

Reference: 02286126

Information Requests
information.requests@ofcom.org.uk

6 October 2026

Freedom of Information request: Right to know request

Thank you for your request for information about yellow train measurement equipment.

We received this request on 21 September 2026 and we received clarification on 22 September 2026. We have considered your request under the Freedom of Information Act 2000 ("the FOI Act").

Your request & our response

It is my understanding that Ofcom uses Network Rail's yellow trains to collect signal data across the rail network since 2017.

"This data product provides filtered 2G, 4G and 5G mobile network measurements collected from Yellow Train surveys. It supports research into railway connectivity, signal quality, mobile network performance and interference along rail corridors" [3].

"We are releasing the data collected between June 2018 and June 2019 under our open data policy, so that industry and policymakers can make full use of the information we have collected." [2]

Data is available on the Ofcom website for the period between June 2018 and June 2019 [1] [2].

Data is available on the Rail Data Marketplace for the period between 2026-03-16 and 2026-05-02 [3].

Please can you provide:

- Exact test equipment used (and if possible how much it cost to purchase).

The four identical measurement systems were based on the following test equipment:

Rohde and Schwarz TSMW Universal Radio Network Analyser – Model 1503.3001.03

Rohde and Schwarz ROMES4 Control software – Model 1117.6885.04

We do not hold the costs of the test equipment, as they were purchased beyond our general data retention period.

- Frequency bands supported by the test equipment (broken down by 2G/3G/4G/5G).

The Rohde & Schwarz TSMW is technology agnostic and supports 2G, 3G, and 4G base station measurements in all of the frequency bands listed below. The TSMW does not support 5G measurements. However, during the Ofcom Yellow Trains project, there were no commercial 5G deployments active in the United Kingdom. Please note that only a subset of the bands below are currently deployed in the United Kingdom.

EUTRA Band	Uplink (UL) Operating Band	Downlink (DL) Operating Band	Duplex Mode
1	1920 MHz to 1980 MHz	2110 MHz to 2170 MHz	FDD
2	1850 MHz to 1910 MHz	1930 MHz to 1990 MHz	FDD
3	1710 MHz to 1785 MHz	1805 MHz to 1880 MHz	FDD
4	1710 MHz to 1755 MHz	2110 MHz to 2155 MHz	FDD
5	824 MHz to 849 MHz	869 MHz to 894 MHz	FDD
6	830 MHz to 840 MHz	875 MHz to 885 MHz	FDD
7	2500 MHz to 2570 MHz	2620 MHz to 2690 MHz	FDD
8	880 MHz to 915 MHz	925 MHz to 960 MHz	FDD
9	1749.9 MHz to 1784.9 MHz	1844.9 MHz to 1879.9 MHz	FDD
10	1710 MHz to 1770 MHz	2110 MHz to 2170 MHz	FDD
11	1427.9 MHz to 1447.9 MHz	1475.9 MHz to 1495.9 MHz	FDD
12	699 MHz to 716 MHz	729 MHz to 746 MHz	FDD
13	777 MHz to 787 MHz	746 MHz to 756 MHz	FDD
14	788 MHz to 798 MHz	758 MHz to 768 MHz	FDD
15	Reserved	Reserved	FDD
16	Reserved	Reserved	FDD
17	704 MHz to 716 MHz	734 MHz to 746 MHz	FDD
18	815 MHz to 830 MHz	860 MHz to 875 MHz	FDD
19	830 MHz to 845 MHz	875 MHz to 890 MHz	FDD
20	832 MHz to 862 MHz	791 MHz to 821 MHz	FDD
21	1447.9 MHz to 1462.9 MHz	1495.9 MHz to 1510.9 MHz	FDD
22	3410 MHz to 3490 MHz	3510 MHz to 3590 MHz	FDD
23	2000 MHz to 2020 MHz	2180 MHz to 2200 MHz	FDD
24	1626.5 MHz to 1660.5 MHz	1525 MHz to 1559 MHz	FDD
25	1850 MHz to 1915 MHz	1930 MHz to 1995 MHz	FDD
26	814 MHz to 849 MHz	859 MHz to 894 MHz	FDD
27	807 MHz to 824 MHz	852 MHz to 869 MHz	FDD
28	703 MHz to 748 MHz	758 MHz to 803 MHz	FDD
29	-	717 MHz to 728 MHz	FDD (CA only)
30	2305 MHz to 2315 MHz	2350 MHz to 2360 MHz	FDD
31	452.5 MHz to 457.5 MHz	462.5 MHz to 467.5 MHz	FDD
33	1900 MHz to 1920 MHz	1900 MHz to 1920 MHz	TDD

34	2010 MHz to 2025 MHz	2010 MHz to 2025 MHz	TDD
35	1850 MHz to 1910 MHz	1850 MHz to 1910 MHz	TDD
36	1930 MHz to 1990 MHz	1930 MHz to 1990 MHz	TDD
37	1910 MHz to 1930 MHz	1910 MHz to 1930 MHz	TDD
38	2570 MHz to 2620 MHz	2570 MHz to 2620 MHz	TDD
39	1880 MHz to 1920 MHz	1880 MHz to 1920 MHz	TDD
40	2300 MHz to 2400 MHz	2300 MHz to 2400 MHz	TDD
41	2496 MHz to 2690 MHz	2496 MHz to 2690 MHz	TDD
42	3400 MHz to 3600 MHz	3400 MHz to 3600 MHz	TDD
43	3600 MHz to 3800 MHz	3600 MHz to 3800 MHz	TDD
44	703 MHz to 803 MHz	703 MHz to 803 MHz	TDD

-Please could you also provide the signal data that was collected between June 2019 and March 2026 in a CSV format (similar to the other data that has been provided previously).

Please note the measurements undertaken by Ofcom were discontinued in 2019. The data published on the Rail Data Marketplace was undertaken by the Department for Transport and Network Rail and is not connected to any measurements taken by Ofcom. You may wish to contact them directly for further information.

Yours sincerely,

Information Requests

Request an internal review

If you are unhappy with the response you have received to your request for information, or think that your request was refused without a reason valid under the law, you may ask for an internal review. If you do, it will be subject to an independent review within Ofcom. We will either uphold the original decision, or reverse or modify it.

If you would like to ask us to carry out an internal review, you should get in touch within two months of the date of this letter. There is no statutory deadline for us to complete our internal review, and the time it takes will depend on the complexity of the request. But we will try to complete the review within 20 working days (or no more than 40 working days in exceptional cases) and keep you informed of our progress. Please email the Information Requests team (information.requests@ofcom.org.uk) to request an internal review.

Taking it further

If you are unhappy with the outcome of our internal review, then you have the right to [complain to the Information Commission](#).