encouraged if building ownership is used);
- Encourages efficient use of space when designing new buildings and refurbishments.

Drawbacks:

- Penalises occupants of older buildings that were not designed for efficient use of space.

In sharing the balance space to building occupiers, it will be blind to its cost category, as this would add a significant amount of complexity to the data and the calculations. The percentages of space for assigned space and balance space are not materially different therefore this is an appropriate simplification for the model.

3.3 Centrally allocated/managed space

Centrally allocated/managed space is mostly general teaching space and is assigned to Estates Department with bookings managed by the Timetabling Unit in Student Administration. In 2014/15 it amounted to approximately 12,000m² (less than 2% of the space on Archibus). Internal charging only takes place for bookings outwith normal working hours. It is also hired out to external organisations, for which we don't always charge (e.g. Festival events). Additionally there are a number of high profile rooms in Old College bookable through Old College reception (the Raeburn Room, Lee Room etc, and the Playfair Library) which amount to approximately a further 1,000 m². In due course the McEwan Hall will also be bookable.

(The Timetabling Unit also deals with what were formerly local teaching rooms (2014/15: approximately 12,000 m²), which are assigned to schools. It is in a transition period of taking over the management and allocation of teaching activities to general teaching space irrespective of its 'ownership' for the Central Area, King's Buildings and Holyrood. In due course other areas will be added to this: MVM at Little France and the Bush, New College, the Business School and ECA (timescales to be determined). For clarity: this centrally managed space is included in the cost driver per occupied space, and not by the approach described in this section.)

In the cost driver, the total space of the non-teaching room bookings occupied (and the associated share of balance space and internal walls) will be split pro rata to bookings made (excluding bookings for which internal charges are made), and this added to space occupied for each School/College/SG. External bookings will be attributed their share and excluded from the cost driver. The bookings data used would be actual data from the most recent full year and would be the number of room bookings weighted by the duration (hours) of the booking and the capacity of the room (number of people).

[The Programme Board agreed that the bookings data used would be the number of room bookings weighted by the duration (hours) of the booking and the size of the room (m²).]

As with space excluded from the cost driver (section 3.1 above), for transparency, charges from bookings (both internal and external) would be included as locally earned income against Corporate and unit-specific costs if internal. In addition, Estates costs would need to be established for all external bookings (even if offered free) and any charged internal bookings, separate from uncharged bookings made by Colleges/SGs.

Benefits:

- Transparency in that all bookings are recognised;
- All general teaching space is made available to all units;
- Management of bookings through the Timetabling Unit for what were formerly local teaching rooms helps drive improved utilisation, and facilitates the identification of rooms for re-purposing (leading to improved student experience and/or more opportunities for growth of conference business);
- Discourages territorial behaviour;
- Clear and consistent ownership of rooms that are bookable through the Timetabling Office;
- Discourages non-usage of bookings, as it is not perceived as a free good;
- The separation of costs relating to external bookings promotes transparency.

Drawbacks:

- May be perceived by Colleges/Schools as an erosion of local control;
- Increase in work of Timetabling Office and Learning Spaces Technology due to additional volume of rooms to be managed;
- A central unit may not be well-placed to match facilities and needs.

Preliminary work has been done to look at the bookings data, and further analysis work is required.

3.4 Space excluded from cost driver (mothballed space and space awaiting or under refurbishment)

Currently mothballed space can be small amounts of non-contingent space, but following the proposal discussed at Space Enhancement and Management Group (29 April 2015), of redefining the criteria for mothballing to be such that only whole buildings can be mothballed, the instance of space being mothballed would be much less frequent, and would be the prelude to Estates Department to dispose of the building. Further, space will no longer be termed 'vacant'. The redefining of this space gives the following split (as at April 2015): awaiting refurbishment (19,900 m²); under refurbishment (10,800 m²); vacant (rooms which will be empty for only a short period of time - 1,700 m², but to be removed as a term) and mothballed (rooms/parts of buildings out of use for at least one academic year or buildings awaiting sale or demolition - 1000 m²).

All of this space (mothballed, under refurbishment and awaiting refurbishment) will be excluded from the cost driver.

As with the excluded space discussed in section 3.1, for our approach to be transparent we need to treat separately the costs incurred for this excluded space. Major refurbishment projects would need to bear these costs and any costs of temporary accommodation for decant/storage during the course of the refurbishment, and these costs would need to be shown alongside the directly earned income from the refurbishment projects. The costs for mothballed space would transparently show no income to offset it. In the case of strategic/opportunistic acquisitions where buildings can be awaiting project commencement for a significant amount of time and there may be uncertainty on the ultimate occupier, strategic funding for these costs may be appropriate, to maintain transparency in the model.

3.5 Rented space and space embedded in other organisations

The University currently rents space and also occupies embedded space in other organisations e.g. NH Board property and the Royal Observatory Edinburgh. These agreements vary in what is provided. We also lease some space on behalf of our subsidiary companies (Edinburgh University Press and Accommodation Services). To date this space has been only a small amount, and is currently largely to facilitate working with external bodies and sharing facilities. However, our approach to estate is becoming increasingly complex (e.g. Argyle House, the Turing Institute) and marks a change in our strategic direction in this area.

Rented and embedded space for use by Colleges/SGs will be included in the space cost driver, and the charges for this space will be included in the SG budget-lines for Estates, in effect spreading the cost of rented and embedded space over all space included in the cost driver.

Benefits:

- Simplicity: given that there are variations in the agreements as to what Estates provide to this space (e.g. services, maintenance, utilities, management of building work) this approach avoids having to split these costs to Estates Department out of budget lines if the opposite approach was taken and space was excluded from the cost driver;
- Recognises the increasingly strategic nature of leasing space for University use and avoids disincentivising occupation of non-University space.

Drawbacks

- Reduced transparency;
- Pressure to seek value for money will need to come from a different driver/process;
- The approach is blind to other factors that are of benefit to the occupying unit, particularly if some sort of collaborative working is involved.

3.6 Internal walls (use of Gross Internal Area)

Consideration has been given to whether net internal area (NIA) or gross internal area (GIA) should be used as the measure. NIA is all the area considered in the above sections. GIA is all this plus internal walls (approximately an additional 6% of area).

GIA will be used as the measure by also including internal walls in the cost driver. Internal wall area will be shared across occupants pro rata to occupied space on a building-by-building basis, in the same way as the balance space.

Benefits:

- Transparent as based on objective information;
- Driven by actual data, therefore updates automatically;
- Simple and consistent process (follows the balance space methodology);
- Encourages efficient use of space when designing new buildings and refurbishments.

Drawbacks:

- Penalises occupants of buildings that have thicker walls (these tend to be older buildings) and where internal walls are structurally necessary.

Note that in our preliminary analysis of Archibus data, we identified data issues with the use of GIA: 7 buildings had a GIA figure that was less than the sum of all space recorded in the building, and a further 18

buildings had a GIA of zero where the GIA field was being used to indicate a building for which the University was not responsible (which would be excluded from the data on this count). These data issues will need to be investigated and addressed.

4. Communication and processes to ensure data availability and accuracy

For all of the cost drivers that we use in RAM and TAG we need to have robust processes to ensure buy-in and ownership of the figures used, and any associated policies.

There are differences of opinion about how accessible space data is, and whilst we have a process for updating it this is not engaged with fully. The lack of information availability is causing frustration and mistrust of the data and as a consequence there appears to be patchy buy-in and some protracted issues. We need to address this in order for the data to have credibility in addition to addressing the fundamental data issues discussed earlier. Whilst it would obviously very helpful to both RAM and TAG to address this quickly, the RAM project will go ahead as planned using as a proxy the most appropriate data we have currently, with this happening in parallel.

To implement this cost driver the following actions are required, with full involvement from key users to ensure buy-in:

Action	Responsibility
Input to the IS project "Estates and Buildings Strategic Reporting Model" on: <ul style="list-style-type: none"> • data validation, database structure, inconsistent use of data fields and other issues encountered in analysing Archibus data; • recommendations on field use/re-purposing • specification of reporting requirements for the cost driver; • accessibility of reports. 	GaSP (HS), BI/MI (CM)
Document the data definitions in Archibus/EBIS relating to the cost driver (as part of Data Governance Group work) and any policies relating to the data.	Estates (MM)
Review the processes for agreeing space changes and ensuring the system data is up to date. See Note 1 below.	Estates
Communicate clear guidance on the data and processes to all appropriate users as part of implementing the reviewed processes.	Estates, BI/MI
Identify and clarify the different types of arrangements for subsidiary companies and external organisations etc occupying university owned space (follow up to section 3.1).	GaSP and Estates
Separate Estates costs of space occupied by subsidiary companies and external organisations from Estates costs of space occupied by Colleges/SGs, and make data system and process changes to allow this ongoing.	TAG and Estates Finance
Liaise with BIMl project to ensure all organisational hierarchy issues arising in developing this cost driver are taken account of in reviewing the purpose and design of the organisational hierarchy (workstrand 7)	GaSP (HS), BI/MI (CM)
Further investigation of central bookings system with respect to data provision	GaSP

Note 1: A particular characteristic of the space data is that there is both a provider and a user involved (and potentially more than one user if there is a change of use) and therefore there needs to be agreement between two or more parties on assignment of space (on the unit to which it is assigned and/or the type of space and/or the date of the change). It is envisaged that with clear documentation of the cost driver data definition and clear communication of the data then this can be handled within the standard processes for

updating the data. However, exceptionally, if there are any disputes that cannot be resolved through these processes then we require a single authority to determine the assignment. We propose that this role is assigned to the Director of Estates.

5. Consultation participants

The following colleagues were included in the consultation for this cost driver:

Helen Sang	HSS, College Estates Officer
Sarah Gormley	ISG, Business Manager
Lesley Ross	ISG, Building and Service Manager
Sylvia Rennie	PPLS, Buildings and Facilities Manager
Jim McGeorge	USG, Business Manager
Charles Hill	CSG, Project, Programme and Planning Manager
Duncan Herd	SCE, College Estates Officer
Maureen Masson	Head of Estates Buildings and Administration
Jane Johnston	Head of Estates Planning and Special Projects
Gary Jebb	Director Estates
Gillian Nicoll	Estates, Space Manager
Richard Mann	Estates, Space Manager
Anna Stamp	Estate Development Manager
Peter Phillips	GaSP
Tracey Slaven	Deputy Secretary, Strategic Planning
Craig Middlemass	BI/MI project
Stuart Graham	TAG project
Wendy Groome-Vine	TAG project

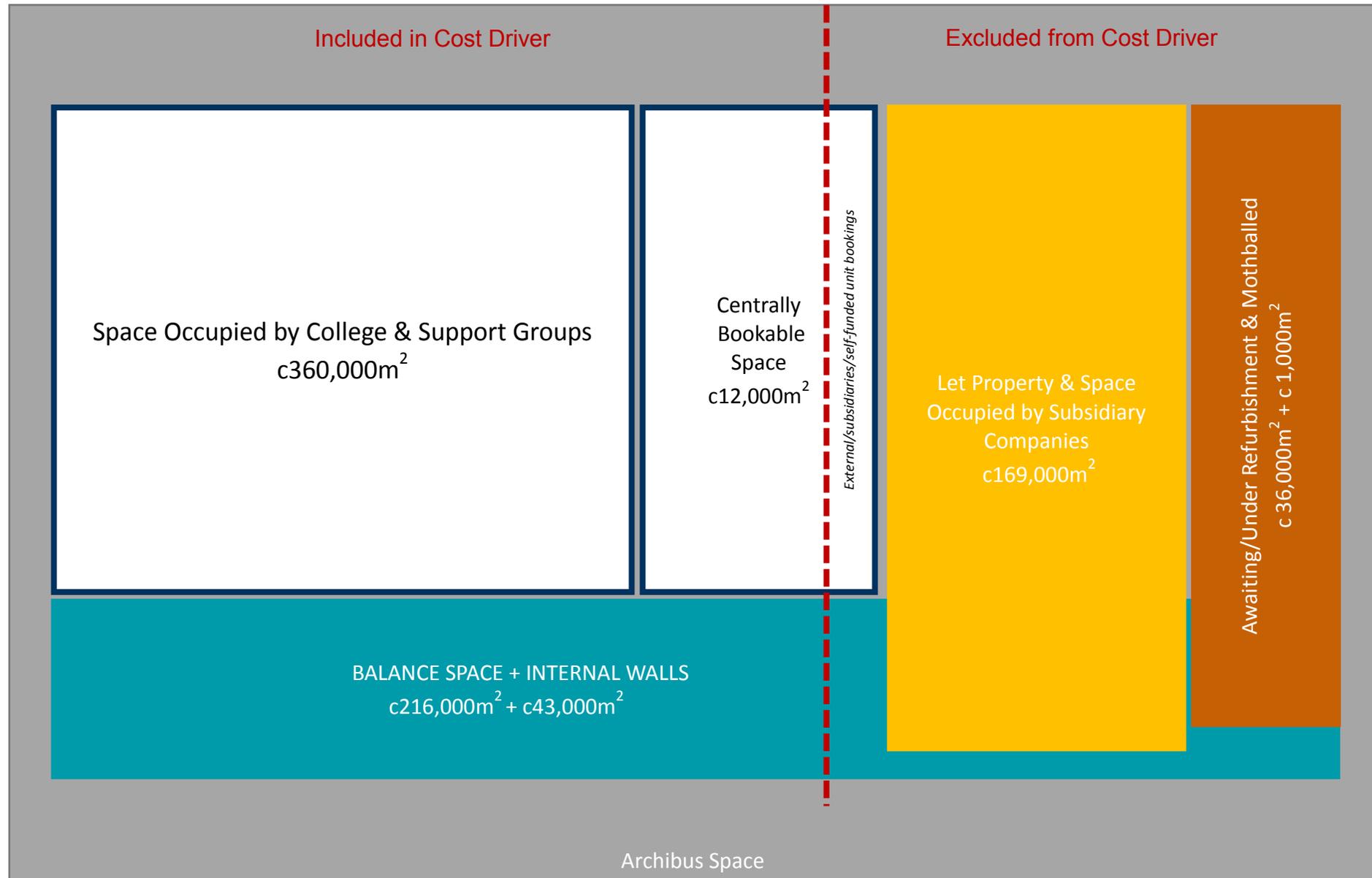
Helen Stocks

2nd September 2015

Updated 26th February 2016

Appendix 1: Diagrammatical representation of the space on Archibus that is included and excluded from the cost driver

* Includes CSG part of Accommodation Services in addition to UoE Accommodation Ltd as the data does not currently differentiate between these entities



Appendix 2: Contractual/financial arrangements of space used by subsidiary companies and let to external organisations, and for self-funded units

For space that will be excluded from the cost driver (space used by subsidiary companies and external organisations), there are a number of different types of legal/financial arrangements and agreements and the table below outlines the range of these as far as has been ascertained to date. Further investigation is required to ensure this list is comprehensive and correct, so it should be seen as illustrative for the moment.

Arrangement	Description	Organisations involved
Ground lease	Similar to freehold. University maintained	<ul style="list-style-type: none"> NHS Flowave TT UoE Utilities Supply Company
Leasehold	Lease with service charges. Occupier pays utilities.	<ul style="list-style-type: none"> ERI ETTC
Let property	Commercial leases. As landlord, Estates maintain building. Occupier pays utilities and manage services.	<ul style="list-style-type: none"> External organisations Accommodation Services
Accommodation Services act as owner?	Managed directly by Accommodation Services, who pay utilities and manage all services. Generally with student support. Can use Estates for maintenance and this is recharged (Estates costs specified separately).	Accommodation Services
Let property/shared ownership	UoE paid to maintain building, and pays rates?	SRUC (Peter Wilson Building)
Shared ownership	University building sits over NHS property	NHS
TBC		Scottish Microelectronics Centre

Similarly, there are a variety of arrangements for self-funded units, and the table below outlines these, as currently ascertained. Note that we will need to revisit resource arrangements (financial and provision of space etc) with respect to self-funded units.

Arrangement	Description	Organisations involved
Let property to self-funded units	Lease with service charges	<ul style="list-style-type: none"> NHS (Health Centre) EUSA Pharmacy
Free let	No agreement for charging premises cost	<ul style="list-style-type: none"> Staff Union EUSA (to review) UoE Nursery (to review)
TBC		<ul style="list-style-type: none"> EUSU Centre for Sport and Exercise Transport and Car Parking

Appendix 3: Clarification of terminology used by Timetabling versus that used by Estates and the university community in general.

The Archibus database used by Estates is not compatible with the database used by Timetabling and as a result, different terms have come into being over years of manual input and the natural evolution of how data is used by different people with different needs. This appendix seeks to clarify the terminology in use, the actual relationships of the terms in use and to define a common language for the purposes of defining Space in RA2018.

Timetabling Terminology	Meaning	Estates Terminology
Centrally allocated	The Timetabling unit manages all of the bookings for this space. In most instances this space will be assigned to Corporate Services within Archibus.	Centrally managed
Locally allocated	The Timetabling unit has created a profile for the College or Support Group so that they can manage the bookings for this space. In most instances this space will be assigned to the College/School or Support Group/Planning Unit within Archibus.	[Name of College/School or Support Group/Planning Unit]