



**Ministry
of Defence**

**JSP 464
Tri-Service Accommodation Regulations Volume 3:
Service Accommodation Charges, Combined
Accommodation Assessment System (CAAS) and
4-Tier Grading (4TG)**

Part 2: Guidance

Foreword

This Part 2 JSP provides guidance in accordance with the policy set out in Part 1 of this JSP; the guidance is sponsored by the Defence Authority for Service accommodation charges. It provides policy-compliant business practices which should be considered best practice in the absence of any contradicting instruction. However, nothing in this document should discourage the application of sheer common sense.

The Combined Accommodation Assessment System (CAAS) provides the methodology for determining accommodation charges and was introduced from 1 April 2016 for Service Families Accommodation (SFA) and replaces both MOD's 4-Tier Grading (4TG) regulations and the Defence Infrastructure Organisation (DIO)'s 'Standard for Condition' as the reported measure of condition for SFA. Where definitions within CAAS contained in Parts 1 & 2 are at variance, Part 1 takes precedence. Single Living Accommodation (SLA) continues to use the 4TG method.

Preface

How to use this JSP

1. JSP 464 Volume 3 Part 2 provides the methodology for determining the accommodation charges for SFA and SLA. It is designed to be used by staff responsible for the banding and administration of Service accommodation charges under the Combined Accommodation Assessment System for Service Family Accommodation, Single Living Accommodation and Substitute Equivalents. This JSP contains the policy and direction on accommodation charges and guidance on the processes involved and best practice to apply to assess and calculate individual property charges. This JSP will be reviewed at least annually.
2. The JSP is structured in two parts:
 - a. Part 1- Directive, which provides direction that must be followed, in accordance with statute or policy mandated by Defence or on Defence by Central Government.
 - b. Part 2 - Guidance, which provides the guidance and best practice that will assist the user to comply with the Directive(s) detailed in Part 1.

Coherence with other Defence Authority Policy and Guidance

3. Where applicable, this document contains links to other relevant JSPs, some of which may be published by different Defence Authorities. Where particular dependencies exist, these other Defence Authorities have been consulted in the formulation of the policy and guidance detailed in this publication.

Related JSPs	Title
JSP 464 Vol 1 Part 1: Directive	Tri Service Accommodation Regulations Vol 1: Service Family Accommodation (SFA) and Substitute Service Family Accommodation – UK and Overseas
JSP 464 Vol 2 Part 1: Directive	Tri Service Accommodation Regulations Vol 2: Single Living Accommodation and Substitute Service Single Accommodation
JSP 464 Vol 3 Part 1: Directive	Tri Service Accommodation Regulations: Vol 3: Service Accommodation Charges, Combined Accommodation Assessment System (CAAS) and 4 Tier Grading (4TG)
JSP 752	Tri Service Regulations for Expenses and Allowances

Further Advice and Feedback – Contacts

4. The owner of this JSP is Defence Infrastructure Organisation – DIO – SDA PR1. For further information on any aspect of this guide, or questions not answered within the subsequent sections, or to provide feedback on the content, contact:

Job Title/E-mail	Project focus	Phone
People-Accommodation- Policy 2	Accommodation Policy and Charges	

Contents

Foreword	i
Preface	ii
How to use this JSP	ii
Coherence with other Defence Authority Policy and Guidance	ii
Further Advice and Feedback – Contacts.....	ii
Contents.....	iii
Table of Amendments	iv
Chapter 1 – CAAS SFA Accommodation Charge Methodology	1-1
Chapter 2 – CAAS SFA Accommodation Charge Administration	2-1
Chapter 3 – CAAS SFA Assessment Criteria - Condition	3-1
Chapter 4 – CAAS SFA Assessment Criteria - Scale	4-1
Chapter 5 – CAAS SFA Assessment Criteria - Location	5-1
Chapter 6 – CILOCT.....	6-1

Table of Amendments

This JSP part was first issued in September 2015. All changes are shown in red.

Version	Chapters Affected	Dated
2	2	26 Feb 16
3	2 & 3	07 Aug 2017
4	5	6 Nov 2017
5	2	4 June 2018
6	Foreword & 1	20 July 2020
7	5	01 Oct 20

1 CAAS SFA Accommodation Charge Methodology

Calculating the CAAS Band

0101. The assessment of condition, scale and location factors (as described in Vol 3, Part 1, Chapter 5 and detailed at Chapters 3-5 below) will produce an assessment at 3 incremental levels for each factor. This leads to 9 different changing bands (A-I). The combination of the three-level assessments made for each factor will determine the accommodation charging band for individual SFA. The methodology for assessing SFA is provided at **Annex A** and described as follows:

- a. **Starting point.** The start of the banding (top charge – band A) is set at Decent Homes Plus (DH+) for condition, upper scale and urban location, with a discount for those properties that do not meet the top standard;
- b. **Condition.** Reduce by two bands for every drop in category for condition (i.e. if a property is in 'DH' rather than 'DH+' it will drop from band 'A' to band 'C');
- c. **Scale.** Reduce by one band for every drop in category for scale (i.e. if a property is 'Middle' rather than 'Upper' it will drop from band 'A' to band 'B');
- d. **Location.** Reduce by one band for every drop in category within location (i.e. if a property is 'Intermediate' rather than 'Urban' it will drop from band 'A' to band 'B');
- e. **Combination of Condition, Scale or Location reductions.** Where a combination of these factors apply, e.g. using all the examples above, if the property is 'DH', 'Middle' and 'Intermediate' it will drop $2+1+1 = 4$ Bands, i.e. from Band 'A' to Band 'E' in accordance with the **Table** below:

CONDITION ↓	LOCATION →	Urban	Intermediate	Remote
	SCALE ↓			
DH+	Upper	A	B	C
	Middle	B	C	D
	Lower	C	D	E
DH	Upper	C	D	E
	Middle	D	E	F
	Lower	E	F	G
DH-	Upper	E	F	G
	Middle	F	G	H
	Lower	G	H	I

0102. Overseas SFA Accommodation Charge reductions. With effect from 1 Apr 16, the following enhancements to the overseas offer will apply:

- a. Reduction by 2 charging bands of the CAAS Band assessment for all overseas SFA, Applied to Germany from 2020.
- b. CILOCT Waiver. All SP, whether in SFA or SLA (or substitute equivalents) overseas will be exempt CILOCT charges (see also Chapter 4 – CILOCT in JSP 464 Vol 3 Part 1).

CAAS ASSESSMENT METHODOLOGY DIAGRAM

Start

Step 1

Step 2

Step 3

Step 4 Overall Band

Step 5 Apply (if applicable)

Step 6 Update HIS

Step 7 Input charge data to JPA

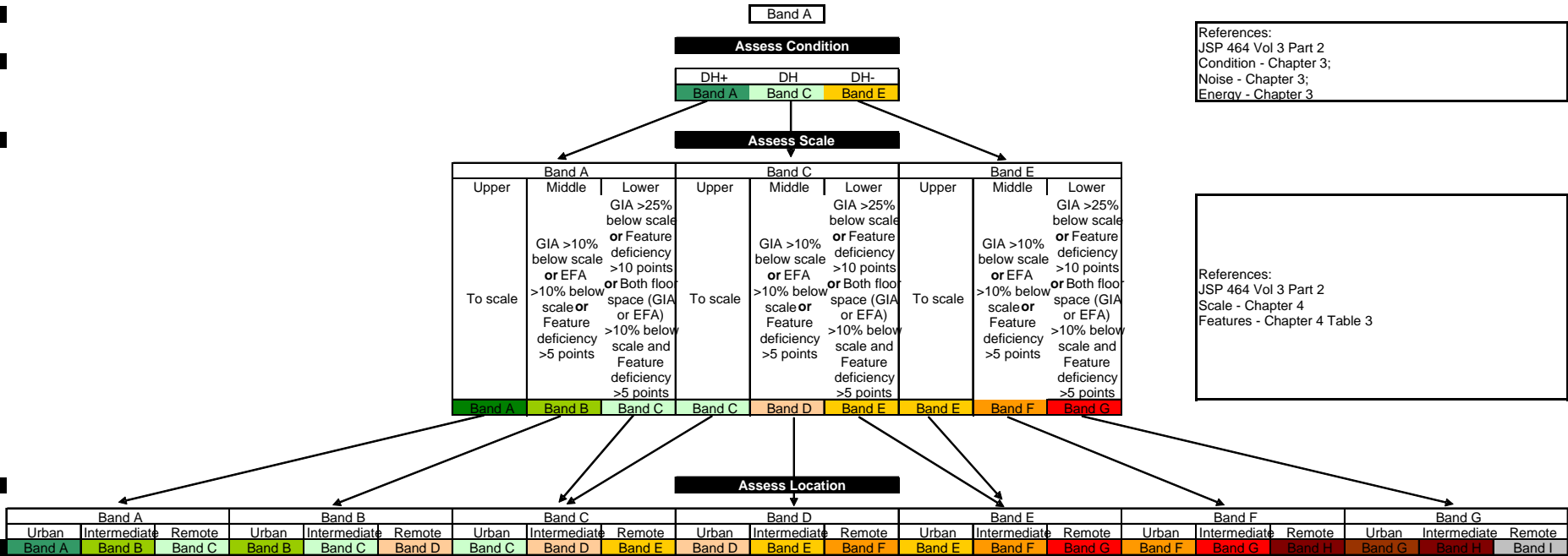
Step 8 Add (if applicable)

Example

Type C SFA with standard garage: Pay Statement shows 4 descriptors against Condition, Scale & Location plus overall Band for Charge
 Condition DH Scale Middle Location Urban Band D
 Starting at Band A, Condition reduces to Band C, flow to Band C to assess Scale, starting at Band C at Middle results in Band D, flow to Location starting at Band D assess Location, results in overall Band for Charge of Band D.

References:
 JSP 464 Vol 3 Part 2
 Condition - Chapter 3;
 Noise - Chapter 3;
 Energy - Chapter 3

References:
 JSP 464 Vol 3 Part 2
 Scale - Chapter 4
 Features - Chapter 4 Table 3



Temporary Reduction to Overall Band
 Permanent Reduction to Overall Band

Reference: Vol 3 Part 1
 Chapter 6

Record Condition (Step 1): DH+, DH, or DH-
 Record Scale (Step 2): Upper, Middle, or Lower
 Record Location (Step 3): Urban, Intermediate, or Remote
 Record Overall Band (Step 4) and Temporary/Permanent Reduction (Step 5)

Condition (Step 1), Scale (Step 2) and Location (Step 3)
 Overall Band (Step 4) and Temporary/Permanent Reduction (Step 5)

Garage Charge
 Additional Bedroom
 Furniture Charge
 Contribution in Lieu of Council Tax (CILOCT)

Reference: Vol 3 Part 1
 Chapter 4

2 CAAS SFA Accommodation Charge Administration

Administration of Charge on JPA

0201. MOD will publish, under the annual Directed Letter, the accommodation charges in the form of a daily rates table for each property Type. DBS is responsible for amending the accommodation charges on JPA in accordance with the rates table within the annual Directed Letter.

0202. DIO will be responsible for undertaking assessment of individual properties to calculate the rental band. DIO is to collate the overall score for each factor, and to assign properties to a rental band. The accommodation charge for individual properties will correspond to the daily charge rate in accordance with the published rates table. Garage charges, Car Port charges and Furnished/Part Furnished charges are to be inputted and charged separately. The accommodation charge will be deducted from pay at source through JPA.

0203. DIO are responsible for raising the appropriate charges and are required to input the occupancy and accommodation charge details within the accommodation fields in JPA.

0204. **Administration of Charge for those occupants not on JPA.** Charges are raised and administered locally.

Governance

0205. Recording of Accommodation Banding. DIO are to keep records of current banding and the date of the last assessment, for all their accommodation.

0206. Recording of Assessment Results. DIO are to maintain a record of the assessment for each property together with the underlying data, as follows:

- a. Decent Homes Standard (DHS)/Decent Homes+ (DH+) assessment proforma (and supporting evidence).
- b. Housing Health and Safety Rating System (HHSRS) risk assessment.
- c. Energy Performance Certificate (EPC) or equivalent (to produce an individual Standard Assessment Procedure (SAP) rating score and Energy Efficiency Rating (EER) band).
- d. Scale assessment and supporting evidence, such as measured survey drawings or calculations.
- e. Pan-UK geographical classification.

Records may be held electronically in a format from which individual SFA reports can be produced.

0207. Assurance. DIO are responsible for assuring findings and ensuring that Banding is conducted in accordance with the correct procedures and within the permitted

timeframes. Assurance is to be conducted in accordance with extant DIO processes. Where it is found that either the correct procedures have not been followed or the timescales have been exceeded, DIO in discussion with the Service Authority (and MOD People-Accommodation if necessary) are to determine whether the findings are to be invalidated. In that event, a re-assessment is to be convened at the earliest opportunity to re-band the accommodation.

TEMPLATE CAAS BAND CHALLENGE / APPEAL LETTER

SFA No / Street
POSTAL TOWN
Postcode

Tel:
E-mail:

Date

(Insert appropriate address)¹

Dear Sir / Madam,

CAAS BAND STAGE 1 CHALLENGE / STAGE 2 APPEAL* – SFA No / Street*

Reference(s):

- A. JSP 464 Volume 3 Part 2.
- B. *Stage 1 challenge date / reference number (complete if a Stage 2 Appeal).*

I wish to challenge/appeal* the CAAS Band applied to my SFA.

I received my CAAS Band letter on *insert date** **or** My Move-In date was *insert date**, and I was notified in writing on that day that the CAAS Band for the SFA is Band A, B, C, D, E, F, G, H, I*.

The basis for my challenge/appeal is on the following grounds:

Condition. *The condition is considered to be over assessed on the criteria of Hazard / Repair / Modernity / Thermal Comfort*.*

Scale. *The floor area has been over assessed, and is less than recorded and/or insufficient points have been awarded in respect of <insert feature(s)>*.*

Location. *The SFA postcode does not merit assessment within the Urban / Intermediate range*.*

Additional Detail/Evidence. *Nil or Provide any relevant additional detail/evidence (e.g. photographs) that will assist DIO to investigate the Appeal*.*

Yours faithfully

NAME(Incl Number / Rank if appropriate)

**Delete and/or amend as appropriate. For overseas locations the band to be challenged / appealed is the actual assessed CAAS band (prior to application of 2 band reduction).*

¹ Address details will be provided within CAAS Band letters / March-In details.

3 CAAS SFA Assessment Criteria - Condition

0301. DIO is required to conduct an assessment of every SFA using the Decent Homes Standard (DHS) and Decent Homes + (DH+) criteria. As part of the DHS assessment, DIO are to conduct an assessment of each property using the Housing Health and Safety Rating System (HHSRS) or equivalent industry standard and an energy efficiency rating to produce an Energy Performance Certificate (EPC) assessment as determined by the Standard Assessment Procedure (SAP) and the Energy Efficiency Rating (EER) band. A summary is shown in the **Table** below.

0302. Decent Homes Standard (DHS). DIO is to assess in accordance with the DCLG guidance; detailed definition for each of these criteria is included in ‘A Decent Home: Definition and guidance for implementation, Communities and Local Government, June 2006’: <http://www.communities.gov.uk/publications/housing/decenthome>. A summary is provided at **Annex A Table 1**.

DHS – A decent home is one that meets all of the following four criteria:

- a. meets the statutory minimum standard for housing as assessed by the Housing Health and Safety Rating System (HHSRS) or equivalent industry standard.
- b. it is in a reasonable state of repair (assessed from the age and condition of a range of building components including walls, roofs, windows, doors, chimneys, electrics and heating systems).
- c. it has reasonably modern facilities and services (assessed according to the age, size and layout/location of the kitchen, bathroom and WC and any common areas for blocks of flats).
- d. it provides a reasonable degree of thermal comfort (adequate heating and effective thermal insulation).

	CONDITION		
	Decent Homes Plus (DH+)	Decent Homes (DH)	Decent Homes Minus (DH-)
	No discount	Reduce by two rental bands (20% discount)	Reduce by four rental bands (40% discount)
Statutory minimum standard	Pass	Pass	Fail any one of the four criteria.
Reasonable state of repair	Pass	Pass	Fail any one of the four criteria.
Reasonably modern facilities and services	Pass enhanced standard	Pass normal standard	Fail any one of the four criteria.
Thermal comfort	Energy Rating Band D and above	Energy Rating Band E	Energy Rating Band F and below

0303. MOD DH PLUS (DH+) DH+ has been developed by DIO, setting stricter assessment criteria under reasonable repair, modern facilities and thermal comfort. A summary, showing enhanced standards, is at **Annex A Table 1**.

Housing Health and Safety Rating System (HHSRS)

0304. DIO is to assess DHS using the HHSRS risk assessment tool or industry standard equivalent to assess potential risks to the health and safety of occupants. There are 29 categories of hazard, each of which is separately rated, based on the risk to the potential occupant who is most vulnerable to that hazard. The individual hazard scores are grouped into 10 bands where the highest bands (A-C representing scores of 1000 or more) are considered to pose Category 1 hazards. For the purposes of the decent homes standard, properties posing a Category 1 hazard do not meet the statutory minimum requirements. A summary of hazard groups is provided at **Annex A Table 1**. Further guidance and definition is available at <https://www.gov.uk/government/publications/hhsrs-operating-guidance-housing-act-2004-guidance-about-inspections-and-assessment-of-hazards-given-under-section-9>

0305. There are 29 hazards associated with the system. The assessment is based on the likely effect of the hazard on the **most vulnerable age group**, regardless of whether the current occupiers are in that vulnerable group. Action taken as a result of identifying hazards should consider the actual occupiers. For some hazards there is no relevant group, but for many hazards it may be either the young or the elderly.

Noise Nuisance

0306. Aircraft noise is not currently a statutory nuisance in the UK. Aircraft noise is specifically exempted from the controls in general environmental protection legislation; therefore, local authorities do not have the legal power to take action on matters of aircraft noise. The national Decent Homes Standard includes an assessment of noise from external sources (such as aircraft and road noise) as one of the 29 hazards when considering the minimum safety standard (Criterion 1). MOD recognises that noise presents an issue, more particularly for SFA adjacent to flying units and will address through CAAS and preventative measures as SFA improvements are carried out, only reducing the rental charge where; the nature and severity of the noise nuisance is significant, it cannot be treated by a combination of noise reduction measures, or noise reduction measures have not been carried out. These measures should not be limited to property specific measures but should also include local airfield management practices, in accordance with CAA guidance. http://www.caa.co.uk/docs/697/srq_env_00001-01-30902004.pdf where practicable. BRE provide guidance on the construction approach to improving sound insulation.

http://www.bre.co.uk/filelibrary/pdf/cap/soundins_homes.pdf

0307. The CAAS assessment is aligned with Government standards on noise exposure² developed in concert with noise specialists within Defence Environment and Safety Authority. SFA will be assessed where data is provided by public bodies in line with European Parliament and Council Directive for Assessment and Management of Environmental Noise 2002/49/EC, which requires publication of noise data, and MOD assessments of military establishments, excluding N Ireland. The assessment is based on

² Noise Exposure Criteria defined under the National Policy Framework (NPPF) Guidance.

calculated noise survey contour data; properties subject to mechanically derived noise above the Government recommended threshold will have the charge reduced (i.e. from DH+ to DH, or DH to DH-). In the worst cases, a property will have the charge reduced by two levels (i.e. from DH+ to DH-). The revised standard and protocols are at **Annex A Tables 2 and 3**. The procedure is as follows:

- a. Obtain noise survey data contours.
- b. Overlay map of estate (to appropriate scale) against noise contours.
- c. Determine whether SFA falls within relative thresholds.

0308. Standard. The assessment of noise nuisance follows DEFRA's Planning and Policy Guidance 24 (PPG24) and the National Policy Framework (NPPF) Guidance. PPG24 has been withdrawn by DEFRA in favour of the less prescriptive NPPF; for the purposes of CAAS assessments MOD requires clear definitive noise level targets contained within PPG24 and incorporated alongside the effect level descriptions in the NPPF. DEFRA are aware of the continued use of this criterion.

0309. Noise Level Standard. The Department for Transport assesses aircraft noise by determining the area exposed to average sound levels of 57dB(A) or more between 0700 and 2300 (Lden) internally to the dwelling with doors & windows closed; the same criteria is to be applied to other mechanical noise sources. This measure is an indicator of the onset of what the government describes as 'community annoyance' in the daytime. Night hours within the Government restriction measures are defined as 2300-0700 (Lnight). CAAS adopts this approach, with noise level standards for reductions in Band for Charge detailed at Table 2.

0310. Noise Measurement. CAAS will assess SFA/SLA by use of modelling from Authority provided noise maps that show Decibel Average (dBA) contours, applying PPG24 guidance and professional assessment on the noise attenuation properties of building fabric, taking into account any improvements made (enhanced glazing, baffles etc) to provide an internal noise assessment. All SLA/SFA within the 57 dBA noise contour of a mechanical noise source are to be assessed taking into account the construction detail and dBA Sound Reduction Index as detailed at Table 3. The maximum internal noise value of an SFA is to be calculated by subtracting the Index value from the dBA contour value.

- a. **Airfields (Military).** All military airfields assessed by DESA will be considered. The dBA contours should reflect the concept of operations for the airfield, allowing for the impact of engine test ground run locations etc. In carrying out the calculation, the assessment result is to err on the side of caution in favour of the lesser Band for Charge e.g. where the contour bisects any part of an SFA, the highest dBA contour value is taken for the calculation. The property would only incur deficiencies under CAAS if the noise level exceeds the thresholds shown in the chart at TABLE 2 **and** noise reduction measures are not in place or insufficient to fully mitigate the impact.
- b. **Other mechanical noise sources.** DEFRA and regional Govt record activities generating excessive noise and those SFA that fall within the affected noise footprint are to be considered. In line with the Government approach to noise nuisance, DIO will aim to mitigate the effect through noise reduction measures in at-risk properties

to reduce the risk of noise exposure. The property would only incur deficiencies under CAAS if the noise level exceeds the thresholds in the chart at TABLE 2 **and** noise reduction measures are not in place or insufficient to fully mitigate the impact. In the event of a temporary occurrence of excessive noise (e.g. sustained demolition using heavy plant) DIO may institute a discretionary temporary downgrade for up to 3 months without recourse to formal noise impact modelling for the duration of the occurrence.

0311. Data Sources. The source data for reviewing noise impacts from non-military sources are provided at the following web locations:

- a. **England.** <http://services.defra.gov.uk/wps/portal/noise/>
- b. **Scotland.** <http://www.scottishnoisemapping.org/public/view-map.aspx>
- c. **Wales.** <http://data.wales.gov.uk/apps/noise/?lang=cy>
- d. **Northern Ireland.** http://www.doeni.gov.uk/index/protect_the_environment/local_environmental_issues/noise/environmental_noise_directive-2/round_2_2012/maps-2.htm (includes MOD movements at NIAL)

Thermal Comfort – Energy Efficiency Rating

0312. CAAS adopts the Government’s Standard Assessment Procedure (SAP) (<https://www.gov.uk/guidance/standard-assessment-procedure>), by producing an Energy Performance Certificate (EPC) (100-0) and from this an Energy Efficiency Rating (EER) (A-G) or equivalent for each property to measure energy efficiency as part of DHS thermal comfort criteria. There is no statutory requirement to produce a SAP for Licenced dwellings (SFA); MOD have chosen to do so with an extrapolation of results where a CAAS survey has not yet been carried out in line with Vol 1 Chapter 7 (Transition Rules). All EPCs produced after September 2016 is available on the NES web page (<https://www.epcregister.com/reportSearchAddressTerms.html?redirect=reportSearchAddressByPostcode>). Where Properties are assessed as failing the Government threshold, they will merit a reduction in accommodation charge to compensate for the additional energy cost. Properties below the minimum SAP threshold could remain fit for habitation if it is not assessed as representing a Category 1 hazard.

0313. The SAP rating will be used as a proxy to assess thermal comfort and will take into account factors including:

- Primary energy source
- Overall floor space
- Insulation
- Double glazing
- Boiler performance

0314. The energy efficiency rating is presented in an A-G **Energy Efficiency Rating (EER)** banding system as part of an Energy Performance Certificate (EPC), where EER Band A rating represents low energy costs (i.e. the most efficient band) and EER Band G rating represents high energy costs (the least efficient band).

0315. The CAAS energy efficiency rating under DHS is assessed against the thresholds in the **Table** below:

Standard	Class Name	SAP Level	EER Band
Target	DH+	SAP 55 and above	Band D and above
Acceptable	DH	SAP 54-39	Band E
Below	DH-	SAP 38 and below	Band F and below

0316. Properties below SAP 38 could remain fit for habitation if it is not assessed as representing a Category 1 hazard in line with the guidance provided under the Decent Homes Standard. The standard will be adjusted for overseas to take into account the necessary differences due to climatic conditions.

0317. Exceptional SFA Assessments. Where 2 SFA have been ‘knocked through’ to create a larger dwelling, the assessment rules below to derive the condition score are to be followed. The elements (2nd kitchen/bathroom/boiler) omitted from the score are to be reported on within the assessment for their condition:

- a. **Kitchen.** If both kitchens retained, the principal kitchen in use by the occupant is assessed.
- b. **Boiler.** If both boilers retained the lowest rated for energy efficiency is to be assessed for SAP.
- c. **Bathroom.** The poorest condition family bathroom is to be assessed.

Thermal Comfort Overseas

0318. Overseas locations will use the in-country SAP methodology or equivalent to assess Thermal Comfort in order to determine the local equivalent of DH+, DH, and DH- ratings. The use of a local methodology will take into account additional demands for heating/cooling driven by local climatic conditions. The Overseas Equivalent to SAP/EPC Energy ratings are at **Annex A Table 4**.

Seismic Protection Overseas

0319. See JSP 464 Vol 3 Part 1.

Compliance with UK Building and Fire Standards Overseas

0320. See JSP 464 Vol 3 Part 1.

TABLE 1 – DECENT HOMES STANDARD (DHS) AND MOD DECENT HOMES PLUS STANDARD (DH+)

Serial 1 – Statutory minimum standard

Serial	Decent Homes Standard (DHS)	MOD DH+ Standard	Guidance & Clarification
1	<p>Meets the current statutory minimum standard for housing.</p> <p>Statutory Minimum Standard: Housing Health and Safety Rating System (HHSRS) is a risk assessment procedure and does not set a standard. HHSRS concentrates on threats to health and safety and is generally not concerned with matters of quality, comfort and convenience.</p> <p>A hazard rating is expressed through a numerical score which falls within a band. There are 10 bands. Scores in Bands A to C are Category 1 Hazards. Scores in Bands D to J are Category 2 Hazards.</p> <p>As a minimum, the elements set out in the Minimum Requirements as being measured by HHSRS must be free from HHSRS Category 1 Hazard. Any element categorised with a HHSRS Category 1 Hazard would automatically result in the dwelling ‘Failing’ the Standard.</p> <p>Hazard Groups and Sub-Groups: There are 29 hazards. These are arranged in four main groups reflecting the basic health requirements. The four groups are sub-divided according to the nature of the hazards.</p>	Assessed as for DHS.	<p>Any SFA having a Category 1 Hazard would be classed as unfit for occupation until the hazard is addressed. Where the SFA is currently occupied, it can continue to be occupied as long as the hazard, or work to address the hazard, does not present an immediate threat to health and safety of the occupant – while sounding equivocal, in practise it will be for the an SME to advise if vacation is required or if works can take place with the occupant remaining in situ. Whichever is most practicable to manage the risk to the occupant</p> <p>Any SFA having a Category 2 Hazard to be classed as fit for occupation; either works to address the hazard included in an improvement programme (where it is identified as an estate or street issue) or addressed via local work order (where hazard affects a single dwelling) as funding is available</p> <p>a. Electrical Hazards: note that age does not mandate replacement, system must fail a test (currently 17th Ed IEE)</p> <p>b. Fire Hazards: note that communal areas (flats) will be assessed by DFRMO who will provide report with categorized work requirements to meet obligations under the Regulatory Reform (Fire Safety) Order 2005</p>

<p>1 (cont)</p>	<p>A. Physiological Requirements including – Hygrothermal conditions and Pollutants (non-microbial).</p> <p>B. Psychological Requirements including – Space, Security, Light, and Noise.</p> <p>C. Protection against Infection including – Hygiene, Sanitation, and Water supply.</p> <p>D. Protection against Accidents including – Falls, Electric shock, Burns and Scalds, and Building related Collisions</p> <p>Dwellings which fail to meet this criterion are those containing one or more hazards assessed as serious ('Category 1') under the HHSRS³.</p>		<p>c. Noise – Refer to Tables 2 and 3 noting that infrastructure solutions to mitigate internal noise are available - enhanced glazing, baffled vents etc.</p>
-----------------------------------	--	--	--

³ Housing Health and Safety Rating System Operating Guidance dated Feb 06.

Serial 2 – Reasonable state of repair

Serial	Decent Homes Standard (DHS)	MOD DH+ Standard	Guidance & Clarification
2	<p>It is in a reasonable state of repair</p> <p>Dwellings which fail to meet this criterion are those where either:</p> <p style="padding-left: 40px;">one or more of the key building components are old <u>and</u>, because of their condition, need replacing or major repair; or</p> <p style="padding-left: 40px;">two or more of the other building components are old <u>and</u>, because of their condition, need replacing or major repair.</p> <p>Key building components are those which, if in poor condition, could have an immediate impact on the integrity of the building and cause further deterioration in other components. They are the external components plus internal components that have potential safety implications. Under DHS dwelling cannot fail on age alone, but must also be in poor state of repair. Assessment sets age and condition criteria depending on component.</p> <p style="padding-left: 40px;">Key components are annotated (k)</p>	<p>Criteria for assessment/failure as for DHS.</p> <p>Improvements to the base level DHS are shown below in Bold.</p>	<p>A major repair is work of a non-routine nature where building or engineering elements have failed and are beyond economical repair by routine maintenance or do not comply with legal requirements.</p> <p>Where a component requires some work, repair should be prescribed rather than replacement unless:</p> <ul style="list-style-type: none"> • the component is sufficiently damaged that it is impossible to repair; • the component is unsuitable, and would be even if it were repaired, either because the material has deteriorated or because the component was never suitable; • for external components even if the component were repaired now, it would still need to be replaced within 5 years. <p>Variations in age criteria for flats are listed by exception. External door to flats are those that are exposed to the elements; flat doors off an enclosed common area should be assessed as for houses.</p>

Serial	Decent Homes Standard (DHS)			MOD DH+ Standard			Guidance & Clarification
	Component	Age	Condition	Component	Age	Condition	
	Wall structure (k)	Fail if	Fail if more than	Wall structure (k)	Fail if	Fail if more than	

2 (cont)		more than 80 Yrs.	30% requires repair or if more than 10% requires replacement		more than 80 Yrs.	30% requires repair or if more than 10% requires replacement.	
	Lintels (k)	Fail if more than 60 Yrs.	Fail if not present / inadequate by visual inspection.	Lintels (k)	Fail if more than 60 Yrs.	Fail if not present / inadequate by visual inspection.	Evidence for example by deflection/bowing of window units, cracking at window head.
	Brickwork & External Wall Render (spalling) (k)	Fail if more than 30 Yrs	Fail if more than 50% requires replacement/renew	Brickwork & External Wall Render (spalling) (k)	Fail if more than 30 Yrs	Failure if more than 30% requires replacement/renew	Brick Work – the surface is peeling or flaking off Render – cement or similar ‘skin’ is falling away or sounds hollow (blown) when knocked
	Wall Finish (k)	Fail if more than 60 Yrs.	Fail if more than 50% requires replacement/re-point/renew	Wall Finish (k)	Fail if more than 60 Yrs.	Fail if more than 50% requires replacement/re-point/renew	
	Flats ≥ 6 storeys	Fail if more than 30 Yrs.	Fail if more than 50% requires replacement/re-point/renew	Flats ≥ 6 storeys	Fail if more than 30 Yrs.	Fail if more than 50% requires replacement/re-point/renew	
	Chimney Stacks (k)	Fail if more than 50 Yrs.	Fail if partial rebuild required	Chimney Stacks (k)	Fail if more than 50 Yrs.	Fail if partial rebuild/ re-point required	
Roof Structure (k)	Fail if more than 50 Yrs.	Fail if replace more than 10% or strengthen more than 30%	Roof Structure (k)	Fail if more than 50 Yrs.	Fail if replace more than 10% or strengthen if more than 20%		
Serial	Decent Homes Standard (DHS)			MOD DH+ Standard			Guidance & Clarification
2	Component	Age	Condition	Component	Age	Condition	
	Roof Structure (k)	Fail if more than	Fail if replace more than 10% or	Flats (all)	Fail if more		

(cont)	Flats (all)	30 Yrs.	strengthen more than 30%		than 30 Yrs.		
	Roof covering/Finish (k)	Fail if more than 50 Yrs.	Fail if replace or isolated repairs to 50% or more	Roof covering/Finish (k)	Fail if more than 50 Yrs.	Fail if replace or isolated repairs to 25% or more.	
	Flats (all)	Fail if more than 30 Yrs.		Flats (all)	Fail if more than 30 Yrs.		
	Windows (k)	Fail if more than 40 Yrs.	Fail if replacement of any or repair parts of two or more	Windows (k)	Fail if more than 30 Yrs.	Fail if replacement of any or repair parts of two or more	Where replacing consider all windows for replacement based on condition. All windows to meet child safety, SBD2 ⁴ , Counter Terrorism Measures (CTM), child security and energy efficiency criteria. Listed/Conservation Areas secondary glazing is acceptable
	Flats (all)	Fail if more than 30 Yrs.		Flats (all)	Fail if more than 25 Yrs.		
	External Doors (k)	Fail if more than 40 Yrs.	Fail if required to replace at least one	External Doors (k)	Fail if more than 30 Yrs.	Fail if required to replace at least one	Where replacing consider all external doors for replacement based on condition. All doors to meet SBD2 ⁵ , CTM, security and energy efficiency criteria. Design to pay cognisance to Listed/Conservation Areas.
Flats (all)	Fail if more than 30 Yrs.		Flats (all)	Fail if more than 25 Yrs.			
Electrical System (k)	Fail if more than 30 Yrs.	Fail if replacement or major repair required	Electrical System (k)	Fail if more than 30 Yrs.	Fail if replacement or major repair required	Failure based on IEE 17 th Ed testing (or later standard if superseded). Survey is a visual assessment and is subservient to SME testing. IEE certificate will state pass/fail.	
Serial	Decent Homes Standard (DHS)			MOD DH+ Standard			Guidance & Clarification
	Component	Age	Condition	Component	Age	Condition	
2	Heating Boiler (k)	Fail if more than	Fail if replacement or major repair	Heating Boiler (k)	Fail if more	Fail if replacement or major repair	Failure based on IEE 17 th Ed testing (or later standard if superseded).

⁴ SBD2 – ACPO Secure By Design, a minimum standard of security through design of the window installation to BS 7950.

⁵ SBD2 – ACPO Secure By Design, a minimum standard of security through design of the door installation to PAS 24-1.

(cont)		15 Yrs.	required		than 12 Yrs.	required	
	Heating System / Distribution	Fail if more than 40 Yrs.	Fail if replacement or major repair required	Heating System/Distribution	Fail if more than 40 Yrs.	Fail if replacement or major repair required	Primary heat source, not focal point fire. Includes Communal Heating Plant (CHP) where installed.
	Heating other (Storage Heaters etc.) (k)	Fail if more than 30 Yrs.	Fail if replacement or major repair required	Heating other (Storage Heaters etc.) (k)	Fail if more than 20 Yrs.	Fail if replacement or major repair required	
	Kitchens	Fail if more than 30 Yrs.	Fail if condition warrants replacement (Major repair or replace 3 or more items out of the 6 cold water drinking supply, hot water, sink, cooking provision, cupboards, worktop)	Kitchens	Fail if more than 20 Yrs.	Fail if condition warrants replacement (Major repair or replace 3 or more items out of the 6 (cold water drinking supply, hot water, sink, cooking provision, cupboards, worktop)	
	Bathrooms	Fail if more than 40 Yrs.	Fail if condition warrants replacement. (Major repairs or replace 2 or more items (bath, wash hand basin, WC)	Bathrooms	Fail if more than 30 Yrs.	Fail if condition warrants replacement. (Major repairs or replace 2 or more items (bath, wash hand basin, WC)	

Serial 3 – Reasonably modern facilities and services

Serial	Decent Homes Standard (DHS)	MOD DH+ Standard	Guidance & Clarification
3	<p>Dwellings which fail to meet this criterion are those which lack <u>three or more</u> of the following:</p> <ul style="list-style-type: none"> • a reasonably modern kitchen (20 years old or less); • a kitchen with adequate space and layout; • a reasonably modern bathroom (30 years old or less); • an appropriately located bathroom and WC; • adequate insulation against external noise (where external noise is a problem); • adequate size and layout of common areas for blocks of flats. <p>A home lacking two or fewer of the above is still classed as decent, therefore it is not necessary to modernise kitchens and bathrooms if a home meets the remaining criteria.</p>	<p>Standards for modern facilities and services mirror as where provided S1fC as a minimum for internal elements. Standards for communal and external elements are included as additions based on the aspiration that all estates should be secure, aesthetically pleasing and engender a community spirit as a 'good place to live'. Guidance where available is provided as to the standards that should be met.</p> <p>Criteria for assessment/failure as for DHS.</p> <p>Improvements to the base level DHS are shown below in Bold.</p> <p>Components fail if age <u>or</u> condition does not meet the enhanced standard.</p>	<p>Department for Communities and Local Government (DCLG) Guidance.</p> <p>Landlords may work to different detailed standards than those set out above. In some instances there may be factors which may make the improvements required to meet the Decent Homes standards' challenging, or impossible, factors such as physical or planning restrictions. Where such limiting factors occur the property should be assessed to determine the most satisfactory course of action in consultation with the relevant body or agency (DIO) so as to determine the best solution. The outcome may determine that some improvements may be possible even if all are not. A dwelling would not fail this criterion, where it is impossible to make the required improvements to components for physical or planning reasons.</p>

Serial	Decent Homes Standard (DHS)			MOD DH+ Standard			Guidance & Clarification
	Component	Age	Condition	Component	Age	Condition	
3	Modern Kitchen	Fail if more		Modern Kitchen	Fail if more	Does not include externally vented	Move-In standards can be found at http://housing.carillionamey.co.uk/moving-in/move-in-standards/

(cont)		than 20 Yrs.			than 20 Yrs.	extract fan.	Constrained by existing stock design; on upgrade must meet current Building Regulations.
	Kitchen – adequate space & layout		Fail if too small to contain all the required items (sink, cupboards cooker space, worktops etc) appropriate to the size of the dwelling. ⁶	Kitchen – adequate space & layout		Assessed as per DHS.	
	Modern Bathroom	Fail if more than 30 Yrs.		Modern Bathroom	Fail if more than 30 Yrs.	Does not have a shower and/or does not meet Bld Regs (e.g. externally vented extract fan & thermostatic shower).	
	Bathroom & WC – appropriately located		Fail if the main bathroom or WC is located in a bedroom or accessed through a bedroom. ⁷	Bathroom & WC – appropriately located		Assessed as per DHS.	A dwelling would also fail if the main WC is external or located on a different floor to the nearest wash hand basin, or if a WC without a wash hand basin opens on to a kitchen in an inappropriate area, for example next to the food preparation area.
	Noise – assessed under Serial 1.			Noise – assessed under Serial 1.			
	Common areas for blocks of flats - adequate size and layout.		Insufficient room to manoeuvre easily. ⁸	Common areas for blocks of flats - adequate size and layout.		Assessed as per DHS.	Examples include where there are narrow access ways with awkward corners and turnings, steep staircases, inadequate landings, absence of handrails, low headroom etc.

Serial	Decent Homes Standard (DHS)			MOD DH+ Standard			Guidance & Clarification
	Component	Age	Condition	Component	Age	Condition	

⁶ As defined in DCLG - A Decent Home: Definition and guidance for implementation June 2006 Update (Page 16).

⁷ As defined in DCLG - A Decent Home: Definition and guidance for implementation June 2006 Update (Page 17).

⁸ As defined in DCLG - A Decent Home: Definition and guidance for implementation June 2006 Update (Page 17).

3 (cont)	Garden Fencing – not measured. Reporting standard only.		Garden fencing where present is secure, in good condition and prevents irresolute egress by minors and canines.	Garden Fencing – not measured. Reporting standard only.			Applies to SFA where there is currently a clearly demarked garden boundary with existing fence or hedge line. Flats at 1 st floor and above excluded, maisonettes included where individual garden is provided. This is a reporting standard only; not meeting the standard does not qualify as a 'Fail'. All fence repairs should be reported and fixed or a replacement task should be entered in the Service register with the appropriate priority considering, planning, age range of family and presence of environmental hazards if egress achieved (major roads, rail etc.). Refer to JSP 315 for technical guidance and standards.
	Environment – not formally measured. Reporting standard only.		The immediate environment (MOD SFA estate) should be well maintained, have adequate play resources in good condition, be free of graffiti and contribute to the overall community living experience. Hazards should be managed or removed (e.g. tree stumps, damaged railings & planters etc).	Environment – not formally measured Reporting standard only.			(Lead Ref: BRE Eco homes 06 Hea 3) – The 'Immediate Environment' refers to any area outside of individual fenced gardens under management by DIO for maintenance. This is a reporting standard only; not meeting the standard does not qualify as a 'Fail'.
Serial	Decent Homes Standard (DHS)			MOD DH+ Standard			Guidance & Clarification
	Component	Age	Condition	Component	Age	Condition	

<p>3 (cont)</p>	<p>Security – not formally measured. Reporting standard only.</p>		<p>The immediate environment (MOD SFA estate) should provide a secure environment in which to live.</p>	<p>Security – not formally measured Reporting standard only.</p>			<p>(Lead Ref: ACPO Secure By Design) – Assess for adequate street lights, and against ACPO guidance. This is a reporting standard only; not meeting the standard does not qualify as a 'Fail'.</p>
----------------------------	--	--	---	---	--	--	--

Serial 4 – Thermal comfort

Serial	Decent Homes Standard (DHS)			MOD DH+ Standard	Guidance & Clarification									
4	<p>It provides a reasonable degree of thermal comfort measured as a minimum score of SAP 39.</p> <p>This criterion requires dwellings to have both effective insulation and efficient heating. It should be noted that, whilst dwellings meeting Serials 2, 3, and 4 are likely also to meet Serial 1 criterion, some Category 1 hazards may remain to be addressed. For example, a dwelling meeting Serial 4 criterion may still contain a Category 1 damp or cold hazard.</p> <ul style="list-style-type: none"> DH considers SAP score of 35 or less to be a potential Cat 1 hazard. Legislative change in 2018 sets SAP 39 as the minimum for let and licensed dwellings. DCLG guidance suggests minimum 50mm loft insulation with efficient heating system, and minimum 200mm with inefficient system. <p>Thermal comfort encompasses several components included at Serial 2 above. Contributing components to thermal comfort and energy efficiency are covered in full as follows:</p>			<p>It provides a good degree of thermal comfort measured as a minimum score of SAP 55.</p>	<p>Contributing Components – not assessed within Pass/Fail as efficiency rating of appliances will be included in the overall SAP calculation. Report on primary heat source (Boiler) with standard for lifecycle planning purposes only.</p>									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="271 954 555 962">Component</th> <th data-bbox="560 954 712 962">Criteria</th> <th data-bbox="716 954 2092 962">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="271 965 555 1145">Loft Insulation (where it can be fitted, excludes flats and ground floor maisonettes etc.)</td> <td data-bbox="560 965 712 1145">270mm (non scoring)</td> <td data-bbox="716 965 2092 1145">Loft insulation level must be a minimum of 270mm</td> </tr> <tr> <td data-bbox="271 1149 555 1361">Cavity Insulation (where building has suitable cavity)</td> <td data-bbox="560 1149 712 1361">Present (non scoring)</td> <td data-bbox="716 1149 2092 1361">Cavity insulation installed</td> </tr> </tbody> </table>						Component	Criteria	Description	Loft Insulation (where it can be fitted, excludes flats and ground floor maisonettes etc.)	270mm (non scoring)	Loft insulation level must be a minimum of 270mm	Cavity Insulation (where building has suitable cavity)	Present (non scoring)	Cavity insulation installed
Component	Criteria	Description												
Loft Insulation (where it can be fitted, excludes flats and ground floor maisonettes etc.)	270mm (non scoring)	Loft insulation level must be a minimum of 270mm												
Cavity Insulation (where building has suitable cavity)	Present (non scoring)	Cavity insulation installed												
Serial	Decent Homes Standard (DHS)			MOD DH+ Standard	Guidance & Clarification									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="271 1412 555 1430">Component</th> <th data-bbox="560 1412 712 1430">Criteria</th> <th data-bbox="716 1412 2092 1430">Description</th> </tr> </thead> </table>						Component	Criteria	Description						
Component	Criteria	Description												

4 (cont)	External Wall Insulation ('hard to treat' houses as defined by DECC e.g. REEMA, Wimpey, English/Flemish bond brick)	Present (non scoring)	Insulated render system installed to external walls at all elevations		
	Heat Source (Stand-alone fossil fuel)	Class A or equivalent (non scoring)	Primary heat source (Boiler) to be SEEBUK Class A (Energy Efficiency) or equivalent		
	Heat Source (electric) (Excludes secondary heat sources – focal fires)	SAP Band A (non scoring)	Primary heat appliances to have efficiency rating SAP Band A		
	Heat Source (communal heating)	Plant – Class B or equivalent. System – insulated & efficient (non scoring)	Plant System – delivers constant heating to 21°C principal rooms and hot water to 42°C with insulation to industry standards		
	Glazing (to windows and doors)	Double glazed (non scoring)	All windows to be uPVC double glazed with trickle vents bar Listed/Conservation Areas where secondary glazing is acceptable.		
	Renewable technology	Present (non scoring)	PV or Solar Thermal panel installed		

PV and Solar thermal provide a 'free' benefit to SFA where installed and are included in the SAP calculation. Not all SFA are suitable for such installation, and DIO is not in a position to fund across all suitable SFA. PV provides free day time electric however the FIT payment is collected in full by DIO. Solar thermal provides free hot water to supplement main hot water heat source, however RHI is paid in full to DIO for both Solar thermal and ASHP/GSHP where installed. Neither FIT nor RHI is attributable to the occupant, and any collection by the occupant may result in disciplinary action being taken.

Notes to Table:

1. The standards set for MOD DH+ above are the entry level standard; the aspiration is to review and improve the standard at a minimum of approximately 5 yearly intervals especially in respect of Serial 4 where it is proposed that the SAP score criteria target should increase by 5 points in 2020 and 2025 respectively.

TABLE 2 – NOISE NUISANCE CRITERIA FOR ASSESSING SFA

Standard	Effect Level (EL)	Categories Description	Noise Exposure Category (NEC)	Action	Noise Parameters	
					Times	Noise Levels
Decent Homes Plus (DH+)	Observed Adverse Effect This is the level above which adverse effects on health and quality of life can be detected.	Noise can be heard and causes small changes in behaviour and/or attitude, e.g. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise. Potential for some reported sleep disturbance. Affects the acoustic character of the area such that there is a perceived change in the quality of life.	B	Mitigate and reduce to a minimum	07:00-23:00	57-66 dBA
					23:00-07:00	48-57 dBA
Decent Homes (DH)	Significant Observed Adverse Effect This is the level above which significant adverse effects on health and quality of life occur.	The noise causes a material change in behaviour and/or attitude, e.g. avoiding certain activities during periods of intrusion; where there is no alternative ventilation, having to keep windows closed most of the time because of the noise. Potential for sleep disturbance resulting in difficulty in getting to sleep, premature awakening and difficulty in getting back to sleep. Quality of life diminished due to change in acoustic character of the area.	C	Avoid	07:00-23:00	66-72 dBA
					23:00-07:00	57-66 dBA
Decent Homes Minus (DH-)	Unacceptable Adverse Effect	Extensive and regular changes in behaviour and/or an inability to mitigate effect of noise leading to psychological stress or physiological effects, e.g. regular sleep deprivation/awakening; loss of appetite, significant, medically definable harm, e.g. auditory and non-auditory.	D	Prevent	07:00-23:00	>72 dBA
					23:00-07:00	> 66 dBA

Extracted from National Planning Policy Framework and Planning and Policy Guidance 24 (Noise Exposure Categories-NEC)

TABLE 3 – CONSTRUCTION DETAIL SOUND REDUCTION INDEX

Construction Type (Building Envelope)	Sound Reduction Index – R _w (Ctr) dB (BS EN ISO 717-1:1997 – Spectrum 2)								
	Class								
	1	2	3	4	5	6	7	8	9
REEMA ⁹ (unclad)	34	34	34	36	37	34	34	34	34
REEMA (90mm EWI & render)	34	34	34	37	37	34	34	35	34
REEMA (40mm EWI & render)	34	34	34	37	37	34	34	35	34
Traditional (1950 – present)	34	34	34	37	37	34	34	35	34
Traditional (1930 – 1949)	34	34	34	37	37	34	34	35	34
Solid Wall (Brick & brick 1920 - 1929)	34	34	34	37	37	34	34	35	34
Solid Wall (Brick & brick 1920 – 1929, 40mm EWI & render)	34	34	34	37	37	34	34	35	34
Solid Wall (Brick & brick 1920 – 1929, 90mm EWI & render)	34	34	34	37	37	34	34	35	34
Solid Wall (Pre-1920)	34 ³	34	34	36	37	34	34	34	34
Solid Wall (Pre-1920, 40mm EWI & render)	34	34	34	37	37	34	34	35	34
Solid Wall (Pre-1920, 90mm EWI & render)	34	34	34	37	37	34	34	35	34

The following assumptions are to be made as to the construction detail of the building envelopes:

Proportion of glazing to wall area is 30%





Glazing to be assessed as standard – no enhancement – unless specified, under the following classes:




- Class 1 - wood frame single glazed
- Class 2 - pre-1980 upvc double glazed (19mm)
- Class 3 - post 1980 upvc double glazed (22mm)
- Class 4 - single glazed with secondary glazing
- Class 5 - Enhanced upvc double glazing ('DIO Hounslow specification' for improved sound attenuation)
- Class 6 - Aluminium framed double glazed (19mm)
- Class 7 - Aluminium framed double glazed (22mm)
- Class 8 - Aluminium triple glazed
- Class 9 - Wood framed double glazed units

⁹ Or similar system build concrete frame SFA designs – Cornish, Wimpey No Fines, Airey, Unity, Waites etc

TABLE 4 – OVERSEAS EQUIVALENT TO SAP/EPC ENERGY RATINGS

Europe




UK EPC Band	UK SAP Range	Decent Homes	CAAS Thermal Comfort Discount	Belgium – Brussels 	Belgium – Flanders 	Belgium – Walloon 	France 
Methodology				Certificat de performance énergétique des bâtiments (PEB)	Energieprestatiecertificaten	Certificat de performance énergétique des bâtiments (PEB)	Diagnostic de Performance énergétique (DPE)
A	92-100	DH+	0%	A++/A+/A/A-	<45kWh/m ²	A	A
B	81-91			B+/B/B-	46-95 kWh/m ²	B	B
C	69-80			C+/C/C-	96-150 kWh/m ²	C	C
D	55-68			D+/D/D-	151-210 kWh/m ²	D	D
E	39-54	DH	20% (one-band)	E+/E/E-	211-275 kWh/m ²	E	E
F	21-38	DH-	40% (two-bands)	F	276-345 kWh/m ²	F	F
G	0-20			G	>345 kWh/m ²	G	G

UK EPC Band	UK SAP Range	Decent Homes	CAAS Thermal Comfort Discount	Germany 	Italy 	Netherlands 	Norway 
Methodology				Energieausweis	Attestato Prestazione Energetica (APE)	Energielabel woningen	Energimerking
A	92-100	DH+	0%	A	A	A	A
B	81-91			B	B	B	B
C	69-80			C	C	C	C
D	55-68			D	D	D	D
E	39-54	DH	20% (one-band)	E	E	E	E
F	21-38	DH-	40% (two-bands)	F	F	F	F
G	0-20			G	G	G	G

Note: European certification is largely based on the requirements of the EU Energy Performance of Buildings Directive






Note: Denmark, Spain, Portugal and Turkey are classified as Small Station LOA (SSLOA)

PJOBS

UK EPC Band	UK SAP Range	Decent Homes	CAAS Thermal Comfort Discount	Cyprus 	Gibraltar 	Falkland Islands 
Methodology					Energy Performance Certificate (Gibraltar)	UK EPC or equivalent
A	92-100	DH+	0%	A	A	A
B	81-91			B	B	B
C	69-80			C	C	C
D	55-68			D	D	D
E	39-54	DH	20% (one-band)	E	E	E
F	21-38	DH-	40% (two-bands)	F	F	F
G	0-20			G	G	G

Note: Ascension Island is classified as Small Station LOA (SSLOA)

Rest of the World

UK EPC Band	UK SAP Range	Decent Homes	CAAS Thermal Comfort Discount	Australia	Brunei 	Canada 	Kenya 	Nepal 	USA 
Methodology						EnerGuide Rating System			Home Energy Rating System (HERS) Index
A	92-100	DH+	0%			House requiring little or no purchased energy (91 - 100)			HERS 0-12
B	81-91					Energy-efficient new house (80 - 90)			HERS 13-29
C	69-80					New house with some energy-efficiency improvements (73 - 79)			HERS 30-46
D	55-68					New House build to building code standards (65 - 72) Or Energy-efficient upgraded older house (66+)			HERS 47-68
E	39-54	DH	20% (one-band)			Upgraded older house (51 - 65)			HERS 69-92
F	21-38	DH-	40% (two-bands)			Older house not upgraded (0 - 50)			HERS 93-118
G	0-20								HERS 119-150

Note: Singapore and Belize are classified as Small Station LOA (SSLOA)

4 CAAS SFA Assessment Criteria - Scale

0401. Overall Methodology. The scale element of CAAS is based on two factors: size and features (functional amenity and physical characteristics).

a. **Size.** Properties will be assessed based on **either one** of the following size criteria:

(1) A measure of the overall size – the Gross Internal Area (GIA) (measured in accordance with Royal Institute of Chartered Surveyors Code of Measuring Practice 6th Edition); in accordance with the thresholds in **Annex A, Table 1**, with reduction applicable where floor area is more than 10% (reduction by one band) and more than 25% (reduction by two bands) below scale; **or**

(2) A measure of the habitable space – the Effective Floor Area (EFA) (measured in accordance with Royal Institute of Chartered Surveyors Code of Measuring Practice 6th Edition); a cumulative floor area of the kitchen, sitting, dining, bedrooms, dressing room and study, in accordance with the thresholds in **Annex A, Table 2**, with reduction applicable where floor area is more than 10% (reduction by one band) below scale.

The measurable of habitable space (EFA) does not apply if the overall size (GIA) has been applied.

b. **Features.** CAAS will provide a discount if a property lacks certain functional amenities; as defined in **Annex A Table 3**.

0402. The combination of measures of size and features will produce an aggregate assessment for Scale as Upper, Middle or Lower scale based on the criteria in the **Table** below:

Category Name	Standard
Upper	To scale
Middle	Floor space >10% below scale (but <25%); or Effective Floor Area >10% below scale; or Net total of feature deficiency points more than 5 (but less than 10)
Lower	Floor space >25% below scale; or Net total of feature deficiency points more than 10; or Both floor space >10% below scale and net total of feature deficiency points more than 5.

This will identify properties that are affected by one or more of the scale factors to produce an overall CAAS Scale classification (Upper, Middle or Lower). A rental discount will be applied to properties by adjusting the property to a reduced Scale category, with the starting level set at the Upper category (no discount), and the lowest rent level capped at the Lower category.

0403. Operation of Limits.

- a. **Size.** The measure of habitable space (EFA) does not apply if the overall size (GIA) has been applied.

- b. **Features.** CAAS combines and integrates deficiency and positive into a single category as overall assessment of functional amenities, with pass/fail criteria. The list of items have been ranked and weighted with individual deficiency points allocated for each item. Additional features attract positive points and act as an offset against other Scale deficiency, with the top rate capped at CAAS Band A (i.e. no premium charged for additional features). The combined score of deficiency points (deficiency minus positive points) will produce an aggregate assessment that will reduce the rental charge at 2 incremental levels (Upper to Middle or Middle to Lower).

- c. **Overall Cap.** The combination of scale factors (based on the size of the property and property amenities) will produce an aggregate assessment at 3 incremental levels (Upper, Middle, Lower), within an overall cap so that Scale can only reduce overall rent by up to two rental bands. The combined operation of the limits is set out in the **Table** below:

Operation of Scale Thresholds			
Step 1	Step 2	Step 3	Result
Size Gross Internal Area (GIA)	Size Effective Floor Area (EFA)	Features Combined total of positive and deficiency points	Final CAAS class
To scale	To scale	5 points or less	Upper
		Greater than 5 points	Middle
		Greater than 10 points	Lower
	Below scale	5 points or less	Middle
		Greater than 5 points	Lower
		Greater than 10 points	Lower
>10% below floor space	To scale EFA does not apply if GIA has been applied	5 points or less	Middle
		Greater than 5 points	Lower
		Greater than 10 points	Lower
	Below scale EFA does not apply if GIA has been applied	5 points or less	Middle
		Greater than 5 points	Lower
		Greater than 10 points	Lower
>25% below floor space	To scale EFA does not apply if GIA has been applied	5 points or less	Lower
		Greater than 5 points	Lower
		Greater than 10 points	Lower
	Below scale EFA does not apply if GIA has been applied	5 points or less	Lower
		Greater than 5 points	Lower
		Greater than 10 points	Lower

0404. Extra bedrooms. An additional bedroom charge is applied where two properties have been combined to accommodate large families (for example, semi-detached 3-bedroom Type C combined to create a 6-bedroom property), with a daily rate set by type.

0405. Frequency of Scale Assessment. The Scale assessment of individual properties is required on change of occupant.

0406. Re-Typing of SFA. Where there is a need to change the use of an SFA within the rank/entitlement structure (e.g. Officer to OR SFA) to meet a change in requirement, Types 4 & 5 may be re-typed as Type D & C respectively. Where an SFA was previously Type 4 or 5, is currently classed and allocated as Type D or C, it may be re-typed to Type 4 or 5 respectively. Where designed and built as Types D & C, SFA cannot be re-typed to Types 4 & 5. (i.e. SFA can be re-typed down and/or subsequently up, but not re-typed up in isolation).

Where a re-type is carried out, a CAAS assessment is to be carried out against the criteria for the proposed use.

0407. Assessment of Type VS. Type VS are to be assessed against Type 5 criteria for Scale and Condition.

0408. Assessment of Type DS. Type DS (OR SFA of 5 bedrooms or more) are to be assessed against the Type D criteria for Scale and Condition, and a bedroom charge added for each additional bedroom.

0409. Assessment of Type A. Type A SFA are to be assessed as Type B for Scale.

0410. Attached Stores. Where an external store is directly attached or formed on the main house foundation, and accessed directly from the SFA, it is only to be assessed within GIA/EFA if all criteria described below apply:

- a. The construction envelope of the store comprises either external and internal 'leaf' with cavity insulation or single leaf with external insulation and render, and insulated roof system.
- b. The outside access doors are assessed as SFA principle doors. Where principle rear/front access door is between store and other SFA rooms, the area is not included in GIA/EFA.
- c. The store contains at least one double electrical socket.

0411. Assessment on Allocation above Entitlement. Refer to **JSP 464 Vol 3, Part 1**.

0412. Assessment on Allocation below Entitlement. SFA may only be allocated below entitlement on request of the occupant, if there is sufficient management margin by Type. Assessment is against the Type of SFA occupied, not the entitlement.

0413. Assessment of Garage. Inclusion of a garage charge in line with **JSP 464 Vol 3, Part 1** is to be waived where the hard standing access (drive) is obstructed by a permanent obstacle that reduces the access width to less than 1.8M

TABLES 1 & 2

TABLE 1 – GROSS INTERNAL AREA (GIA) FOR ASSESSING SCALE - ALL DIMENSIONS m ²								
	Type							
	I	II	III	IV	V	D	C	B
Upper Level Scaled Gross Internal Area	Above 211.5	Above 174.6	Above 128.3	Above 112.1	Above 95	Above 97.2	Above 76.3	Above 68.2
Middle Level Reduced Floor Area Scale Threshold Below scale >10%	211.5 to 176.4	174.6 to 145.6	128.3 to 107	112.1 to 93.5	95 to 79.2	97.2 to 81.1	76.3 to 63.7	68.2 to 57
Lower Level Reduced Floor Area Scale Threshold Below scale >25%	176.3 & below	145.5 & below	106.9 & below	93.4 & below	79.1 & below	81 & below	63.6 & below	56.9 & below

GIA as per 4TG “Table 3 – Standard and Reduced Floor Area Recognised for Grading SFA” 4TG in Part 1.

TABLE 2 – EFFECTIVE FLOOR AREA (EFA) FOR ASSESSING SCALE - ALL DIMENSIONS m ²								
	Type							
	I	II	III	IV	V	D	C	B
Upper Level	Above 157	Above 139	Above 93.6	Above 81.9	Above 70.2	Above 73.35	Above 55.8	Above 47.25
Middle Level Below scale >10%	157 & below	139 & below	93.6 & below	81.9 below	70.2 & below	73.35 & below	55.8 & below	47.25 & below
Lower Level	Not applicable							

Cumulative Effective Floor Area
The combination of effective floor area not individual rooms for the following rooms kitchen, sitting, dining, bedrooms, dressing room, study, utility rooms, against the above thresholds.

The measurable of habitable space (EFA) does not apply if the overall size (GIA) has been applied.

TABLES 3 AND 4

TABLE 3 – CAAS FEATURES (SCALE) SFA

Ser	Item	Points Allowed	Comments	Applies (Yes/No)	Points Scored
P1	Provision of En-suite	-2 (Max -2)	Where en-suite (defined as a minimum of a shower, WC and basin) provided in an adjoining room to a bedroom.		
P2	Provision of Utility area	-2	Where utility area or room is provided. Defined as an area with plumbing and electricity either within or separate to the kitchen within the curtilage of the building (excluding communal utility area).		
P3	Provision of Additional WC (not En-suite)	-1 (Max -1)	Where more than two WC provided per property.		
Sub total positive points					
D1	Lack of Study	2	Applicable where non provision of a Study in Type III SFA.		
D2	Lack of Cloakroom	2	Applicable where non provision of second WC and basin in all SFA (in addition to main bathroom or WC).		
D3	Lack of Power sockets [Refer to Table 4]	2 (Max 2)	Applicable where total number of single power sockets is below the threshold in accordance with Table 4. Double power sockets are counted as two sockets. Includes fixed fused spur for white goods / appliances. Award 0.25 points for deficiency of each single power socket up to a maximum of 2 points.		
D4	Lack of shower	2	Either cubicle or fitted shower (including mixer taps) over bath.		
D5	Lack of Privately enclosed external space	2	Applicable where no exclusive use of external area per property excluding balcony. Only applies to flats and maisonettes Minimum space requirements: Private space – 1.5m ² per bedroom. Shared space: minimum 1m ² per bedroom. An outdoor space could be a private garden, a communal garden or courtyard.		
D6	Lack of Lift	2	Only applies to flats and maisonettes. Applicable where main entrance to property not on ground floor.		
D7	Lack of Door/window locks	2 (Max 2)	Where following not supplied: external front door fitted with twin cylinder automatic dead latch (or equivalent); external door fitted with 5 level mortice latch (or equivalent). Award 0.25 points for each door and window. Maximum of 2 points.		
D8	Lack of Plumbing for Washing Machine	2	No plumbing for Washing Machine.		
D9	Lack of Space for fridge/freezer within kitchen or utility area	2	No suitable place for standard upright fridge. No suitable place for freezer (unless space available elsewhere). Minimum area dimension of w600mm x d600mm x h870mm.		

D10	Lack of Heated airing cupboard	1	No heated linen/airing cupboard		
D12	Lack of Outdoor drying	1	No outdoor drying area.		
D13	Lack of Extractor fan for cooker	1	No mechanical extractor fan for cooker (hood type or wall/window mounted).		
D14	Lack of Extractor fan in bathroom	1	No mechanical extractor fan for bathroom (ceiling, wall or window mounted).		
D15	Lack of Plumbing for dishwasher	1	No plumbing for dishwasher.		
D16	Lack of Telephone socket	0.5	Where not supplied.		
D17	Lack of TV aerial	0.5	Where TV socket not supplied, or where if supplied, free to air TV channels cannot be received.		
D18	Lack of Outside tap	0.5	Where not supplied.		
Subtotal deficiency points (Maximum points) (Where sub-total ends in 0.5, round up to next whole number)					
Total Points Scored (Deficiency points MINUS Positive points)					
UPPER	To Scale - 5 points or less				
MIDDLE	Combined total of positive and deficiency points >5 points				
LOWER	Combined total of positive and deficiency points >10 points				

TABLE 4 – SCALING OF SFA POWER SOCKETS RECOGNISED FOR GRADING SCALE

(Cross refer to Table 3, Serial D3)

Type	I	II	III	IV	V	D	C	B
Number of single power sockets (note: double sockets are counted as two single sockets) Award 0.25 points for deficiency of each single power socket up to a maximum of 2 points.	38	38	38	38	33	38	33	29

5 CAAS SFA Assessment Criteria – Location

0501. This chapter sets out the methodology used to establish each SFA location assessment category and detail of openly available, third party data sources the information is drawn from to assess location under CAAS.

Methodology

0502. The CAAS location assessment methodology was developed for MOD by the Centre for Housing Policy to provide a rational and consistent approach to classify individual properties, by postcode. The location discount is determined by an assessment of four location-related factors **described below:**

- a. **Initial Pan UK Geographical Classification.** Based on the UK Census which is undertaken every 10 years¹⁰ and occurs simultaneously in all parts of the UK. In England and Wales, the Office for National Statistics (ONS) is the responsible body,. in Scotland, it is National Records of Scotland (NRS), and in Northern Ireland, the Northern Ireland Statistics and Research Agency (NISRA). These Government rural-urban area classification systems (England and Wales, Scotland and Northern Ireland) are used to place an SFA into an initial geographical classification of Urban, Intermediate or Remote.
- b. **Accessibility to Key Services.** Application of journey time specifics to a number of Key Services from the SFA using methodology and criteria set by the Department for Transport (DfT). Accessibility is based on a measure of the average travel time to key amenities either using public transport or by walking. For England this data is published by the DfT; for Scotland, Wales and Northern Ireland the data can be accessed through a landing platform on MODnet (see JSP 464 Vol 3, Part 2, Sect 5, para 0510 for details on how to access) .The following thresholds are applied:
 - (1) Urban (less than 20 minutes travel); or
 - (2) Intermediate (between 20 and 40 minutes); or
 - (3) Remote (more than 40 minutes).

The total number of Key Services categorised for assessment is 8¹¹; due to geographical data availability and parameters Northern Ireland is assessed against 7 Key Services¹². This is further explained in JSP 464 Vol 3, Part 2, paras 0506 and 0507.

- c. **Broadband Accessibility.** Assessment of the broadband accessibility and speed for the SFA using Ofcom data for average broadband download speed. The

¹⁰ with the most recent conducted in 2011; forecasted 2021.

¹¹ Food store, GP, employment centre, primary school, secondary school, further education institution, hospital, town centre

¹² Employment centres are not assessed.

threshold that must be met to pass this criterion is set against the **UK Government's national minimum superfast broadband speed**¹³.

d. **Deprivation.** Applies the Governments Indices of Multiple Deprivation (IMD) mechanism, which score, and rank locations based on a number of deprivation factors¹⁴ against the SFA post code.

0503. Final CAAS Location Classification Procedure. The classification procedure consists of 4 key stages based on individual SFA post codes pan UK:

Stage 1: The pan-UK classification (National Geographic Census data).

Stage 2: The average accessibility to Key Services.

Stage 3: Apply the minimum for the Government superfast broadband speed plan of 24 Mbit/s or more coverage for over 96% of UK premises and the programme is committed to run until 2026.

Stage 4: Whether the SFA is located in the bottom decile of the IMD.

A summary of the open and available Data sources used for the CAAS location factor assessment is at **Annex A Table 1**. Noting that for England, only, the accessibility data can be sourced from Gov.uk, the DfT Journey time Statistics page accessed from Table 1 Annex A. A summary of the classification process, carried out by Data Analytics and Insight (DA&I) is at **Annex A Table 2**.

0504. In 2016, when CAAS charging was implemented, Stage 2 was only applied for England as the Government only published this data for England. DA&I have now been able to produce data for Wales, Scotland and Northern Ireland using the methodology for England.

0505. The next series of paragraphs provides further clarity on Step 2: **Accessibility to Key Services** which is the travel time specifics to a number of key services from the SFA, using methodology and criteria set by the DfT.

0506. Definitions of Key Services. The following eight key services are used for England, Scotland (KS 8 metrics defined separately) and Wales only:

a. **Employment centres:**

0507. Accessibility to Key Services. Assessment of Northern Ireland SFA is based on 7 Key Services due to lack of data for Employment Centres. Accessibility data to Employment Centres is not available due to differing statistical geography that does not align to the Lower Super Output Areas, making the locality of a suitable Employment Centre too broad; in addition Northern Ireland does not produce a Business Employment Register Survey. When the next Pan UK Census is issued in 2021 this will be reviewed.

0508. Journey times are worked out using Public transport/walking travel times, assessed at varying times throughout the day to reflect normal patterns of life should the SP need to

¹³ As @ 20 Mar 20 The government has ensured superfast broadband (speeds of 24Mbps or more) coverage for over 96% of UK premises. The Superfast programme is committed to run until 2026.

¹⁴ Indices of Multiple Deprivation consider factors such as income, employment, health, education, skills and training, crime and living environment.

use the key services defined above. Several routes, times and scenarios are analysed and an overall average is then applied.

- a. To assess walking journey times from SFA to each Key Service, ESRI ArcGIS¹⁵ (Network Analysis Extension) is applied. Full details are at Annex B to this chapter.
- b. To assess public transport journey times from SFA to each Key Service, Google maps (an online web mapping service) is applied. Full details are at Annex B to this chapter.

0509. CAAS Location Factor Frequency will be review once every 4 years with 01 Apr 2021 being year 1.

0510. Data Interrogation. SP are able to interrogate specifics relating to their SFA by using the data source links displayed in Table 1 of Annex B to this chapter, or by inputting their postcode into a landing page accessible through MODNET at the following link: <https://modgovuk.sharepoint.com/sites/defnet/DIO/Pages/SFA-Location-Classification-Tool.aspx>

0511. Operation of Limits. The CAAS location criteria are combined to determine the classification of SFA as Urban, Intermediate or Remote, which will determine the charge level for the location component. A discount will be made to SFA that is affected by one or more of the thresholds that can move a property from its initial classification to a lower category, with the lowest level being capped for property in the Remote category.

Assessment Overseas

0512. See JSP 464 Vol 3 Part 1 Chap 5 para. 0518.

¹⁵ Environmental Systems Research Institute, **ESRI** is a company. Its by far the world's leading builder and supplier of commercial Geographical Information Systems (GIS) software. **ArcGIS** is a geographic information system (GIS) for working with maps and geographic information.

Table 1: CAAS Location Component Data Sources – from 1 Apr 18

Location Factor Components Data Sources			
Criteria	Data Source	Provider	Date of version used
Geographical Classification	Office for National Statistics (ONS) - Postcode lookup table	ONS (Open Geography Portal)	November 2016
Accessibility to Key Services (England only)	Department for Transport - Journey time statistics	GOV.UK	2014
Broadband Accessibility	OFCOM - Average broadband download speeds	'Connected Nations' at DATA.GOV.UK	2015
Deprivation	Index of Multiple Deprivation: England (IMD2015)	GOV.UK	2015
	Index of Multiple Deprivation: Scotland (SMID2016)	GOV.SCOT	2016
	Index of Multiple Deprivation: Wales (WIMD2014)	StatsWales	2014
	Index of Multiple Deprivation: Northern Ireland (NIMDM2010)	NISRA	2010

Table 2: Final CAAS Location Classification Procedure.

Location classification procedure for SFA in the UK				
Stage 1	Stage 2	Stage 3	Stage 4	Result
Initial Pan-UK Classification	Accessibility - Average public transport/walking travel time (Minutes)	Average Broadband download speed (Mbit/s)	Indices of Multiple Deprivation (Bottom decile)	Final CAAS classification
Urban	<20	17.8+ (Until 31 Mar 18) 24 (From 1 Apr 18)	No	Urban
			Yes	Intermediate
		Less than 17.8+ (Until 31 Mar 18) Less than 24 (From 1 Apr 18)	No	Intermediate
			Yes	Remote
	20 to <40	17.8+ (Until 31 Mar 18) 24 (From 1 Apr 18)	No	Intermediate
			Yes	Remote
		Less than 17.8+ (Until 31 Mar 18) Less than 24 (From 1 Apr 18)	No	Remote
			Yes	Remote
	40+	17.8+ (Until 31 Mar 18) 24 (From 1 Apr 18)	No	Remote
			Yes	Remote
		Less than 17.8+ (Until 31 Mar 18) Less than 24	No	Remote
			Yes	Remote

		(From 1 Apr 18)		
Intermediate	<20	17.8+ (Until 31 Mar 18) 24 (From 1 Apr 18)	No	Intermediate
			Yes	Remote
		Less than 17.8+ (Until 31 Mar 18) Less than 24 (From 1 Apr 18)	No	Remote
			Yes	Remote
	20 to <40	17.8+ (Until 31 Mar 18) 24 (From 1 Apr 18)	No	Intermediate
			Yes	Remote
		Less than 17.8+ (Until 31 Mar 18) Less than 24 (From 1 Apr 18)	No	Remote
			Yes	Remote
	40+	17.8+ (Until 31 Mar 18) 24 (From 1 Apr 18)	No	Remote
			Yes	Remote
		Less than 17.8+ (Until 31 Mar 18) Less than 24 (From 1 Apr 18)	No	Remote
			Yes	Remote
Remote	Any	Any	Any	Remote

CAAS Location Factor details on how to work out Journey Time

1. **Walking Journey Times.** To establish the journey times that would be taken on foot from the SFA locations to each Key Service, the Network Analysis extension in ESRI ArcGIS was used. Network Analysis holds a range of tools that are commonly used to provide answers and geospatial outputs to routing/logistical queries (e.g. how long will it take to travel via car/on foot from Location A to Location B? What is the distance of that journey?).

a. Within the Network Analysis extension is the Origin Destination (OD) Cost Matrix Solver tool, which is used for all analysis. OD Cost Matrix calculates the least cost paths (in time & distance) of a journey between origins (locations of the SFA) and several potential destinations (each of the key services). OD Cost Matrix allows for simultaneous route calculations to be performed for multiple origins to multiple destinations. It requires points of origin and destination, a road network dataset and toolset to run the analysis.

b. More information on the network analyst extension that was used for this project can be found at – <https://desktop.arcgis.com/en/arcmap/latest/extensions/network-analyst/what-is-network-analyst-.htm> It should be noted that SFA postcode data acts as the origin and the key services data acts as the destination.

c. A road network data set contains data about the characteristics of a road network and its dimensions and accessibility; OS Mastermap Highways Network was used. More information on the network dataset for this analysis can be found at - <https://www.ordnancesurvey.co.uk/business-and-government/products/os-mastermap-highways-network.html>

d. The location study worked through analysing travel times at specific pinch point times during the day by setting additional parameters to tailor the analysis. The final analysis provided the five fastest routes for each Origin Destination scenario to ensure clarity and efficiency. The attributes of interest were Walk Time (in minutes) and Walk Length (in miles).

2. **Public Transport Journey Times.** Google maps (an online web mapping service) was used to identify the journey time for travel by public transport. The network analysis carried out for the walking journey times, assisted in identifying the nearest key services to each of the SFA locations. For each journey scenario (i.e. SFA to Hospital, SFA to primary school, etc) two or three of the nearest key services were searched to account for differences in journey types. For instance, where an SFA may be in a location with a similar walking journey time to three hospitals, the public transport journey may help to indicate which one is more easily accessible.

a. A directions search was used to help establish the quickest routes via public transport. Using the postcodes of the SFA locations as the starting point and the key services as the destination, Google Maps provided several alternative public transport routes and timeframes.

b. To ensure consistency across the analysis, the same parameters used for the walking analysis were used and aligned with work conducted by DfT(Journey Times Statistics: Notes and Definitions) England;

c. Allowance for catching first public transport service is 5 minutes - added to any journey that involves boarding one or more public transport services. Public transport speed was applied using local published timetable information. Interchange time of 5 minutes (minimum interval allowed between arriving at a stop and catching another service)

Table 1 - CAAS Location Data Sources Accessibility for Scotland, Wales and Northern Ireland – 1 Oct 20 - 1 Apr 25

Scotland Data Sources		
Service	Data Description	Data source for location of service
Primary Schools	Location of all Primary Schools in the Scotland	List of School Contact Details. Scottish Government. September 2018. Taken from - https://www2.gov.scot/Topics/Statistics/Browse/School-Education/Datasets/contactdetails . Data was filtered out to include Primary Schools. Tabular data was geolocated to postcodes using OS Codepoint.
Secondary Schools	Location of all Secondary Schools in the Scotland	List of School Contact Details. Scottish Government. September 2018. Taken from - https://www2.gov.scot/Topics/Statistics/Browse/School-Education/Datasets/contactdetails . Data was filtered out to include Secondary Schools. Tabular data was geolocated to postcodes using OS Codepoint.
Further Education	Location of all Further Education Institutions in Scotland	OS Open Names dataset. A dataset of place names and postcodes. https://www.ordnancesurvey.co.uk/business-and-government/products/os-open-names.html Attribute data was filtered by 'LOCAL_TYPE' to capture any locations with the keyword 'Further Education'. Dataset was checked and any discrepancies fixed against the list provided by the collegescotland.ac.uk and subsidiary college websites
Hospital	Location of Hospitals in Scotland	Hospital location data was taken from ISD - https://www.isdscotland.org/Health-Topics/Hospital-Care/Hospitals/ This tabular data was then joined via postcode to OS Code-point to accurately geolocate.
GP	Location of GP Practices in Scotland	Spreadsheet of all GP practices in Scotland - NHS Digital. https://digital.nhs.uk/services/organisation-data-service/data-downloads/home-countries Tabular data was joined to OS Code-point via postcodes to geolocate.
Food Stores	Location of Food Stores in Scotland	Geolytix 'Retail Points Q4 2018' - https://geolytix.co.uk/?retail_points
Town Centres	Location of Town Centres in Scotland	OS Named Place dataset, part of OS VectorMap District combined with OS_Settlement_Seed, part of OS.Strategi (to provide better Town & City Descriptors)
Employment Centres	Location of Employment Centres (with employment =>500)	Employment data is associated with Data Zones (a small area statistic boundary in Scotland). A population weighted centrepoint spatial dataset was obtained from https://data.gov.uk/dataset/8aabd120-6e15-41bf-be7c-2536cbc4b2e5/data-zone-centroids-2011 to provide a single location for each Data Zone. Employment data was taken from https://www.nomisweb.co.uk/query/select/getdatasetbytheme.asp?theme=27 it was selected to include both Data Zones and their related Employment

		information. Tabular data was joined to the spatial data via the Data Zone ID.
Wales		
Service	Data Description	Data source for location of service
Primary Schools	Location of all Primary Schools in the Wales	Address List of Schools in Wales. Welsh Government August 2019. Taken from - https://gov.wales/address-list-schools Data was filtered out to include Primary & Middle Schools. Tabular data was joined to OS Codepoint to geolocate.
Secondary Schools	Location of all Secondary Schools in the Wales	Address List of Schools in Wales. Welsh Government August 2019. Taken from - https://gov.wales/address-list-schools Data was filtered out to include Secondary & Middle Schools. Tabular data was joined to OS Codepoint to geolocate.
Further Education	Location of all Further Education Institutions in Wales	Directory of Further Education Institutions taken from Welsh Government - https://gov.wales/further-education-institutions-contact-details Cross checked against OS Open Names. Tabular data was geolocated using OS Codepoint.
Hospital	Location of Hospitals in Wales	List of Hospitals taken from Health in Wales - http://www.wales.nhs.uk/ourservices/directory/Hospitals & Healthcare Inspectorate Wales - http://hiw.org.uk/find-service/service-index/?establishmentType=Hospitals&or=NHS&lang=en . Tabular data was joined to OS Code-point via postcodes to geolocate.
GP	Location of GP Practices in Wales	Spreadsheet of all GP practices in Wales - NHS Digital. https://digital.nhs.uk/services/organisation-data-service/data-downloads/gp-and-gp-practice-related-data . Tabular data was joined to OS Code-point via postcodes to geolocate.
Food Stores	Location of Food Stores in Wales	Geolytix 'Retail Points Q4 2018' - https://geolytix.co.uk/?retail_points
Town Centres	Location of Town Centres in Wales	OS Named Place dataset, part of OS VectorMap District combined with OS_Settlement_Seed, part of OS.Strategi (to provide better Town & City Descriptors)
Employment Centres	Location of Employment Centres (with employment =>500)	Employment data is associated with LSOA (a small area statistic boundary in Scotland). A population weighted centrepoint spatial dataset was obtained from http://geoportal.statistics.gov.uk/datasets/output-areas-december-2011-population-weighted-centroid s to provide a single location for each LSOA. Employment data was taken from https://www.nomisweb.co.uk/query/select/getdatasetbytheme.asp?theme=27 , it was selected to include both Data Zones and their related Employment information. Tabular data was joined to the spatial data via the LSOA ID..
Northern Ireland		
Service	Data Description	Data source for location of service
Primary Schools	Location of all Primary Schools in the Northern Ireland	Open Data NI - Locations of Schools data (July 2017). https://www.opendatani.gov.uk/dataset/locate-a-school/resource/d0947faf-5d84-4ce4-80dd-ce4fa0e1c0d5
Secondary Schools	Location of all Secondary Schools in the Northern Ireland	Open Data NI - Locations of Schools data (July 2017). https://www.opendatani.gov.uk/dataset/locate-a-school/resource/d0947faf-5d84-4ce4-80dd-ce4fa0e1c0d5
Further Education	Location of all Further Education Institutions in	List of FE institutions taken from NI Direct - https://www.nidirect.gov.uk/contacts/further-education-fe-colleges . Tabular data was joined to OS Codepoint via postcodes to geolocate

	Northern Ireland	
Hospital	Location of Hospitals in Northern Ireland	Hospital Location data taken from detailldata (August 2016) - http://data.nicva.org/dataset/hospital-locations . Was verified against hospitals listed in HSCNI Online - http://online.hscni.net/other-hsc-organisations/hsc-service-finder/
GP	Location of GP Practices in Northern Ireland	Spreadsheet of all GP practices in Northern Ireland - NHS Digital. https://digital.nhs.uk/services/organisation-data-service/data-downloads/gp-and-gp-practice-related-data . Tabular data was joined to OS Code-point via postcodes to geolocate.
Food Stores	Location of Food Stores in Northern Ireland	Geolytix 'Retail Points Q4 2018' - https://geolytix.co.uk/?retail_points
Town Centres	Location of Town Centres in Northern Ireland	OSNI Open Data Place Name Gazetteer - http://osni-spatial-ni.opendata.arcgis.com/datasets/117e5c3d0f0b41208d1caec1ddbd1330_1

6 CILOCT

Background

0601. Council Tax (CT) is payable on residential properties in the United Kingdom, other than in Northern Ireland where rates are payable. However, Service accommodation in England, Scotland and Wales is formally exempt from the CT regime and the MOD instead pays a Contribution in Lieu of Council Tax (CILOCT) to local authorities, broadly equivalent to the amount of CT that would otherwise be due. The average contribution, determined by the type of property occupied, is then recovered from Service occupants with their accommodation charge. With effect from 1 Apr 16, CILOCT is waived for SFA, SLA and the substitute equivalents overseas.

Private Accommodation

0602. Service personnel who own or rent private accommodation are responsible for paying CT direct to the appropriate LA concerned. If they also occupy Service accommodation they may ask their LA to reduce the rate of CT due on the private property for single or nil occupancy. For service personnel who own or rent a private property, a 50% council tax discount may be claimed from their local authority, where their main job-related dwelling is provided by the Ministry of Defence anywhere in Great Britain and their private property is in:

- England, under the Council Tax (Prescribed Classes of Dwellings) (England) Regulations 2003, SI 2003/3011 (as amended by SI 2004/926 and SI 2005/416) and SI 2012/2964.
- Scotland, under The Council Tax (Discount for Unoccupied Dwellings) (Scotland) Regulations 2005, SI 2005 No. 51.
- Wales, under The Council Tax (Prescribed Classes of Dwellings) (Wales) (Amendment) Regulations 2010, Welsh Statutory Instruments 2010 No. 612 (W.58).

This is not the case where the job-related dwelling is in Northern Ireland, as council tax is not paid there.

0603. See Volume 3 Part 1 (Directive) for CILOCT Regulations.