**Date issued:** 24 March 2022

**Freedom of Information Request**

We are writing in response to your Freedom of Information request. Your request has been considered in accordance with the requirements of the Freedom of Information Act and our Data and Information Management Policy.

**You asked for the following information:**

*“We live next to where some of the new Metro is going. We are at Ty-isaf, near Danescourt station and the rail line runs along our boundary, I’d say within arcing distance of these new overhead lines.*

*This could cause a real danger of electrocution to us as a family and we are also concerned of the effect of EMF radiation to our young children (and ourselves) not to mention the visual impact and therefore extremely likely, the loss of value to our property.*

*What studies can you reference in regard to the health effect on those in such close proximity and your liability as a company for knowingly causing such exposure? From our research these lines are way too close to be safe for our property.*

*Could you provide me with the location of the posts in relation to our property too please.”*

**Having reviewed your questions, we are able to provide the following information:**

The electrification of our track and all associated live parts are designed to fall well inside the railway boundary, and we will ensure that this key safety requirement is met for all of our lineside neighbours. We will meet, as a minimum, the international standards for this clearance and in the majority of locations, we will far exceed these standards. The Rail Safety and Standards Board have reviewed the application of the Control of the Electromagnetic Fields at Work Regulations (‘CEMFAW’ Regulations - see GLGN1620 attached) and note that EMF radiation is only detected in close proximity to the live contact wire and return circuit.

Note that GLGN1620 makes reference to a further a document which provides guidance on the application of CEMFAW Regulations in the railway environment, the ‘Health and Safety Executive’s (HSE) Guidance’, which sets out the general processes for complying with the requirements of the CEMFAW Regulations and can be found here: [A guide to the Control of Electromagnetic Fields at Work Regulations 2016 (hse.gov.uk)](https://www.hse.gov.uk/pubns/books/hsg281.htm). We would also bring to your attention further reading from the Overhead Line Electrification for Railways group about how this equipment works, found here: [Download the 6th Edition PDF – Overhead Line Electrification for Railways (ocs4rail.com)](https://ocs4rail.com/downloads/)

As a comparison, the general public should compare overhead line electro-magnetic fields with those coming from LV mains cables in the pavements of the street outside their homes, of which the amps can be significantly higher.

In respect of property prices; once operational, an electric railway is far cleaner and quieter than the existing diesel operation. The trains will produce no exhaust gasses and are much lighter, meaning they will generate far less noise, whilst the electric traction motors are also quieter too. Local economies served by electrified railways also benefit from what is known as the ‘sparks effect’, where it has been found that commuter populations are attracted to areas where they can expect a better experience onboard new rolling stock and more efficient journey times. As such, if a property is within close catchment of a train station served by an electrified railway, then this is likely to have a positive impact.

Although the Overhead Line structures will have noticeable visual impact, this is due to them being new. When compared to existing street furniture, the Overhead Line masts being installed on the railway are significantly less in number the telegraph poles, streetlights and pylons we are used to seeing.

Though your exact address details have not been provided, we believe mast locations outside the property are as follows:

*A picture containing radar chart

Description automatically generated*

You note that the Overhead Line equipment is within arching distance of your garden, but without your exact address details, we cannot provide any further information about the placement of our masts that that outlined in the first paragraph of our response. If you remain concerned, we encourage you to contact our Stakeholder Engagement team, who engage with our lineside neighbours and may offer further support. They can be contacted here: [engagement@tfw.wales](mailto:engagement@tfw.wales) (please note the Stakeholder Engagement team are unable to process complaints).

We hope this information is of use to you.

Yours sincerely,

**Transport for Wales**

**Appeal Rights**

If you are unhappy with the way your request has been handled and wish to make a complaint or request a review of our decision, please write to the Head of Freedom of Information at either Transport for Wales, 3 Llys Cdwyn, Pontypridd, CF37 4TH or [freedomofinformation@tfw.wales](mailto:freedomofinformation@tfw.wales). Your request must be submitted within 40 working days of receipt of this letter. If you are not content with the outcome of the internal review, you have the right to apply directly to the Information Commissioner for a decision.

The Information Commissioner (ICO) can be contacted at Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF or you can contact the ICO through the 'Make a Complaint' section of their website on this link: <https://ico.org.uk/make-a-complaint/>

The relevant section to select will be "Official or Public Information".