Street Hub
Noise Management Plan

Version 2



Background

As one of many features, Street Hubs provide free phone calls via a speaker and microphone system. The following document identifies the steps we are able take to ensure that these calls, like all the features of the Street Hub, help improve the amenity of a local area whilst also respecting the expectations of local community over time. Please note: this noise management plan refers specifically to the noise from the Street Hub. Noise from pedestrians, users of the Street Hub, or from other nearby sources are not included and would typically be considered matters for the Police and other authorities who have the appropriate and relevant powers to act on such issues if necessary.

We have designed our Street Hub so that they create a 'sound cloud' for the person making a call with noise levels sufficient to make calls with background noise for the surroundings. Whilst this generates a reasonable conversational volume in proximity to the Street Hub, it is intended to result in minimal to no noise being noticeable further away. The average volume settings are 65dB average at 3m distance from each Street Hub. Users may also choose to use headphones when making calls or using the tablet, which deactivates the speaker for the duration of their use.

It is worth noting that the Street Hub are situated on public streets, in the most part close to roads where high volumes of traffic will be seen, examples of background noise experienced on streets are details below:

Noise Level, dB	**Example**
60-70	Conversational Speech
70-80	Average traffic on Street Corner
80-90	Heavy lorries at 6m

Noise Management Plan

Daytime (07:00 – 21:00)

Street Hub have controllable volume levels. This will default to 50% at the start of any user activity during the day and can be increased and decreased based on the preferences of the user.

Night Time (21:00 – 07:00)

Between the hours of 21:00 to 07:00 all Street Hub will be governed so that the volume cannot be increased to greater than 60% of the maximum volume.

999 Calls

It should be noted that when the 999 is called through the tablet or the emergency button is pressed by a user the volume of calls is set to 100% to ensure that any user is able to effectively communicate with the emergency services. This volume can be lowered as requested by the user.



Exceptional Circumstances

We manage noise by exception based on feedback from users and the local community. If we receive any feedback that the Street Hub may be causing detrimental environmental impact, we take the following actions:

1. Understand the reason for the issue and any extenuating circumstances. At this point we will separate out any Police or community safety matters and work directly with the relevant authorities, and support the local residents in raising these issues through official channels where appropriate.

2. We will then verify the evidence provided against the Street Hub's call history and other operational data as required. This will allow us to understand the number, time, and frequency of outbound calls being made and better understand the severity of the reported situation.

3. Once we have verified the situation, we will typically look to apply local bespoke volume governor controls appropriate to the situation. We have found that reducing the Street Hub 's maximum volume to 40% during relevant periods tends to resolve issues where they have been identified.

4. We will continue to monitor the situation and listen to ongoing feedback from the community as we do take matters seriously. We continue to learn as part of our roll out how Street Hub are fitting in to the community.



Noise Testing

We have conducted 2 separate tests on the Street Hub, the initial test are to simulate typical operating temperatures (Test Scenario 1), with the secondary test simulating the worst case operating temperature (fans setting at max speed; Test Scenario 2). Each test involved 16 different test points taking part at 1.5m above floor level, with 3 readings being taken at each location, resulting in over 48 readings per test condition (96 in total). The equipment used to conduct the tests was the ANENG-GN101 Decibel Monitor. The average results in test scenario 1 was 50.5dB (55.9dB without factoring in background noise), in test scenario 2 the average result was 59.1dB (60.4dB without factoring in background noise).

NOISE TEST REPORT

DATE OF ISSUE	16/11/2021
DEVICE UNDER TEST	BT STREET HUB 2 – MODEL BTSH-01
TEST EQUIPMENT USED	Decibel meter (ANENG-GN101), tripod, spirit-level, measuring tape

SUMMARY OF TESTS PERFORMED	
1	NOISE LEVELS UNDER TYPICAL OPERATING CONDITIONS
2	NOISE LEVELS UNDER WORST CASE OPERATING CONDITIONS

TEST 1 : NOISE OUTPUT UNDER TYPICAL OPERATING CONDITIONS		
EQUIPMENT SET-UP	OPERATING UNDER THERMAL MANAGEMENT SYSTEM AT AMBIENT TEMPERATURE	
AMBIENT TEMPERATURE DURING TEST	17.8°C	
BACKGROUND NOISE LEVEL	54.4dB	

RESULTS				
			Average	55.9
			Factor for Background Noise	**50.5**

TEST 2 : NOISE OUTPUT UNDER WORST CASE OPERATING CONDITIONS		
EQUIPMENT SET-UP	OPERATING WITH ALL EQUIPMENT RUNNING AT MAXIMUM LOAD	
AMBIENT TEMPERATURE DURING TEST	17.8°C (simulated to 35°C by setting fans to max. speed)	
BACKGROUND NOISE LEVEL	54.4dB	

RESULTS				
			Average	60.4
			Factor for Background Noise	**59.1**

Further information

We want each Street Hub to provide the best possible experience for users and the communities around them, and will continue to work with councils, police, and the wider community to make sure they do. For more information on Street Hubs and how they are managed contact streethub@bt.com



Offices Worldwide

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