

## **Appendix 2**

### **Health & Safety**

ESB Telecoms Ltd, Balgaddy 38kV  
January 2022

### 3. HEALTH AND SAFETY

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With many developments of this nature, there may be public concerns related to the maintenance of telecommunications infrastructure, primarily in relation to potential perceived 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. It is ESB Telecoms Ltd policy to continually review and update standards in light of new developments and research findings.

#### 3.1 INTERNATIONAL GUIDELINES

The International Commission for Non-Ionising Radiation Protection (ICNIRP) is an independent, scientific organisation, established in 1992. Its purpose is to advance Non-Ionising Radiation Protection for the benefit of both people and the environment, in particular, providing guidance and recommendations on protection from Non-Ionising Radiation exposure.

ICNIRP is formally recognised as a non-governmental organisation and operates in co-operation with the Environmental Health Division of the World Health Organisation and the United Nations Environment Programme. In 1998 ICNIRP published "Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic and Electromagnetic Fields", the main purpose of these guidelines is to limit electromagnetic field exposure in order to protect against unknown adverse health effects.

The ICNIRP guidelines limits have been adopted by many countries across the world. In Ireland the Communication Regulator adopted the 1998 guidelines outlined by the ICNIRP.

#### 3.2 COMMUNICATIONS REGULATOR, IRELAND

The Commission for Communications Regulation (ComReg) is the licensing authority for the use of the radio frequency in Ireland. As the licensing authority for radio communications in Ireland, ComReg is responsible for ensuring that communication operators comply with their licence condition relating to non-ionising radiation. In 2001 ComReg began the process of randomly testing communications site to ensure compliance with the adopted ICNIRP and ComReg Standards.

ComReg continue its programme of surveying sites to establish the highest emission levels associated with each site. The emission levels from all ESB Telecoms Ltd. sites fell significantly below the ICNIRP general exposure levels. ComReg continues to survey sites and is increasing the intensity of testing to include 80 sites per year throughout the country. Please find attached the latest site RF Emission Test carried out by independent group Obelisk for ESB Telecoms Ltd on 30<sup>th</sup> July 2015. The test identifies that the subject structure falls far below the ICNIRP limits. ESB Telecoms Ltd carries out annual independent emission tests to monitor all sites. The 2014 survey carried out by KTL dated 24<sup>th</sup> June 2014, is also enclosed.

### 3.3 INDEPENDENT RESEARCH

The Department of Communications Marine and Natural Resources established a group of experts to examine the issue of the Health Effects of Electromagnetic Fields. The results of this research were published in March 2007.

The report draws together existing scientific research in the field of Non-Ionising Radiation and compiles an informed report of the most up to date information available. The evidence contained within the report finds that

“no adverse short or long term health effects have been shown to occur from exposure to the signals produced by mobile phones and base station transmitters.” (Chapter 3, Question 1)

In terms of exposure to radiofrequencies from base stations, it is explained that the strength of the frequency is greatest at the source and demises quickly with distance. At or near ground level, in the vicinity of an average 25 metre high base station the level of radiofrequency exposure is much lower than that emitted from a mobile phone (Chapter 4).

With respect to the general location of mobile base stations and in particular their location near places where children gather, the findings of the Steward Report and the precautionary principle are examined. In responding to this, the report finds that there is no data available to suggest that the use of mobile phones or exposure to mobile base stations has adverse health effects for children or adults, irrespective of the location of the phone mast. The report makes it clear that at the current time there is no evidence of adverse health effects, and states that “the exposure (levels) are so low as to make it immaterial where masts are located with respect to schools, playgrounds, health centres or other places where children gather” (Chapter 3, Question 4).

### 3.4 THE MONITORING OF ESB LTD SITES

The latest ComReg report entitled *2013 Programme of Measurement of Non-Ionising Radiation Emissions – Second Interim Report 31<sup>st</sup> July 2013* can be found at the following link:

[https://www.comreg.ie/\\_fileupload/publications/ComReg1374.pdf](https://www.comreg.ie/_fileupload/publications/ComReg1374.pdf)

In conclusion, the report finds that the emission levels from surveys undertaken at all sites

‘fall significantly below the international ICNIRP general exposure levels. In some cases the levels are in fact less than one thousandth of the ICNIRP limits.’



## 10. RF Emissions Test

- Photographs
- Test Certificate c/w ESBT as-built mark up of test location

### RF Emissions Cert & Site Layout Mark Up



**RF Emissions Reading No.1 Photograph**



**RF Emissions Reading No.2 Photograph**



Energy for generations



# RF Emission Test

Site Name: ESB-097 ~ Balgaddy 38kV Balgaddy 38kV

Test Date and Time: 10/05/2021, 21:59:23

Tested By: Austin Smith

Test No. 1	Location	Main Site Entrance
Average Levels	1.24	$\mu\text{W}/\text{cm}^2$

Test No. 2	Location	Compound
Average Levels	1.24	$\mu\text{W}/\text{cm}^2$





Sketch:



### 13. RF Emissions Test

- Test Certificate c/w ESBT as-built mark up of test location
- Photographs

#### RF Emissions Cert & Site Layout Mark Up

 <b>GRA Networks</b>	
<b><u>RF Emission Test</u></b>	
Site: Balgaddy MW Site	
Structure Type: 30m 3 sided lattice	
Date of Inspection: 14/10/19	
Engineer: Robert Reid	
<b><u>Test No.1</u></b>	
Average Levels:	1.215 V/M
Location:	Main Site Entrance
<b><u>Test No. 2:</u></b>	
Average Levels:	1.019 V/M
Location:	Compound
<i>Signed on behalf of GRA Networks</i>	
Signature: <u></u>	Position: <u>PICW Rigger</u>
Print Name: <u>Robert Reid</u>	

