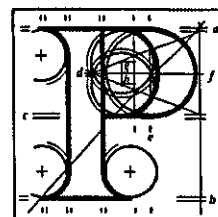


Our Case Number: ABP-314724-22

Planning Authority Reference Number:



**An
Bord
Pleanála**

ESB Telecoms Limited
Building 2
Swift Square
Northwood Business Park
Northwood
Dublin 9

Date: 13 December 2022

Re: Railway (Metrolink - Estuary to Charlemont via Dublin Airport) Order [2022]
Metrolink. Estuary through Swords, Dublin Airport, Ballymun, Glasnevin and City Centre to
Charlemont, Co. Dublin

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above-mentioned proposed Railway Order and will take it into consideration in its determination of the matter.

The Board will revert to you in due course with regard to the matter.

Please be advised that copies of all submissions/observations received in relation to the application will be made available for public inspection at the offices of the relevant County Council(s) and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,



Niamh Thornton
Executive Officer
Direct Line: 01-8737247

| | | |
|---------------------------|----------------|--|
| Tel | Tel | (01) 858 8100 |
| Glaó Áitiúil | LoCall | 1890 275 175 |
| Facs | Fax | (01) 872 2684 |
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| Ríomhphost | Email | bord@pleanala.ie |

| | |
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| 64 Sráid Maoilbhríde | 64 Marlborough Street |
| Baile Átha Cliath 1 | Dublin 1 |
| D01 V902 | D01 V902 |



Telecoms

Metrolink Railway Order 2022

Submission from ESB Telecoms Limited to An Bord Pleanála in regard to the Application by the National Roads Authority (operating as Transport Infrastructure Ireland) for the Railway (Metrolink – Estuary to Charlemont via Dublin Airport) Order 2022

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| AN BORD PLEANÁLA | |
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APPENDIX – Outdoor Coverage Mapping

1. INTRODUCTION

ESB Telecoms Limited (ESBT) welcomes the opportunity to comment on the application by the National Roads Authority (operating as Transport Infrastructure Ireland) for the Railway (Metrolink – Estuary to Charlemont via Dublin Airport) Order 2022 to An Bord Pleanála, acting as the competent authority responsible for making the decision whether or not to grant the Order. ESBT are a landowner for land currently operating as a fully operational telecommunications base station at ESBs Ballymun 38kV Substation at the junction of the R108 Ballymun Road and the R103 Collins Avenue, Ballymun, Dublin 9. These lands and the adjoining access have been identified as land earmarked for temporary possession during the construction of Metrolink.

ESBT from the outset wish to record its overall support for the Metrolink Project. We recognise, acknowledge, and support the overall Project, which as informed by planning policy context is: 'To provide a sustainable, a safe, efficient, integrated and accessible public transport service between Swords, Dublin airport and Dublin city centre'. ESBT wishes to see the Project to progress in a timely manner through to fruition. The potential of Metrolink in contributing to the enabling Dublin and wider area in meeting its potential as a competitive, sustainable city with a good quality of life for all is recognised.

In terms of this Submission ESBTs role is first discussed below before detailing the scope of this submission. The context of the Ballymun base station site is detailed showing the relationship with ESBs Ballymun 38kV Substation in terms of access and land ownership, before emphasising the importance of the site to ESBT, our customers and the services they provide. The need to preserve the integrity of the site and continue to provide an uninterrupted service in a safe and secure manner will be highlighted, including the need for unrestricted access to the site. The implications for losing the site, even for a period of temporary possession will be highlighted and in doing so demonstrate why ESBT do not support the temporary possession of the site. Finally, strong reservations will be made to the proposed temporary possession of the adjoining ESBs Substation lands in so far as it would impact on the telecommunications site and associated infrastructure and its operation.

1.1 ESB Telecoms Limited

ESB Telecoms Ltd (ESBT) was established in early 2001 as a subsidiary company to ESB, Ireland's premier electricity supplier. Since that time ESBT has been a leading independent telecommunications infrastructure provider, delivering high quality, turnkey communication network solutions to all potential co-location customers at market rates.

ESBT now provides network solutions for a wide variety of network operators, wireless broadband providers, as well as transferring data for the ESB Supervisory Control and Data Acquisition (SCADA) system, ESBs internal safety and communications system. In recent years we have grown a substantial external customer base, supporting a wide range of private and public sector business activities.

It is ESBTs policy to design and construct our communication structures to the highest international standards. All sites developed by ESBT are made available at market rates to our customer base, namely any registered telecommunications player in the Irish market, as points for co-location. Customers can rent space from ESBT allowing them to locate their base station equipment on ESBT sites, allowing them to provide mobile and broadband

coverage from these ESBT sites, using mainly 3G, 4G and 5G networks. This policy aims to limit the number of such structures appearing in urban and rural landscapes.

ESBT built and owns a 1,600 kilometre national fibre optic network (NTFON). The NTFON is constructed in a 'Figure of Eight' around Ireland and also includes a spur from Carrick-on-Shannon to Buncrana, now connected back to Dublin via BT (NI). This network also incorporates extensive fibre ducting throughout the Dublin and Cork metropolitan areas. The NTFON enables high speed data connections to remote location that may otherwise have been overlooked. ESBT presently have approximately 150 tower sites connected directly to our NTFON network, allowing virtually limitless backhaul (data connectivity) to data centres and the wider internet.

The imminent roll-out of next generation mobile broadband services will offer more opportunities to ESBT to offer well connected, well maintained telecommunication infrastructure capable of delivering virtually limitless backhauling capacity to our customers, the network operators, via our own NTFON network.

1.2 Scope of the Submission

ESBT received the following drawings as part of the consultation process and will therefore limit its submission relating to the areas covered by the drawing particularly those relating to the telecommunications compound and the wider ESB Substation where the compound is located. It is understood that ESB has been consulted separately regarding lands in their ownership and interest.

Area No. 304 Land Tag ML4D – T1 Drawing No. ML1-JAI-BOR-Rout_XX-DR-Y-02766

Area No. 304 Land Tag ML4D – T2 Drawing No. ML1-JAI-BOR-Rout_XX-DR-Y-02767

Area No. 304 Land Tag ML-P 304 D-E Drawing N. ML1-Jai-BOR-Rout_XX-DR-Y-030767

ESBT own the lands of the telecommunications compound covered by Land Tag ML4D – T1 (Drawing No. ML1-JAI-BOR-Rout_XX-DR-Y-02766) and Land Tag ML4D – T2 (Drawing No. ML1-JAI-BOR-Rout_XX-DR-Y-02767).

ESBT acknowledge the supporting documentation that accompanies the application, specifically the Environmental Impact Assessment Report (EIAR) prepared to enable the board to undertake the EIA. The EAIR forms part of the application, and ESBT recognise its importance and while supportive of the contents do not wish to comment any further on these elements and contents contained therein.

2. BALLYMUN 38KV SUBSTATION AND TELECOMS COMPOUND

ESBT support the route of the proposed Metrolink however with specific reference to the construction techniques would wish to emphasise that the integrity of the Grid and in particular electricity supply to our Ballymun telecoms site must be maintained ensuring that any disruption

and outages to the site are prevented. During the construction phase of this part of the tunnel, vibration must be contained with prescribed limits to ensure the stability of the telecoms tower and services from the base station generally must not be compromised.

2.1 Site Characteristics

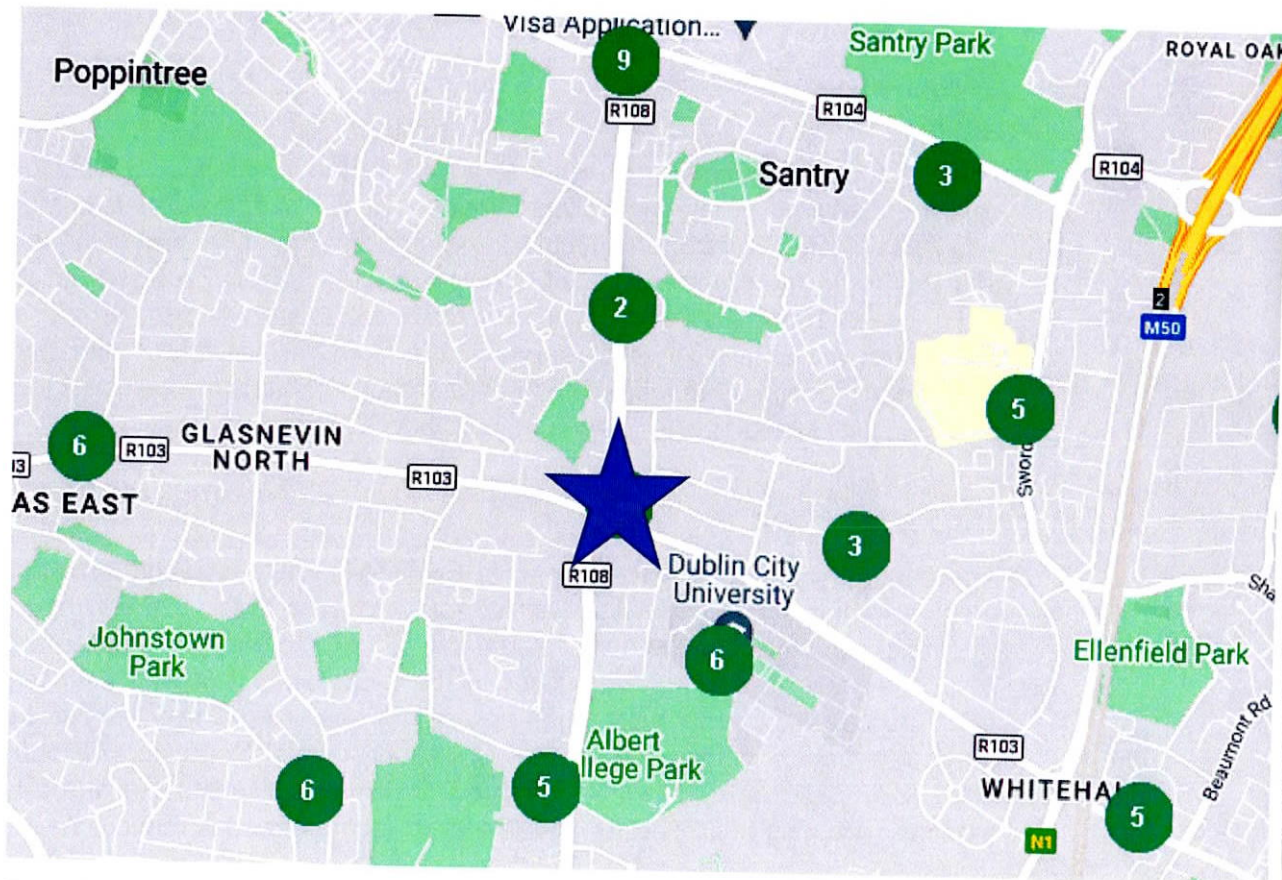
The Ballymun base station site is located within the wider ESB Substation lands at the corner of Ballymun Road and Collins Avenue. The surrounding area is primarily residential, with relatively new apartments located to the north of the site, and semi-detached houses that front onto the northern side of Collins Avenue (R103) immediately to the east. In the wider locality Ballymun Road (R108) is a major regional route into north Dublin and Dublin city centre, while Collins Avenue represents a main east - west thoroughfare through this part of north Dublin. Both routes are heavily trafficked. Within the vicinity is the main campus of Dublin City University, located to the southeast of the site.

2.2 Importance of the Site

The importance of the Ballymun site to ESBT cannot be over emphasised. The 3 main mobile and broadband operators are currently located at the site and accommodated on the mast structure: these being Vodafone, Three Ireland (Hutchison) Limited and Eir Mobile/Broadband. The service delivery of these operators located at the site on the existing structure currently forms an integral part of their network. The latter can be clearly seen from information contained on the Communication's Regulators (ComReg) website: <https://coveragemap.comreg.ie/map> The website provides the details of individual base stations, including their location and operators located at each particular site.

Fig.1 below, taken from the ComReg Site Viewer shows the existing Ballymun base station in the centre – highlighted with a 'blue star', with the location of other base stations in the wider locality, indicated with 'green circles'. Given the developed nature of this urban area and the high demands mobile and broadband usage in such areas the cell size served by each base station is relatively small so the capacity of service can be maintained. The central location of this site is vital in order to provide a continuous robust service and coverage in the locality providing a seamless link to neighbouring base stations.

Fig 1. The Location of the Ballymun 38kV Base Station Relative to neighbouring Base Station Sites



Extract from ComReg Site Viewer.

The coverage associated with individual sites and operators can also be identified from ComRegs Site Viewer which can be used to further demonstrate the importance of the site. The website also provides coverage mapping showing the existing 2G, 3G and 4G coverage for operators in the area from individual sites. This is demonstrated by providing outdoor coverage levels for each of the three mobile/broadband operators that currently utilise the Ballymun site, as shown in the Appendix attached.

For example, Vodafone's current 4G and 5G coverage is shown on the first of the 2 coverage maps. Existing coverage ranges between Very Good (Dark Brown) and Good (Brown). Continuation of this service is essential to Vodafone. The 4G map in particular shows the coverage from the Ballymun site, and in doing so demonstrates that any loss of this site would clearly diminish the coverage in the immediate area, including along the R103 and R108, properties in the vicinity, resulting in a significantly diminished and loss of service. This would be clearly unacceptable to ESBT and our customers. A similar pattern of coverage can also be seen for both Eir and Three Ireland.

ESBT also wish to emphasise the existing structure will also assist in facilitating the upgrades necessary meet customer demands and expectations, without the need for an additional structure.

ESBT has a proven record of offering its sites for co-location and in doing so reduces the need for a further proliferation of structures. This is the case at the Ballymun site which in

the past has had other operators availing of the site. The site and structure has the capacity to allow for other operators to locate there and as such continues to be offered for further co-location.

2.3 Need for Unhindered 24/7 Access

ESBT authorised staff require unhindered and unrestricted access to all our base station sites, including Ballymun. It is important to emphasise that this requirement for such access also extends to authorised persons acting on ESBT's behalf as well as to our customers and where appropriate contractors working on behalf of our customers. Such access is needed on a 24 hour/ 7 days per week basis to allow not only for routine maintenance, but also any emergency works that may be required. The need to maintain a high degree of security at all times is also imperative in order to prevent trespass, potential vandalism, theft, and safety of all those who enter the base station.

ESBT would have strong reservations to any use of the wider substation lands that could be required for the construction phase of Metrolink on the basis of safety, security and access; unless absolute assurance could be given that these issues were effectively controlled, and necessary arrangements put in place.

2.4 Implications of Temporary Possession

The nature of the telecommunications business is such that in terms of location, technology and cost means that base stations operated by ESBT are somewhat location tied in terms of individual cell size with regard to coverage areas. In urban areas, where the cell areas tend to be relatively small, as it is in these areas where mobile and broadband traffic is high. Given the built up nature, land uses and vehicular traffic in the vicinity of the Ballymun site the demand and expectations for good and robust mobile and broadband services is high.

The Ballymun base station is a fully functioning base station providing an integral part of our portfolio of sites and the network of our customers currently operating from the station. As such the integrity of the site and safety of the site must be maintained to ensure our customers, the three largest commercial mobile and broadband providers can continue to deliver seamless services to local businesses, residents, people visiting and passing through the area. There is also substantial existing infrastructure powering the existing base station.

From a commercial and practical perspective finding an alternative site(s) are often difficult to find particularly in urban areas, where land is either already developed or earmarked for development. The process from site identification, design, planning, procurement, capital costs etc. would give rise to very significant capital costs for ESBT and our customers. Put simply, the cost of disruption would greatly outweigh the short term benefits to be gained through the temporary procession of the site. This would be unlikely to be sustainable particularly on a short term/ temporary basis i.e., covering the construction period for Metrolink.

ESBT could not therefore support in making the telecoms land available, even on a temporary procession basis, to avoid such significant costs in finding an alternative location(s). ESBT would also have strong reservations regarding the use of the adjacent



substation lands for such uses connected with Metrolink for reasons concerning access, safety and security.

3. CONCLUSION

The application by the National Roads Authority (operating as Transport Infrastructure Ireland) for the Railway (Metrolink – Estuary to Charlemont via Dublin Airport) Order [2022] is welcomed. The project is acknowledged, the purpose of the Metrolink Project represents an important infrastructure investment that will when completed bring with it several co-benefits to the area such as traffic reduction, improved air quality, reduced noise and less fossil fuel dependence.

ESBT is a subsidiary company of the Electricity Supply Board. While independent ESBT shares many of the core values of ESB particularly to commitments to reducing carbon emissions and strategies that support the transition of Ireland to a low-carbon and ultimately post-carbon economy that is competitive, resilient and sustainable. In ESBT's case the development and maintenance of an efficient, robust telecommunications network supports more sustainable ways of working, including for example opportunities for home and remote working, reducing the need to travel. ESBT fully supports the Metrolink Project, however in addressing the Railway Order we request that due consideration is given to the issues raised in this submission relating to our lands at ESB's Ballymun 38kV substation, most particularly:

- The telecommunications compound represents a fully functioning base station providing an integral part of our portfolio of sites and the network of our customers currently operating from the station.
- The integrity of the site and safety of the site must be maintained to ensure our customers, the three largest commercial mobile and broadband providers can continue to deliver seamless vital services to local businesses, residents, people visiting and passing through the area. The site continues to be offered as providing opportunities for further co-location for other operators wishing to avail of the facility.
- Clear unhindered access to the compound and tower is required by ESBT staff, our licenced operators, and approved contractors, working on our behalf and on behalf of our customers, on a 24 hour basis 7 days a week. This access is required on a regular basis to deal with site inspections, essential maintenance, equipment upgrades, as well as unforeseen occurrences and emergencies.
- It is critical that the integrity of the telecommunications base station, access to it and site security is maintained at all times.
- The cost of temporary possession of the telecoms lands would outweigh the overall benefits to be gained by Metrolink for off-site storage and any other unspecified activities.
- ESBT, in light of the aforementioned do not support the temporary procession of lands within their ownership or any proposal that would compromise the unhindered access to or safe operation of important telecommunications site.



Telecoms

It is requested that An Bord Pleanála give due consideration to the matters raised in this submission. If we can be of any further assistance, or if you wish to clarify any of the points raised, please do not hesitate in contacting me.

Yours sincerely,

Harry McKechnie

for Nicola Arthur | Asset, Governance, Safety & Compliance Manager | ESB Telecoms Ltd |T: +353 1 7026344 / +353 87 9077702

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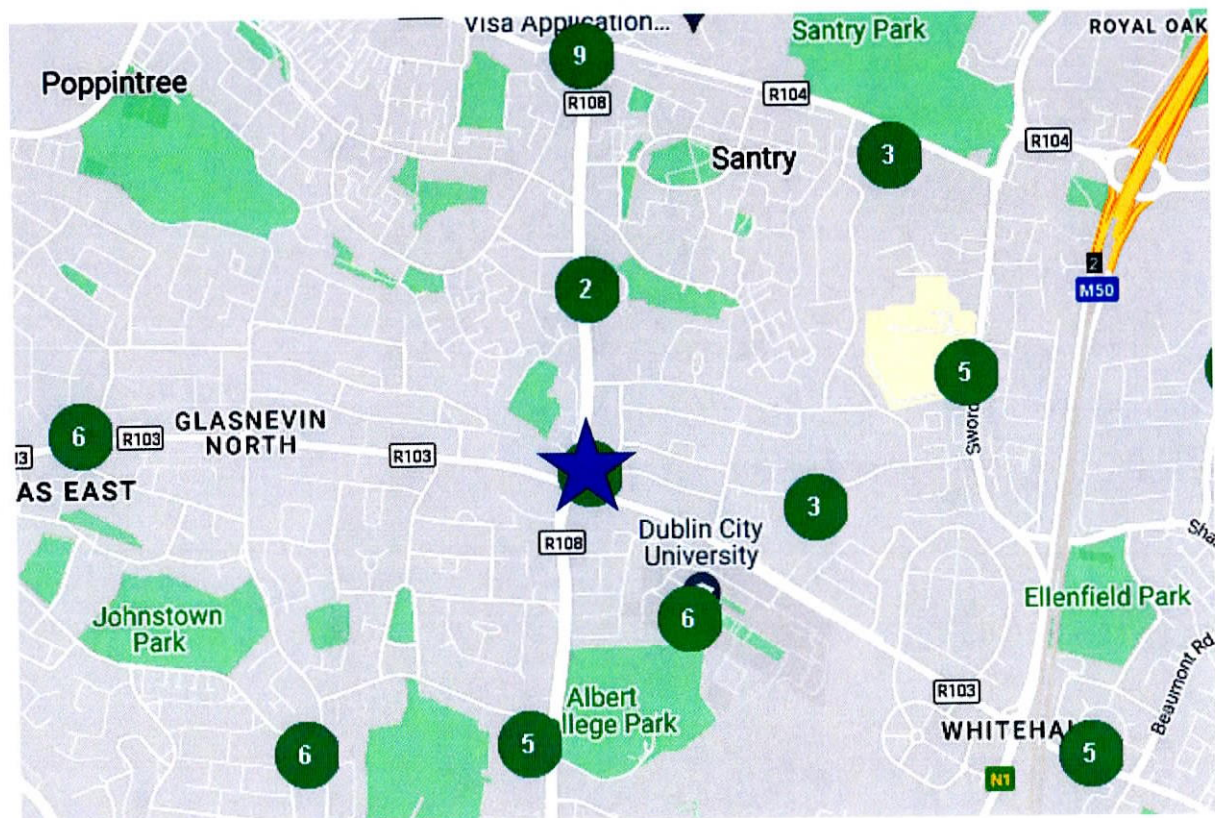
APPENDIX

Outdoor Coverage Mapping

The importance of the ESBTs Ballymun Telecommunications Site to ESBT and the current three operators based on the site, Vodafone, Eir and Three, can be demonstrated by looking at the levels of outdoor coverage levels served by the individual base station.

As a reference the location of the individual telecommunication base stations area shown on Figure 1 below, with ESBs Ballymun site centrally located, marked by the 'blue star'. The other sites in the vicinity are depicted by 'green circles'.

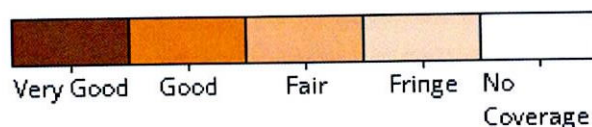
Fig 1. The Location of the Ballymun 38kV Base Station Relative to neighbouring Base Station Sites



Source: ComRegs Site Viewer

On the following pages the outdoor coverage levels for 4G and 5G for Vodafone, Eir and Three are given with levels of coverage levels related to the Legend. In each instance the Ballymun base station is indicated by the red coloured pin.

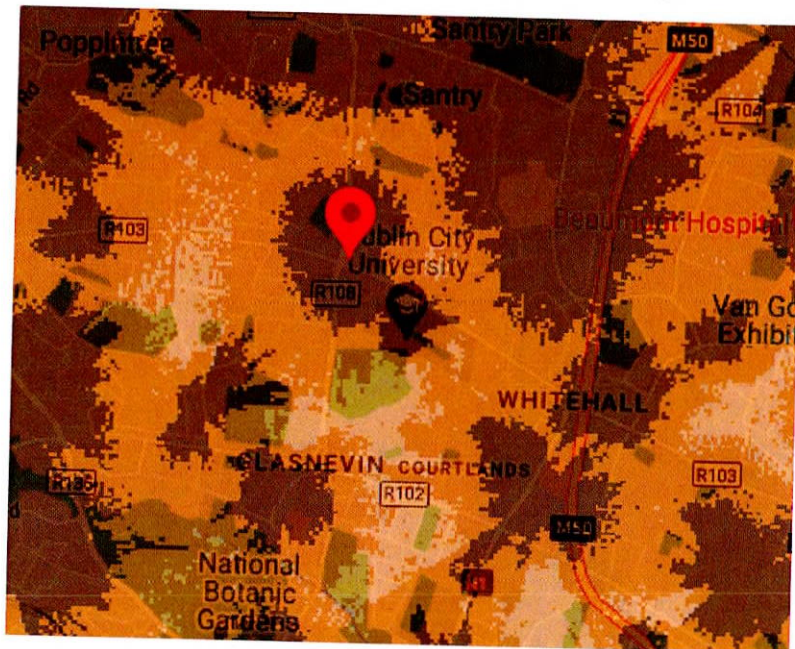
Legend



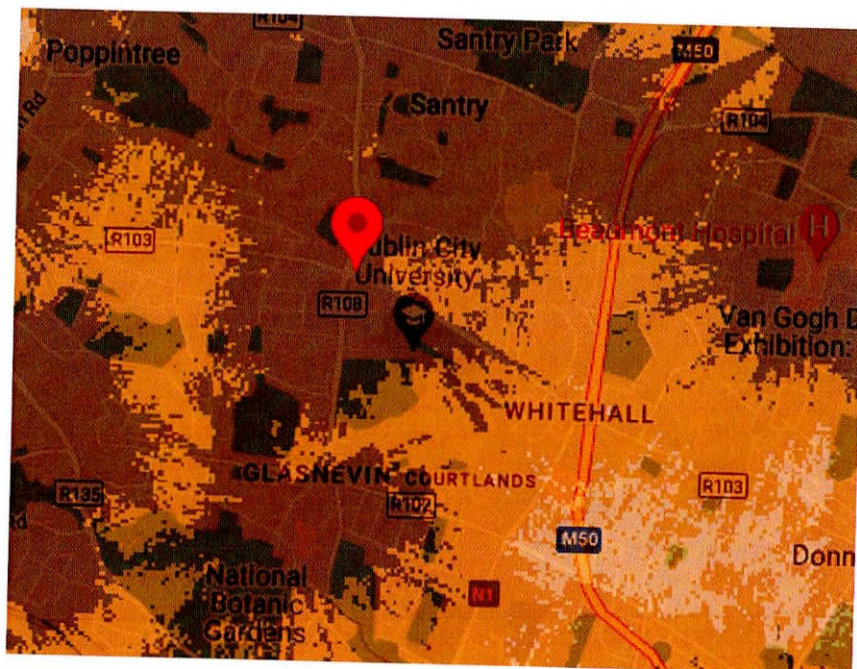
By identifying and isolating coverage from the Ballymun site the importance of the site in providing a robust coverage level can be seen. An analysis of the coverage levels is provided in the main Submission.

APPENDIX

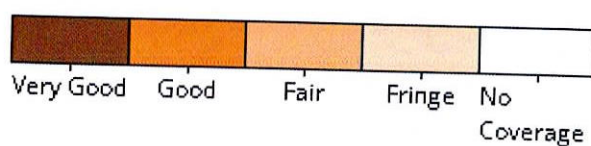
Vodafone's 4G Outdoor Coverage



Vodafone's 5G Outdoor Coverage

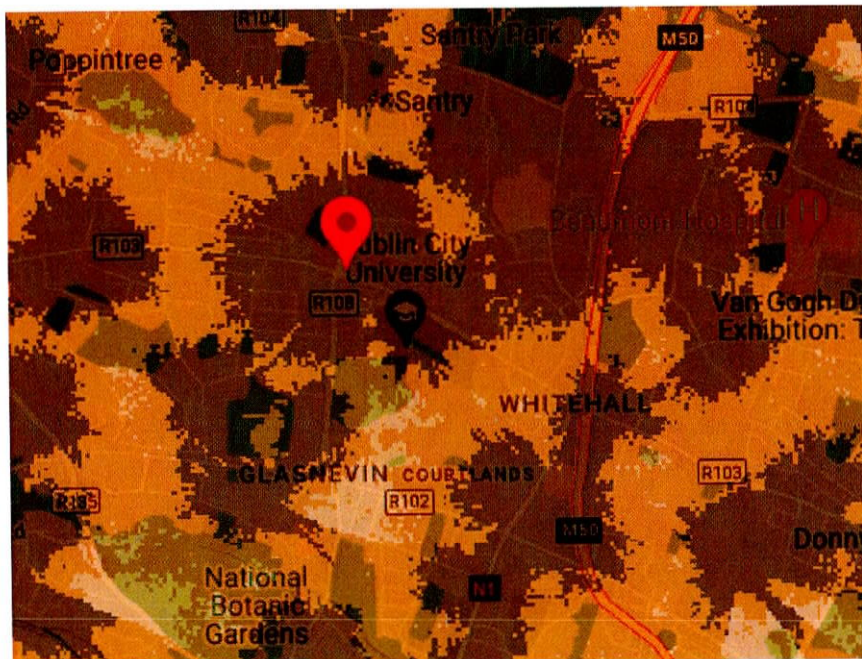


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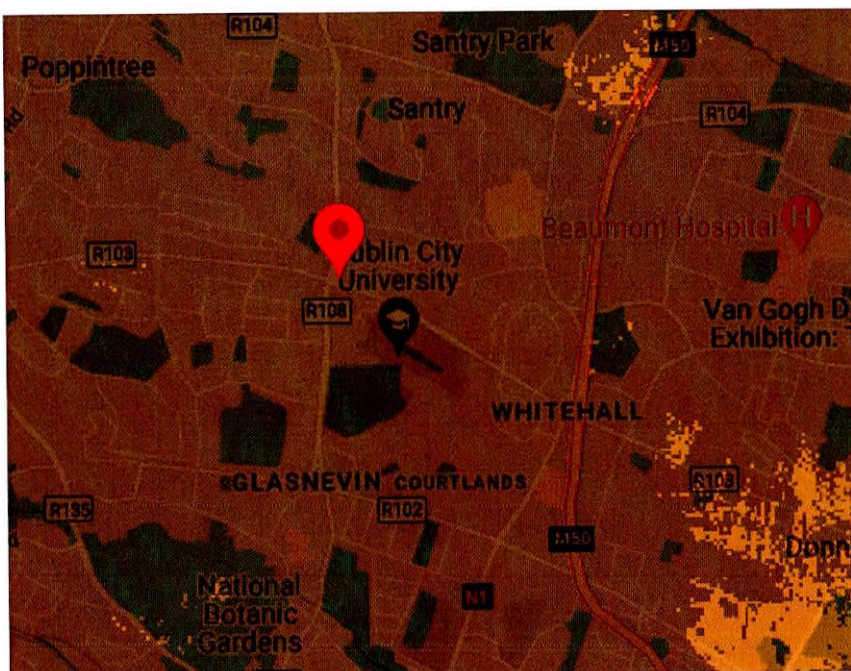


APPENDIX

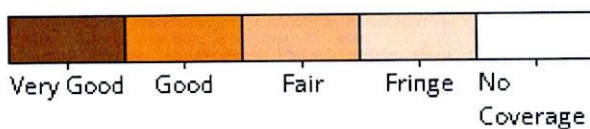
Eir's 4G Outdoor Coverage



Eir's 5G Outdoor Coverage

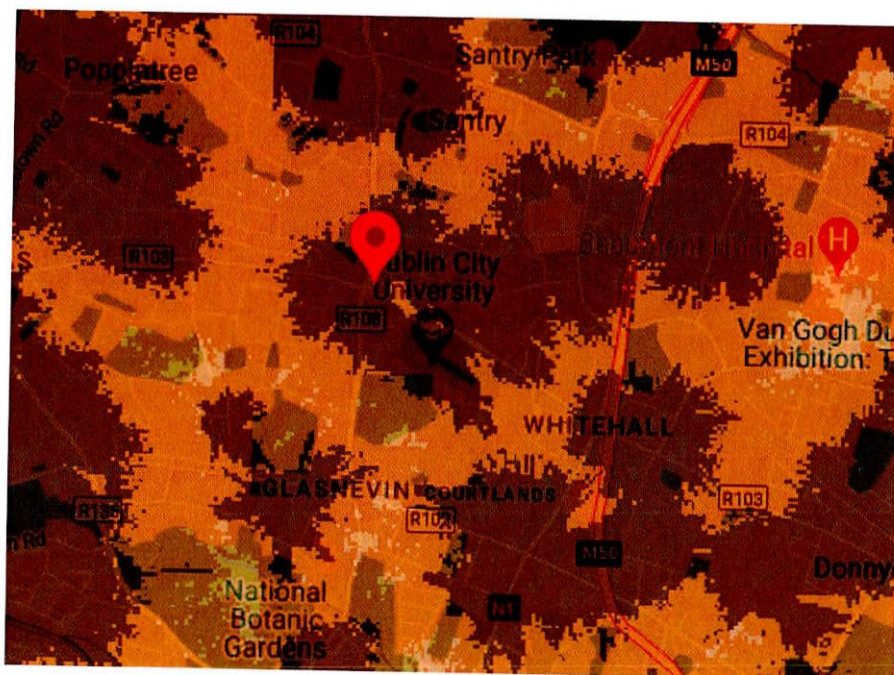


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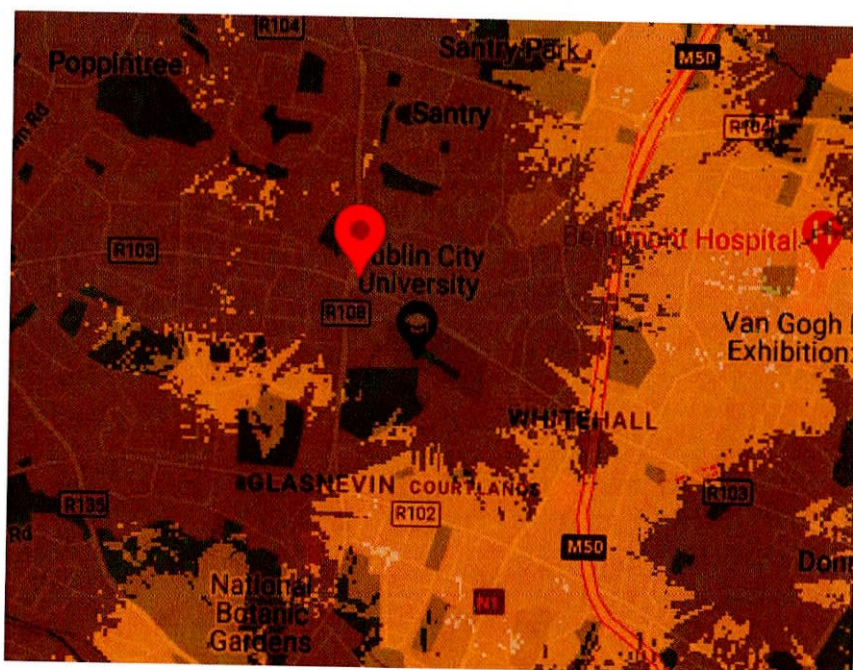


APPENDIX

Three's 4G Outdoor Coverage



Three's 5G Outdoor Coverage



Legend

