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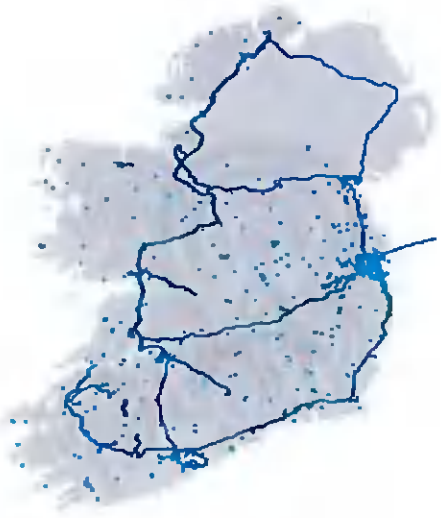
Appendix

1. BACKGROUND TO ESB TELECOMS LTD

1.1 CREATION OF ESB TELECOMS LTD

ESB Telecoms Ltd was established in early 2001 as a subsidiary company to ESB, Ireland's premier electricity supplier. Since that time ESB Telecoms has become Ireland's leading independent telecommunications infrastructure provider, delivering high quality, turnkey communication network solutions.

ESB Telecoms has grown from its original function of providing a communications system for our parent company, ESB. This communications system is called Supervisory Control and Data Acquisition (SCADA) and is still used today to monitor, control and remotely operate the ESB's complex electricity network infrastructure. The SCADA system continues to be upgraded as it is a vital part of radio and transmission communication for ESB's maintenance and repair crews.



Map 1: The existing ESBT fibre network is shown in blue lines with the tower infrastructure denoted with a blue dot.

1.2 FUNCTION OF ESB TELECOMS LTD

ESB Telecoms Ltd now provides network solutions for the wide variety of mobile network operators, wireless broadband providers, as well as transferring data for the SCADA network. Over the last 2 and a half decades of operating in the Irish market, we have grown a substantial external customer base, supporting a wide range of private telecoms providers. ESBT's portfolio of sites also support a broad range of public sector telecoms activities such as council run fire departments, Enet – the national operator of local urban fibre networks, as well as Tetra who are a major customer specialising in the delivery of nationwide coverage to blue light services (Garda, Fire and Ambulance services). ESBT tend to own the sites and develop the structures therein, and rent space within the site to network operators, allowing them locate antennae on the telecoms structure as well as locating the necessary ground-mounted equipment (exempted development

under Class 31(e) and (f)) within the telecoms compound. ESBT do not actively manage all the equipment within the ESBT site.

It is ESB Telecoms Ltd policy to design and construct our communication structures to the highest international standards. All sites developed by ESB Telecoms 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 and 4G networks. This policy aims to limit the number of such structures appearing in urban and rural landscapes.

ESB Telecoms 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 from the connected tower sites.

The imminent roll-out of next generation mobile broadband services will offer more opportunities to ESB Telecoms 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.

2. SITE AND CONTEXT

2.1 NATURE OF THE SITE

The subject site is situated at ESB's Balgaddy 38kV Substation at Kishoge in Lucan. The new Adamstown Link Road passes from the east to the south west of the site. The application site is surrounded by un-landscaped open space, overshadowed by the 220kV ESB power lines that pass through the site. The site is zoned "To provide for strategic development in accordance with approved planning schemes" in the Development Plan for the area. The nearest dwelling is approximately 100m from the site, at Tullyhall Rise. The site is located at the northern end of ESB's Balgaddy 38kV Substation, containing an assortment of pylons and busbars associated with the transmission and distribution of electricity. It is planned to underground the 220kV power lines as part of an upgrade to the electrical grid in area (ABP pl. ref. VA0019). This work is expected to be completed sometime in 2019.

2.3 NATURE OF THE DEVELOPMENT

This application proposes the continued use of the existing 30 metre high lattice type communication structure at ESB's 38kV Balgaddy substation. The telecoms compound was constructed in April 2003 to cater for the needs of commercial mobile operators in this area, as well as ESB's internal telecommunications requirements. The site was constructed by ESB Telecoms, will space subsequently rented out to operators wishing to co-locate thereon.

The breakdown of equipment co-located on the tower is as follows:

Vodafone:	6 Antennae	3 Dishes
Three Ireland	6 Antennae	4 Dishes
Meteor	3 Antennae	3 Dishes
IoT (ESBT)		1 Dish

The existing communication compound is enclosed within a 2.4 metre high palisade fence. The site is a major hub site for the mobile networks of all operators in West Dublin.

2.3 PLANNING HISTORY

A planning application was submitted to South Dublin County Council in 2001 for the erection of a 30 metre high free standing lattice structure and associated ground mounted equipment, reference number SO1A/0615. The application was refused the 10th of April 2002.

The decision of South Dublin County Council was appealed to An Bord Pleanala on 8 May 2002 (Ref PL06S.129728). The application was approved by the Board the 7th November 2002. Condition no. 2 of the grant limited the period of the grant to 5 years, in line with the ministerial guidance at the time.

The 9th October 2007 an application was lodged with South Dublin County Council for retention permission of the existing structure prior to the lapsing of

the previous 5 year permission (PA ref SD07A/0798). The application was granted permission for a further 2 year period. This decision was appealed to and Bord Pleanala granted permission for a further period of 5 years, in line with departmental guidance at the time (ABP ref PL06S.227246).

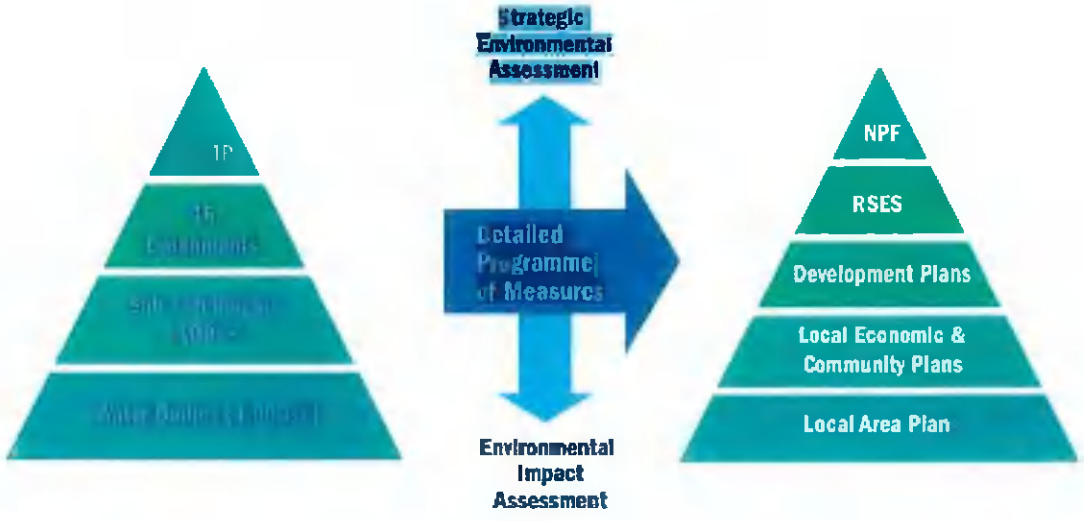
ESB Telecoms submitted a planning application for the continued use of the Balgaddy 38kV telecoms compound the 21st June 2013 (planning reference SD13A/0125). The Council granted permission with 4 conditions. Most notably, condition no. 4 restricted the development to a period of 5 years.

Planning permission for the continued use of the structure for a further 3 year period was sought in 2018 under local planning reference number SD18A/0378. The development was granted permission by SDCC for a period of 2 years. This was increased by An Bord Pleanala to 3 years on appeal, with the Board amending condition no.2 "to enable the impact of the development to be reassessed, having regard to the development of the Clonburris Strategic Development Zone lands.

3. NATIONAL, REGIONAL & LOCAL PLANNING POLICY CONTEXT

The proposal is now set out in terms of its planning policy context from the national, regional and more local level.

Figure 9.1 | Hierarchical Structure of RBMP and Planning Policy



Picture 1: Taken from the NPF 2018-2040.

3.1 NATIONAL PLANNING FRAMEWORK (NPF) (PROJECT IRELAND 2040) & THE NATIONAL DEVELOPMENT PLAN (NDP) 2018-2027

The NPF was published in 2018. It is the Government's high-level strategic plan for shaping the future growth of Ireland to the year 2040. It sets out both the National Strategic Outcomes (NSOs) and National Policy Objectives (NPOs) for the future growth and sustainable development of the country to 2040.

The NSOs cover a wide range of themes such as enhanced regional accessibility, strengthened economies and communities. The proposed development would help support the likes of NSO5 that relates to a strong economy supported by enterprise, innovation and skills, and whereby sustainable full employment will be achieved in part through digital and data innovation; for example, supporting the implementation of the National Broadband Plan and promoting our cities as demonstrators of the latest information and communications technology.

NPOs support the NSOs, The NDP sets out the investment priorities that will underpin the NPF, including the latest information and communications technology.

The current proposal is in accordance with the NPF and NDP and will contribute to the overall NSOs and NPOs contained therein.

3.2` National Broadband Plan 2012

The National Broadband Plan recognises 'the importance of digital engagement for Ireland, both economically and socially' and the Government commitment to the rollout of high-speed broadband.

In order to drive commercial rollout of high-speed broad band:

'The Government is committed to a range of actions that will facilitate the more efficient rollout of infrastructure including addressing planning and road opening challenges, assisting getting citizens and businesses online, measures relating to spectrum technology and maximising the use of State assets where possible.'

It is envisaged that 'once completed all parts of Ireland will have access to a modern and reliable broadband network, capable of supporting current and future generations.'

In the most recent update on the National Broadband Plan roll-out map Palmerstown is shown as a 'Blue area' where commercial operators are delivering or have indicated plans to deliver high speed broadband services. Operators are continuing to enhance their services in these areas to improve access to high-speed broadband.'

Eir and Three, currently operating from the site are two such operators delivering broadband into the Palmerstown area. The proposed development would contribute to the objectives of the National Broadband Plan.

3.3 Regional Spatial and Economic Strategy (RSES: Eastern & Midland Regional Assembly (EMRA) 2019-2031

The RSES is a strategic plan which identifies regional assets, opportunities and pressures and provides appropriate policy responses in the form of Regional Policy Objectives. At this strategic level it provides a framework for investment to better manage spatial planning and economic development to sustainably grow the Region to 2031 and beyond. The EMRA made the RSES on the 28th June 2019.

The principal statutory purpose of the RSES is to support the implementation of Project Ireland 2040 – National Planning Framework and National Development Plan 2019-2027 and the economic policies of the Government by providing a long-term planning and economic framework for the development of the Region.

The importance of connectivity is made throughout the RSES to realise the potential of Dublin and its wider metropolitan area, within which the application site is a part. For example, Chapter 8; Connectivity: 'Section 8.6 Communications Network and Digital Infrastructure' acknowledges that the increasing use of digital technologies is impacting on every aspect of our lives: from transport, to education, leisure and entertainment and health services. Infrastructure to deliver better connected services is vital to our continued growth, supporting businesses and enhancing our communities....'

While the RSES is a high-level strategic document, the importance of good communications of which the subject proposal is a part will contribute to the realisation of the RSES, its overall vision and objectives. ESBT consider that the proposed development will aid in the continued delivery and upgrading of vital telecommunications infrastructure and enable the site to continue to form an integral link in the mobile operators' wireless broadband network in the Palmerstown locality and the wider surrounding area.

3.3 SOUTH DUBLIN COUNTY DEVELOPMENT PLAN 2016 – 2022

The South Dublin County Development Plan (2016-2022) sets out policies and objectives to guide how and where development will take place in the county over the lifetime of the Plan. It provides an integrated, coherent spatial framework to ensure the county is developed in an inclusive way which improves the quality of life for its citizens, whilst also being a more attractive place to visit and work. The Plan was adopted by South Dublin County Council on 10th June 2016 and came into effect on 12th June 2016.

The development plan is generally positive towards the telecommunications infrastructure in appropriate locations. Chapter 7.4.0 relates specifically to Information and Communications Technology (ICT), in which the Council recognises that "the widespread availability of a high-quality Information and Communications Technology (ICT) network within the county will be critical to the development of the county's economy and will also support the social development of the county". The Development Plan lists as a stated action that South Dublin County Council will co-operate with service providers in securing a greater range and coverage of telecommunications services in order to ensure that people and businesses have equitable access to a wide range of services and the latest technologies as they become available.

Accordingly, it is the policy of the Council to promote and facilitate the sustainable development of a high-quality ICT network throughout the county in order to achieve balanced social and economic development, whilst protecting the amenities of urban and rural areas. The proposed development would facilitate the provision of state-of-the-art services for multiple operators from this long-standing telecommunications compound ensuring adequate broadband and mobile services are delivered into the area for the foreseeable future.

The proposed development would be in accordance with and aid in the delivery of several key objectives, notably **IE4 Objective 1** which seeks to "promote and facilitate the provision of appropriate telecommunications infrastructure, including broadband connectivity and other innovative and advancing technologies within the County." Furthermore, **IE4 Objective 3** aims to "permit telecommunications antennae and support infrastructure throughout the County, subject to high quality design, the protection of sensitive landscapes and visual amenity." ESBT contend that the existing structure serves as a major hub site for the mobile operators (see Technical Justifications in appendices) and would remain a suitable structure for this location over the lifetime of a grant of permission, ideally for a further 3 years.

ESB Telecoms offer all our infrastructure to all telecoms providers at market rates, ensuring the proposed development would be in alignment with **IE4 Objective 4**, the aim of which is to "discourage a proliferation of telecommunication masts in the County and promote and facilitate the sharing of facilities." The location of the proposed development, within an existing live substation, ensures there would not be any impingement on walking routes, as specified in **IE4 Objective 6**.

The CDP Lists the following ICT actions:

- South Dublin County Council will co-operate with service providers in securing a greater range and coverage of telecommunications services in order to ensure that people and businesses have equitable access to a wide range of services and the latest technologies as they become available.

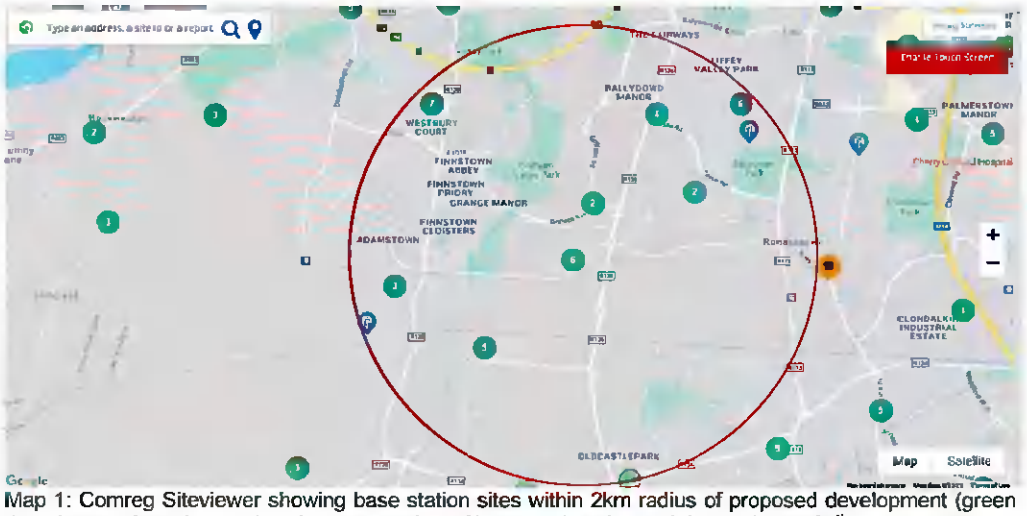
- The Planning Authority will create and maintain a register of app telecommunications structures supported by relevant databases in coope with operators.

In the consideration of proposals for telecommunications antennae and support structures, applicants will be required to demonstrate:

- Compliance with the Planning Guidelines for Telecommunications Antennae and Support Structures (1996) and Circular Letter PL 07/12 issued by the DECLG (as may be amended), and to other publications and material as may be relevant in the circumstances,
- On a map, the location of all existing telecommunications structures within a 2km radius of the proposed site, stating reasons why (if not proposed) it is not feasible to share existing facilities having regard to the Code of Practice on Sharing of Radio Sites issued by the Commission for Communications Regulation (2003),

ESBT would contend that in the case of suburban base station (cell) sites, the 2km radius is too large to meaningfully assess how a proposed site might fit into a network in 2022. The reason for this is that cells have a limited capacity to accommodate calls and data downloads. The extent of the cell is limited by the amount of data and calls that can be handled by the equipment located at each base station site. As the usage of mobile broadband services increases within a given cell, this will shrink the cell size. As the usage of mobile services have increased exponentially over the lifetime of the CDP, cell sizes have shrunk considerably. For this reason, we have zoomed in on the Comreg Siteviewer map to show towers within a 1km radius, as this is a more appropriate level of granularity to assess the impact of the proposed

development on the wider network. Eir have submitted a Technical Justification showing coverage maps which have been included in the appendices of this application. We believe the Technical Justifications provided by the mobile operators included in this application adequately justify the need the continued use of the proposed development as the existing infrastructure made available from this site (in terms of fibre connectivity and structural capacity) are not available from alternative base station locations in the vicinity.



Map 1: Comreg Siteviewer showing base station sites within 2km radius of proposed development (green dots denote sites, the number denotes number of base stations located thereon). as of 6th January 2022.

Map 2: Comreg Siteviewer.ie showing base stations (blue markers) in the immediate vicinity of Balgaddy 38kV substation site with red line showing approximate radius of 1km.

As can be seen from the above maps, typical modern base stations cells (mobile tower catchment areas) are significantly smaller than 2km in radius. The reason for this is the exponential increse in data transfer rates now expected from mobile users. Each base station has a finite capacity for transfering data in a given area (known as a cell), so as the level of activity in a given cell increasesm the cell size shrinks, As can be seen from the above map 2, modern cells have radii of approximately 500m in size, which overlap to ensure continued signal coverage while end users move through the city. As can be seen from the Technical Justification from Eir included with this application, this site affords essential coverage to the Tullyhall and Griffeen Avenue and Kishoge areas to the soutern end of Lucan. Furthermore, due to

the existing fibre connecivity to ESB's extensive fibre network and the nearby data centrres in Grangecastle, this telecoms structure also serves as a hub site or collector site for data and calls from several nearlby towers. Each dish on this tower is receiving the calls and data from a nearby tower and directing these calls onto the fibre network linked to the existing structure. In this regard, the existing structure forms an integral node in the telecoms network in the wider area.

The sharing of existing communication structures is promoted by the Council. Having regard to the site's history and use as a telecommunications base station since 1996, ESBT maintain that the continued use of this site would not impact unduly negatively on the surrounding properties. IE4 Objective 4 identifies the preference of co-location. The existing site is in line with this objective as the site is shared by a number of mobile network operators.

The Development Plan in Chapter 6: Economic Development, Section 6.5: Infrastructure & Communications Technology is also supportive to ICT in general, ensuring for example communications infrastructure is widely available. Objective ED108 seeks to 'Support the provision of home-based economic activity that is subordinate to the main residential use of a dwelling and that does not cause injury to the amenities of the area.' This is particularly relevant in recent times where home working, along with normal usage has placed increased demands and reliance on a robust communications network.

Having regard to the zoning of the site, the proposed development is located within the boundary of the Clonburris Strategic Development Zone. The policies and zoning of this plan will be addressed in a subsequent section.

3.4 Draft South Dublin County Development Plan 2022-2028

In July 2020 SDDC announced its intention to prepare the new Development Plan. Preparation of the Plan is well underway and following publication of the Draft Plan the period for public consultation ended on 15th September 2021. On 7th December 2021 Councillors began to consider Submissions received on the Draft Plan. The new Plan is due to come into effect in June 2022.

While it is acknowledged that the current proposal will be assessed against the current 2016-2022 Development Plan, due to the relatively advanced stage of the new Plan the subject application has also been prepared with regard to the provisions of the new Plan in mind.

With specific regard to Telecommunications Section 11.4 Information and Communications Technology states that 'The continued widespread availability of high-quality Information and Communications technology (ICT) networks within the County is critical to the development of the County's economy and to social progress. It will ensure that the County remains attractive to hi-tech knowledge-based industries providing for high value employment. It is also a huge asset to the residents of the County encouraging home working and individual entrepreneurial activity. The

following Policy and Objectives are considered to be particularly relevant: in this regard:

Policy IE5: Information and Telecommunications Technology (ICT)
Promote and facilitate the sustainable development of a high-quality ICT network throughout the County in order to achieve social and economic development, whilst protecting the amenities of urban and rural areas.

IE5 Objective 1:
To promote and facilitate the provision of appropriate telecommunications infrastructure, including broadband connectivity and other innovative and advancing technologies within the County in a non-intrusive manner.

IE5 Objective 3:
To permit telecommunications antennae and support infrastructure throughout the County, subject to high quality design, the protection of sensitive landscapes and visual amenity.

IE5 Objective 4:
To discourage a proliferation of telecommunication masts in the County and promote and facilitate the sharing of facilities.

Under proposed land-use Zoning Objective 'RES' 'Public Services' is a Use Class that is 'Permitted in Principle'. The definition of Public Services includes telecommunications as detailed in Appendix 6: Definitions of Use-Classes.

3.5 South Dublin County Local Economic and Community Plan (LECP) 2016-2021

The LECP sets out, for the period 2016-2021, the objectives and actions need to promote and support the economic development and the local and community development of the local authority area, both by itself directly and in partnership with other economic and community development stakeholders.

The continuation of service and coverage from existing mobile operators at this site, as well as the potential for enhanced coverage the apparatus on the new structure will facilitate will in the opinion of ESBT assist in the delivery of the overall vision and objectives of the LECP by ensuring residents, businesses and visitors to the area have the opportunity to avail of a high quality mobile and broadband network.

3.6 Clonburris Strategic Development Zone (SDZ) 2019

The Clonburris SDZ has been established with the overarching brief of developing sustainable communities along the Kildare Train Line. Building

higher density developments along transport spines has long been a policy of all planning departments in the Dublin area, with Adamstown SDZ being the first and most notable planning scheme adopted by SDCC. South Dublin County Council recently prepared a consolidated Planning Scheme document at the behest of An Bord Pleanala which was published in May 2019.

The development proposed to be retained is located in the area called Kishoge North West (KNW) – S1, as set out in Figure 2.1.4 of the Development Areas and Sub Sectors Map. The wider KNW sector is earmarked for residential development only with a housing target for the area is set at 566 units, approximately 50 dwellings per hectare. The specific sector in which the application site is located is earmarked for a dwelling density of between 42-52 units per hectare. This is a slightly lower density than the plan average of 62.35 units per hectare.

Policy 2.6.5 specifically seeks to enable and promote home working, with broadband connectivity being an essential component of.

Section 2.9 is concerned with the delivery of services and infrastructure. It is a Key Principle of the SDZ "to enable connection and high quality use of telecommunications infrastructure by a range of parties, promoting Clonburris as a connected place"; Section 2.9.7 relates purely to telecommunications, however, this section concerns itself only with fibre cabling. There is no mention of mobile broadband provision within the scheme in this section.

Having regard to any mention of electricity supply and substation sites, the SDZ scheme only mentions the undergrounding of nearby 220kV powerlines, however the existing substation is earmarked as an "indicative energy centre location" which acknowledges the existing use as an ESB substation.

According to the map of the KNW sector set out on page 118 of the planning scheme, the existing telecoms compound would be located at the north-eastern corner of a proposed local park.

4 MINISTERIAL GUIDANCE

4.1 TELECOMMUNICATIONS ANTENNAE AND SUPPORT STRUCTURES, 1996

4.1.1 Siting

It is stated in the guidelines that the design and siting of antennae support structures will, to a large extent, be dictated by radio and engineering parameters (**Section 4.2**). The existing tower is located in an area zoned as the Clonburris SDZ, within which plan the specific area is earmarked for public open space, with a mention of the overall site being suitable for use as a "energy centre location", acknowledging the site's current use as a substation site. In terms of siting, the guidelines specifically state that "*substations operated by the ESB may be suitable for the location of antennae and support structures*" (**Section 4.3**).

4.1.2 Design and Visual Impact

The lattice design had been selected from ESB Telecoms' portfolio of structures as it is capable of carrying a large amount of communication equipment while being similar in design to the existing pylons in the substation.

The 1996 Guidelines asserts that support structures should be kept to the minimum height consistent with effective operation. In order for a communication structure to operate effectively, unobstructed "point to point" contact needs to be achieved with other dishes and antennae in the area. As a consequence of this requirement, all modern communication structures need to be higher than the surrounding features. The site is well situated on a flat plain in proximity to the rail line and canal with a view over the wider Lucan and Clondalkin areas. The height is also necessary to accommodate the quantum of equipment located on the existing structure.

4.1.3 Co-Location

It is a primary aim of these guidelines to encourage local authorities to promote clustering and shared services at telecommunication masts, especially in suburban areas, with the aim of reducing visual intrusion across the landscape (**Section 4.5**). This site is an excellent example of co-location and shared services as all ESB Telecom sites are available to all operators to co-locate. In this instance all 3 mobile operators are currently availing of services from this busy site, along with Imagine wireless broadband. ESB Telecoms Ltd continues to operate a policy of co-location, in line with current Ministerial Guidelines, and has substantially expanded its base of co-location partners since 2001. The existing structure will continue to be made available to all existing and potential customers as a network solution for the imminent rollout of next generation broadband, thus reducing the proliferation of structures in the area.

4.2 CIRCULAR LETTER PL 07/12

4.2.1 Time-Limited Permission

Against a background of the rollout of fourth generation (4G) broadband, the Department of the Environment, Community and Local Government issued updated guidance for local authorities in relation to telecommunications infrastructure.

Given the nature of the site and the zoning of the wider area as an SDZ, when taken in conjunction lack of development of the SDZ to date, ESBT strongly contend that a time limit of 3 years on a new grant of permission to remain in-situ would be reasonable and justified, having regard to An Bord Pleanala's rewording of Condition no.2 of the last grant of permission.

4.2.2 Health Effects

With many developments of this nature, there may be public concerns about the perceived implications of telecommunications development, primarily in relation to the adverse health effects of the installation. ESB Telecoms Ltd regards the protection of the health, safety and welfare of its staff and the general public as a core company value in all its activities. Accordingly, it is ESB Telecoms policy to continually review and update standards in light of new developments and research findings.

Planning authorities are urged to concern themselves with design and siting issues only and should defer any health and safety issues and their monitoring to the relevant authorities, in this instance The Commission for Communications Regulation (ComReg).

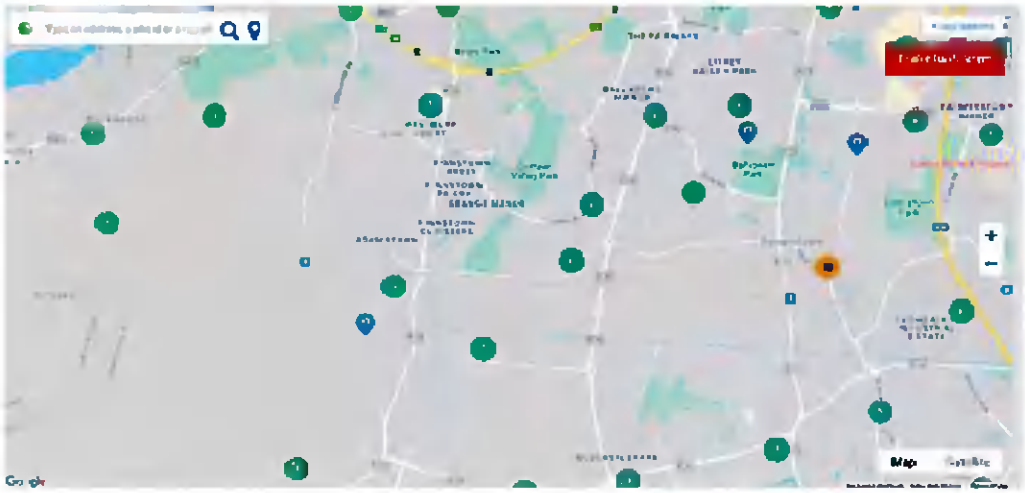
ComReg is the licensing authority for the use of radio frequency in Ireland. As the licensing authority for radio communications in Ireland, ComReg is responsible for ensuring that communication operators comply with their license conditions relating to non-ionising radiation. In 2001 ComReg began the process of randomly testing communication sites to ensure compliance with the adopted ICNIRP and ComReg Standards. Since then, 109 ESB Telecoms sites have been tested, all of which have passed the standards.

Health and safety issues are referred to further in **Appendix 2,** along with ESB Telecoms' annual emissions test results for similar sites. A copy of the latest ComReg report on the Measurement of Non-Ionising Radiation Emissions is available on the Comreg website.

5.0 THE DEVELOPMENT IN CONTEXT

5.1 Need for the Proposal

The need for the proposal is apparent when considering the coverage that currently exists in the area for both mobile phone coverage and in particular the delivery of broadband. The existing lack of coverage can be clearly seen by assessing site location and coverage map provided by ComReg https://coveragemap.comreg.ie/map. The mapping provided shows the coverage for operators on the nearest telecommunication sites in the wider area. The Map below shows the location of the subject application, with the nearest telecommunication sites shown with blue pins. Note, the green pins simply relate to sites where ComReg have published reports.



Extract from ComReg Site Viewer

All three national mobile operators, Eir, Three Ireland and Vodafone, currently operate from the existing site. All operators have indicated the need to operate from this site in order to provide mobile and broadband coverage for this part of Lucan with Eir's technical justification included in Appendix 1.

With regard to Eir, they have indicated that as part of the licensing requirements and the continuing rollout of their 3G and 4G networks, they require a site in south Lucan and without this site, parts of this area will suffer a severe degradation in mobile voice and data services which leads to poor mobile coverage and, as a result, there would be a large number of dropped/ blocked calls and poor data sessions which will possibly limit people's ability to work from home on the Eir network in this area. The email is accompanied with coverage signal coverage maps that demonstrate that the areas which will be degraded by the loss of this site will include but not limited to a large stretch of Tully Hall and Tully Rise.

Vodafone and Three have also indicated support for the proposed development remaining in-situ for 3 years as they have no available site replacement options.

5.2 Siting and Design

The area surrounding the substation contains many lattice design pylons carrying overhead lines. Within the overall site context, ESB Telecoms Ltd do not consider that the telecoms structure would constitute a new feature to the landscape, and suggest that the continued use of this structure will not be harmful to the character of the area for the next number of years. It was correctly chosen for its structural robustness, a significant engineering parameter, given the quantum of co-located equipment currently facilitated on the tower and the fact that the site is acknowledged by our customers as one the busiest in the country. The proximity of the site to the nearby Grangecastle and Profile Park data centre hubs, along with the existence of fibre at the site, have ensured this site has remained essential to all national mobile network operators. From the design process it was considered that various 'totem' designs would in themselves appear visually incongruous against in the local street scene and against the backdrop of the electricity substation. The site after all is within an existing utility site. Therefore, on balance it is considered that a new simple monopole with a slight taper design would be most appropriate for the site. Particularly as it would be slimmer than the existing lattice and the overall height of such a structure could be

reduced to 20m. This reduction in height would still enable a point of co-location for the two mobile operators currently sited on the lattice structure at a height where they would still be able to achieve acceptable levels of signal coverage while maintaining line of sight requirements. Any reduction below this height would not allow both operators to function from the site as nearby buildings and trees would block signals for the operator situated lower on the monopole.

5.3 Visual Impact & Landscaping

In compiling the original planning application ESBT gave consideration to all structures in its portfolio and considered that a lattice tower was at the time the most appropriate structure due to its structural capacity and ability to reduce the need for additional structures in the area.

Given the nature of the existing telecommunications facility and the 38kV Substation, the proposed development is considered to be a modest alteration to the overall utility site. It will visually complement the existing telecommunication pylons and substation infrastructure, reducing the visual impact from further afield, including approaches to the site from along Ninth Lock Road and local road network generally. Most importantly, the site would not be visible from either the Grand Canal or Clondalkin village proper, particularly the from the Round Tower or its immediate surroundings.

Furthermore, having regard to the nature of the site and relative distances to neighbouring residential properties in particular ESBT are firmly of the opinion that visually the structure will not be overly dominant in the receiving streetscape where the existing lattice tower has become an established feature locally. It is therefore concluded that the provision of a lower, slimmer replacement structure will not cause undue harm to the visual amenities of the immediate area and wider locality.

ESBT accept that in the instance of this particular site the structure may not remain over the longer term. As such, mitigation measures such as landscaping and other planting would not be necessary. ESBT will be happy to remove the site as and when the Clonburris Scheme is at a more advanced stage of construction.

5.6 Co-Location

In line with Guidelines, ESBT makes available wherever possible all its existing structures with other licensed operators for co-location. This policy has been in place since 2001 and continues to be the case, reducing the unnecessary proliferation of such essential structures throughout the country.

The subject site at Balgaddy is a good example of co-location, where all three operators shared the mast.

5.7 Realising the Potential of ESB Telecom Fibre

The site is currently served by ESBT's fibre network. The site is connected to ESBT's fibre network allowing virtually limitless bandwidths (data rates) when compared to other forms of communication. Faster data transmission results in a better service delivery for the end user. The evolution of the telecommunications industry over the last number of years means that the presence of fibre at communication base stations is a key criterion for the

provision of mobile technologies such as mobile broadband and internet services to mobile phones and home-based broadband customers alike.

5.8 Environmental Considerations

Flooding
The OPW website, National Flood Hazard Mapping, launched in May 2018, shows that the site has not been subject to flooding. There is no record of recent of flooding within the site or the immediate locality.

Natural Heritage Designations
In terms of natural heritage designations and specific regard to the requirement of EU Habitats Directive the following sites are noted:

- Glenasmole Valley SAC (Site Code 001209) c. 8.5km south of the site.
- South Dublin Bay SAC (Site Code 00210) c. 12km to the east of the site.
- South Dublin Bay and River Tolka SPA (Site Code 004024) c. 12km to the east of the site.
- Rye Water Valley/Carton SAC (Site Code 001398) c. 8km to the north-west of the site.

Having regard to the nature of the proposed development and location of the site and/or proximity to the nearest European sites, forming part of the Natura 2000 network (Article 6 of the EU Habitats Directive refers) and their qualifying features, no appropriate assessment issues arise. It is not considered that the proposed development would likely have a significant effect on the integrity individually or in combination with other plans or projects on a European site.

5.9 Duration of Permission

Ministerial Circular PL07/12 issued guidance to Local Planning Authorities to cease attaching time limited conditions to telecommunication structures, as structures will continue to play a vital role in delivering economic growth to the areas they service in the future. Only in exceptional circumstances where particular site or environmental conditions apply should a permission be issued with conditions limiting their life.

ESBT acknowledge that SDCC have identified Clonburris as a SDZ and have strong aspirations to see the redevelopment of the area. In this context ESBT in parallel with the current application have continued to undertake an extensive search of the surrounding area in order to identify alternative locations for the communication base station.

This search has not identified any suitable location for the relocation of the base station. In light of the progression of the SDZ, the search for an alternative site and the continued need for communication coverage it is respectfully requested that the communication structure is granted a 3 year development approval. While this period may appear exceptional, it is ESBT's contention that the period represents a balanced response.

On the other hand, such a timeframe would allow all parties, including SDDC, to consider how best the service can be secured as planned changes to

Clondalkin and the built form are progressed in the medium to long term. This could for example be progress through the Local Area Plan, where a LAP for Clondalkin is overdue and the draft Development plan includes a commitment to undertake such an LAP during the timescale of the new Development Plan.

6. CONCLUSIONS

Having regard to the zoning for the area, ESBT note the acceptability of public services in such zoned areas. The site has been used as a multi-operator telecoms compound delivering vital services into the area since 1998 and is well established in the area. Changes in mobile technology over the years, when taken with The exponential growth in mobile data usage over the last decade requires the upgrade of the physical base station infrastructure in order to ensure services can continue to be provided into this residential area into the future. This upgrade in services necessitates a new structure capable of accommodated newer equipment and involves a modest increase in height which ESBT contend does not impact unduly negatively on the amenity of the area.

National, regional and local policy and strategy documents are consistent in acknowledging the necessity for continued investment in telecommunications infrastructure. An efficient and cost-effective broadband network is understood to be essential if the country as a whole is to prosper and thrive in the era of the knowledge based and value-added economy **(NDP, Chapter 2, p63)**. In essence, "*effective communications infrastructure will help support and attract intellectual and physical capital*" **(NSS 3.7.3)**. Moreover, the new Development Contribution Guidelines for Planning Authorities explicitly mention telecommunication infrastructure as essential to the Government's efforts to support job creation.

With mobile penetration rates nearing 100% there are increasing social benefits to be derived locally from a robust telecommunications infrastructure. Such benefits include universal access to many public services, social networking and interaction, media and broadcasting ('on-demand') and e-learning among others. A grant of permission for this application would play an active role in supporting the policies and aims of the NSS and regional guidelines for the area generally. Additionally, the continuance of use of this telecommunication compound would not be contrary to the policies set out in the South Dublin County Development Plan in terms of undue impacts on residential amenity and landscape.

Good telecommunications is a cost effective means of delivering support services to vulnerable groups and is increasingly popular as a means of delivering educational services and products such as distance learning along with being essential for the creation of new employment opportunities and diversifying the economic base of the county. In terms of the existing telecommunications network in the area, this site forms an important link for

our customers, the network operators, and it is ESB Telecoms' contention that this strategic site will increase in importance with the rollout of 4G mobile broadband.

According to the Ministerial Guidelines of 1996, necessary telecommunication infrastructure ought to be encouraged in "*substations*". The Guidelines also support the sharing and clustering of services via co-location, a practice promoted at all ESB Telecoms Ltd sites. In this instance the existing telecoms site forms an essential node in the respective networks for 2 commercial operators, and a grant of permission for the proposed development would avoid the need for alternative structures in the area, thus reducing the proliferation of similar type structures in the immediate vicinity.

Having regard to the national, regional and local plans and strategy documents, the Ministerial Guidelines for the sector, the nature of the site and of the scale of the existing development, it is the view of the ESB Telecoms Ltd that the application is in agreement with all the relevant planning policy and guidance. The continued use of this site for telecoms purposes would not be unduly visually obtrusive at this location and would be in accordance with the proper planning and sustainable development of the area. ESB Telecoms Ltd respectfully request that the existing structure is granted planning permission.