

Appendix 2

Health and Safety

Introduction

With many developments of this nature, there may concerns from local residents about the perceived implications of the proposed development, primarily in relation to the adverse health effects of the installation. ESB 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.

INTERNATIONAL GUIDELINES

The International Commission for Non-Ionising Radiation Protection (ICNIRP) is an independent, scientific organisation which was established in 1992. Its purpose is to advance Non-Ionising Radiation Protection for the benefit of people and the environment and in particular to provide guidance and recommendation 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 a great many Countries across the world. In Ireland the Communication Regulator has adopted the 1998 guidelines outlined by ICNIRP.

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 have continued its programme of randomly surveying site to establish the highest emission level associated with each site, including a number of sites by ESB Telecoms Ltd. The emission levels from all sites fall significantly below the ICNIRP general exposure levels. ComReg has to continued surveying sites through 2020.

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 the 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 adult, 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;

“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)

RADIO FREQUENCY EMISSION TEST RESULTS FOR ESBT’S SITE AT ESB’S CLONDALKIN 38KV SUBSTATION, NINTH LOCK ROAD, CLONDALKIN, DUBLIN

The Radio Frequency Emission Test Details for ESB Telecoms Site at ESB’s Clondalkin 38kV Substation, Ninth Lock Road, Clondalkin, Dublin in May 2014, August 2015, August 2017, October 2019 and March 2021. The results shown on the following pages confirm that tests show that emissions were within prescribed parameters.

RF Emission Test

Site Name: Clondalkin 38kV

Test Date: 20-May-14 Time: 10:30

Tested By: Austin Smith

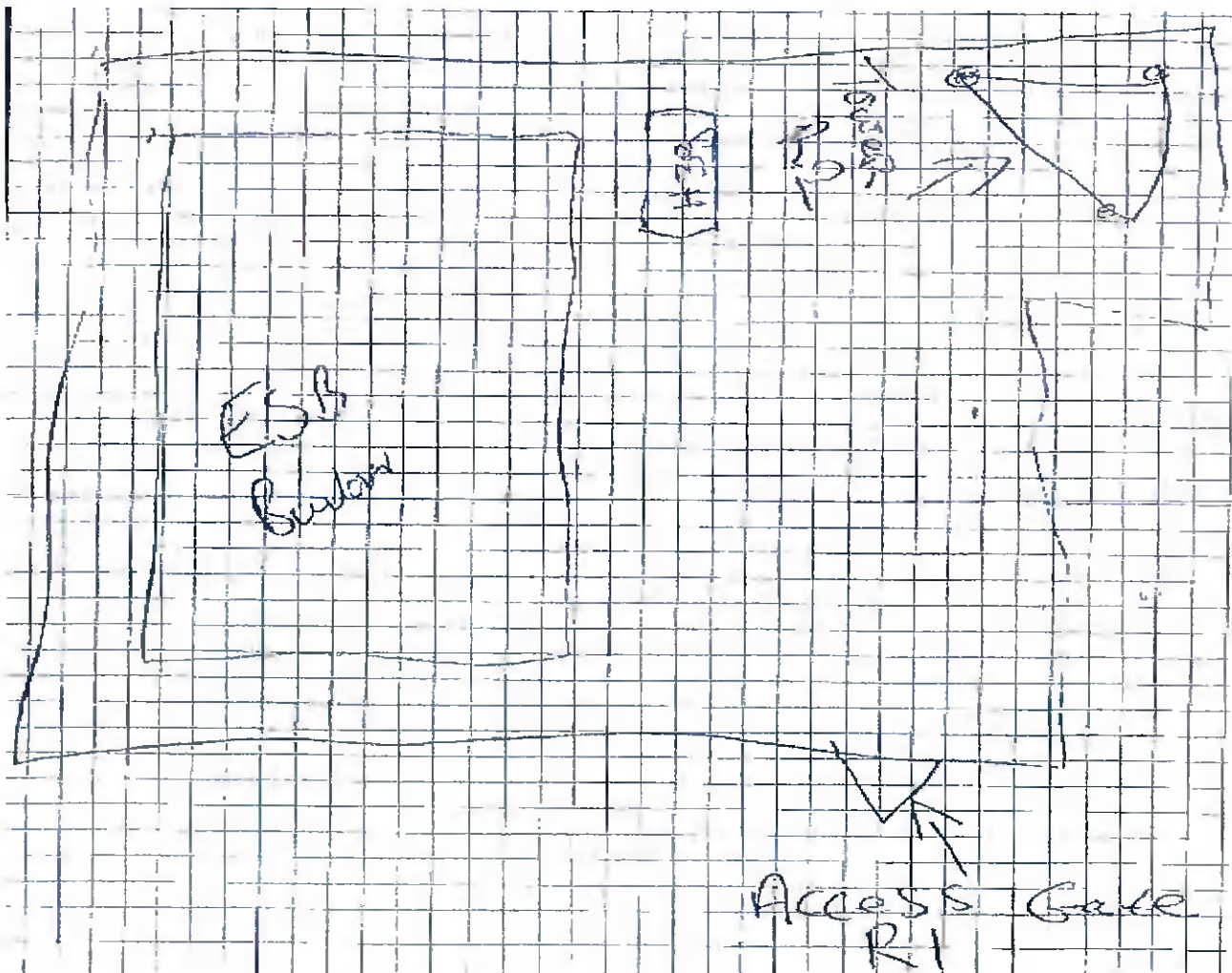
Test No. 1 Location Main Site Entrance

Average Levels 1.2000 $\mu\text{W}/\text{cm}^2$

Test No. 2 Location Compound

Average Levels 0.2000 $\mu\text{W}/\text{cm}^2$

Sketch



Emission Tests



RF Emission Test 1 (Entrance)



RF Emission Test 2 (Structure)



SLANEY COMMUNICATIONS LTD T/A
COMSOL

2 Slaney Court, Parkview Road, Naas, Co. K. 191. Tel: 045 876 582 Fax: 045 821 943 Email: info@comsol.com

RF READING

CLIENT: **ESB Telecoms Ltd.**

SITE LOCATION:

Clondalkin 38kV

TEST DETAILS: Provide an RF Reading over an average 6 minutes per test.

TEST METER: Narda Broadband Field Meter (NBM-50)

RESULT OF READING POINT 1:

Main ESB entrance from public road

W/m2 0.0021

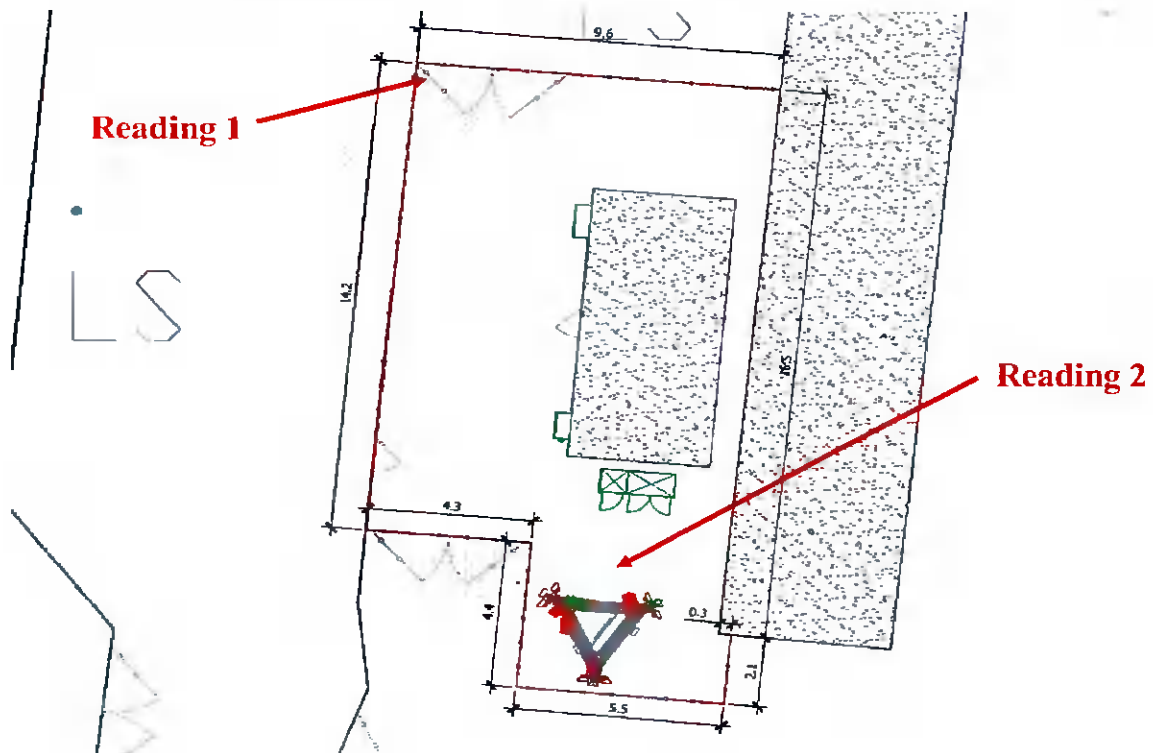
RESULT OF READING POINT 2:

ESB Telecoms structure

W/m2 0.0018

TESTER:

Michael Lamont – 18th August 2015





Energy for generations

ESBT Maintenance Report

ESB Telecoms RF Emission Test



Client: ESB Telecoms Ltd.

Site Name: Clondalkin 38kV

Site Address Ninth Lock Rd, Clondalkin,
Co Dublin

Test Date: 18/08/2017

Tested by: Ollie Qualter

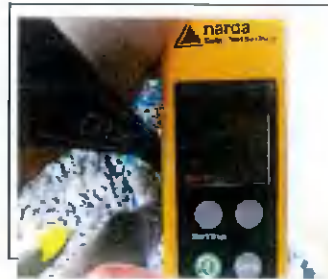
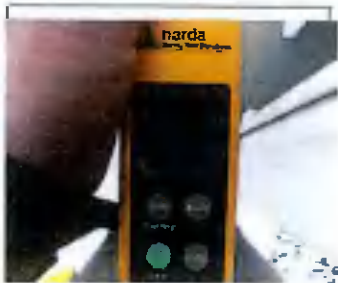
Test Details: Provide an RF Reading over an average 6 minutes per test

Test No. 1 Entrance Gate

Average levels: 0.0061 W/M2
1.512 V/m

Test No. 2 Base of the structure

Average levels: 0.0031 W/M2
1.071 V/m



Area of Testing






13. RF Emissions Test

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

RF Emissions Cert & Site Layout Mark Up

 GRA Networks	
<u>RF Emission Test</u>	
Site: Clondalkin 38Kv Radio Site	
Structure Type: 25m 3 sided lattice	
Date of inspection: 21/10/19	
Engineer: Robert Reid	
<u>Test No.1</u>	
Average Levels:	1.485 V/M
Location:	Main Site Entrance
<u>Test No. 2:</u>	
Average Levels:	0.876 V/M
Location:	Compound
<i>Signed on behalf of GRA Networks</i>	
Signature: _____	Position: PICW Rigger
Print Name: Robert Reid	



Energy for generations



RF Emission Test

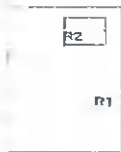
Site Name: ESB-187 ~ Clondalkin 38kV Clondalkin 38kV

Test Date and Time: 04/03/2021, 20:09:32

Tested By: Austin Smith

Test No. 1	Location	Main Site Entrance
Average Levels	0.00	$\mu\text{W}/\text{cm}^2$

Test No. 2	Location	Compound
Average Levels	0.00	$\mu\text{W}/\text{cm}^2$



Sketch:

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