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**NOISE INVESTIGATION AT**   
(AUGUST 2020)

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## 1. COMPLAINT DETAILS

<b>Complaint ref.</b>	12274486		
<b>Property location</b>	Northern line: Between Kennington and Oval, above the Kennington loop (see Figure 1)	<b>LCS Codes</b>	N192/NRD01 260m N144/NSBLO 260m N144/NNBLO 530m

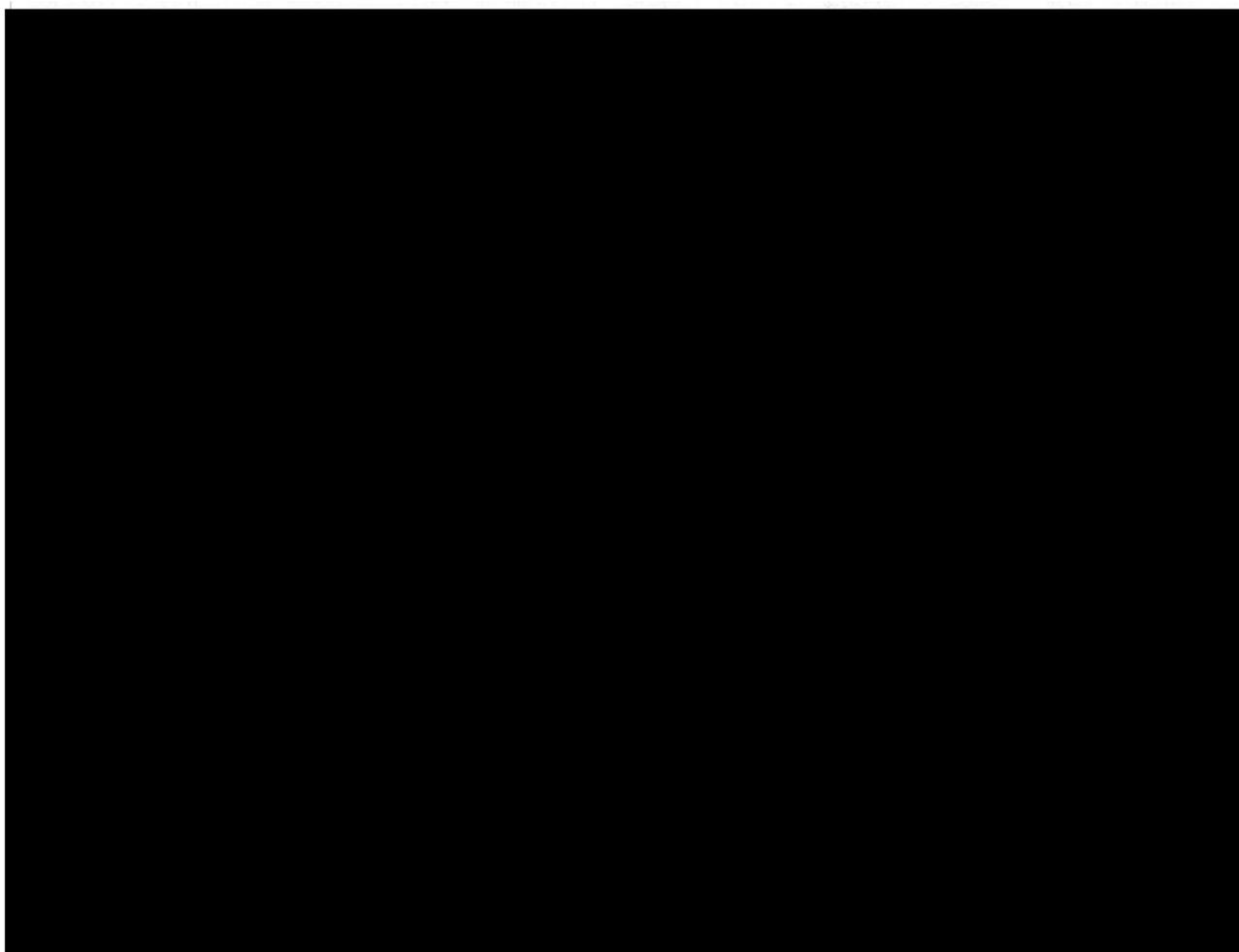


Figure 1: [REDACTED] in relation to the Kennington loop

The resident initially contacted TfL on 20<sup>th</sup> August 2018 to report a sudden change in the train noise from 6<sup>th</sup> August 2018. The noise was described as a “rumbling and vibrations” by the resident. In-property measurements were then taken on 28<sup>th</sup> August 2018.

On 2<sup>nd</sup> January 2020 the resident phoned the LU Contact Centre to report that “the noise from trains on the Loop was now worse than it was before” and requested further measurements be taken. The noise and vibration had been particularly bad over the Christmas / New Year period.

Measurements were taken on 7<sup>th</sup> January 2020. However, the resident said that the noise levels during the day-time period of attended measurements were not as high as they normally experienced. Therefore, in order to capture a more extensive sample of trains,



unattended monitoring was carried out overnight on 16<sup>th</sup> / 17<sup>th</sup> January 2020. The train noise levels for these latter measurements were, in fact, higher.

At the end of 2019, some residents living near to the loop and who are disturbed by train noise raised the possibility of permanent noise monitoring being undertaken in a few properties. It was explained to them that aside from being intrusive to residents, it would not enhance our understanding of the issues. Instead it was proposed by TfL that periodic noise monitoring at 3 or 4 monthly intervals could be carried out. [REDACTED] was chosen as a suitable property for on-going routine noise monitoring.

The latest measurements have been taken to assess the current noise levels within the property.

## 2. MEASUREMENT DETAILS

<b>Date of latest measurements</b>	13 <sup>th</sup> August 2020
<b>Equipment used</b>	Svantek SVAN 958A sound & vibration meter S/N 69836
<b>Measurement location</b>	<u>Ground floor kitchen / diner.</u> The microphone was tripod-mounted, at a height of about 1.4m, between the table and the wall (approx. 1m from the wall).

The measurement location was selected in discussion with the resident. The kitchen / diner is a room where the family spends a lot of time and where they consider the train noise to be most disturbing.

## 3. RESULTS OF NOISE MEASUREMENTS - ( $L_{A,MAX,FAST}$ ) dB(A):

The identification of Northern line train movements was determined from subsequent reference to TrackerNet (an internal application).

### Kitchen / diner – all attended measurements

	Around the loop				Background ( $L_{A90}$ )
	No. of trains	min.	max.	mean	
24/08/2018 10:30 to 10:55	5	45	49	<b>47</b>	30
07/01/2020 13:05 to 13:45	13	43	45	<b>44</b>	26
13/08/2020 11:30-11:55	11	38	44	<b>42</b>	26



### Kitchen / diner – overnight unattended measurements in January 2020

	Around the loop				Background (L <sub>A90</sub> )	Number of trains in range 41 to 46dB(A)	Number of trains in range 48 to 54dB(A)
	No. of trains	min.	max.	mean			
16/01/2020 16:30 to 18:00	26	41	53	<b>48</b>	23	10	16
16/01/2020 20:30 to 21:00	20	41	54	<b>49</b>	24	5	15
17/01/2020 06:05 to 07:35	15	41	54	<b>48</b>	31	7	8

Note: The entirety of the unattended recording was reviewed. The time periods for which the results are shown in the above table were chosen as times when there was no other intrusive noise present.

#### **4. OBSERVATIONS**

As for the previous measurements it is only the trains travelling around the loop that are the source of disturbance. A few trains between Kennington and Oval were only just audible. The nature of the noise of trains around the loop is a long low rumble, with an erratic impulsive feature. Some of the train passes caused kitchen items to rattle.

From a comparison of the L<sub>Amax,F</sub> noise levels with all those obtained previously, the train noise levels are the lowest recorded in the property. Compared to the results of the unattended measurements taken in January 2020, the current trains noise levels are, on average, 6dB(A) lower.