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# ASSESSMENT REPORT

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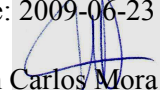
**Report No.:**  
**29933IDT.001**

**REPORT ON:** RF EXPOSURE ASSESSMENT OF THE F3507g ERICSSON MOBILE BROADBAND MODULE INSTALLED IN DELL LAPTOP COMPUTERS

<b>Product</b>	: Ericsson Mobile Broadband Module
<b>Trade Mark</b>	: Ericsson
<b>Model</b>	: F3507g
<b>FCC ID:</b>	: VV7-MBMF3507G-D
<b>Manufacturer</b>	: Ericsson AB
<b>Requested by</b>	: Ericsson AB
<b>Host Platforms</b>	: DELL MINI 1110 / DELL STUDIO 14 DELL STUDIO 1745, 1747, 1749 DELL STUDIO 14z / DELL LATITUDE Z600
<b>Standard(s)</b>	: OET Bulletin 65 Edition 97-01 August 1997 FCC 47 CFR § 1.1307 FCC 47 CFR § 1.1310 1999/519/EC Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003 ARPANSA RPS No. 3 AS 2772.2-1998:Radiofrequency radiation - Part 2 Vodafone requirements [1999/519/EC]

This test report includes 2 annexes and therefore, the total number of pages is 40.

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Date: 2009-06-23	Issued by: Date: 2009-06-23  Ricardo Orejas Worldwide Compliance Engineer	Approved by: Date: 2009-06-23  Juan Carlos Mora Technical Manager Laboratories Division	Page: 1 of 40
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## 1. COMPETENCE AND GUARANTEES

AT4 wireless is a testing laboratory competent to carry out the evaluation described in this report.

AT4 wireless guarantees the reliability of the data presented in this report, which is based on the information available at AT4 wireless at the time of performance of the evaluation.

AT4 wireless is liable to the client for the maintenance of the confidentiality of all information related to the item under review and the results of such evaluation

## 2. GENERAL CONDITIONS

1. This report refers only to the item that has undergone the evaluation as described in Annex A of this report according to the information provided by the applicant.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of AT4 wireless.
4. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of AT4 wireless and the Accreditation Bodies.

## 3. CHARACTERISTICS OF THE EVALUATION

### 3.1. SERVICES REQUESTED

RF exposure assessment of the F3507g Ericsson Mobile Broadband Module installed in the DELL laptop computers according to:

Requirements	Frequency bands
<p>OET Bulletin 65 Edition 97-01 August 1997 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields</p> <p>FCC 47 CFR § 1.1307 - Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.</p> <p>FCC 47 CFR § 1.1310 - Radiofrequency radiation exposure limits.</p>	GSM 850, FDD V, PCS 1900, FDD II
<p>1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)</p>	E-GSM 900, DCS 1800, FDD I

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<p>Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003</p> <p>ARPANSA RPS No. 3 – Maximum Exposure Levels to Radiofrequency Fields (3 kHz to 300 GHz)</p> <p>AS 2772.2-1998: Radiofrequency radiation - Part 2: Principles and methods of measurement - 300 kHz to 100 GHz</p>	FDD V, E-GSM 900, DCS 1800, FDD I
Vodafone requirements [1999/519/EC]	GSM 850, FDD V, E-GSM 900, DCS 1800, PCS 1900, FDD II, FDD I

### 3.2. REQUIREMENTS AND METHOD

The evaluation has been carried out according to the following documents and standards:

Requirements	Frequency bands
<p>OET Bulletin 65 Edition 97-01 August 1997 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields</p> <p>FCC 47 CFR § 1.1307 - Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.</p> <p>FCC 47 CFR § 1.1310 - Radiofrequency radiation exposure limits.</p>	GSM 850, FDD V, PCS 1900, FDD II
1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)	E-GSM 900, DCS 1800, FDD I
<p>Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003</p> <p>ARPANSA RPS No. 3 – Maximum Exposure Levels to Radiofrequency Fields (3 kHz to 300 GHz)</p> <p>AS 2772.2-1998: Radiofrequency radiation - Part 2: Principles and methods of measurement - 300 kHz to 100 GHz</p>	FDD V, E-GSM 900, DCS 1800, FDD I
Vodafone requirements [1999/519/EC]	GSM 850, FDD V, E-GSM 900, DCS 1800, PCS 1900, FDD II, FDD I

## 4. IDENTIFICATION DATA SUPPLIED BY THE APPLICANT

Identification data included in this section has been supplied by the client.

### 4.1. APPLICANT

**Name / Company:** Ericsson AB

**V.A.T. Registration number:** 556056-625801

**Address:** Lindholmspiren 11, SE-417 56 Goteborg

**Country:** Sweden

**Telephone:** +46 31 747 0000

**Fax:** +46 31 747 6033

### 4.2. REPRESENTATIVE

**Name:** Pelle Hellberg

**Address:** Lindholmspiren 11, SE-417 56 Goteborg

**Country:** Sweden

**Telephone:** +46 31 747 0000

**Fax:** +46 31 747 6033

### 4.3. IDENTIFICATION OF ITEM/ITEMS EVALUATED

**Product:** Ericsson Mobile Broadband Module

**Trade mark:** Ericsson

**Model:** F3507g

**FCC ID:** VV7-MBMF3507G-D

**Manufacturer:** Ericsson AB

**Country of manufacture:** China

**Host platforms:** DELL MINI 1110 / DELL STUDIO 14 / DELL STUDIO 1745, 1747, 1749  
DELL STUDIO 14z / DELL Latitude Z600

**Description:** 850/900/1800/1900/2100 MHz GSM/GPRS Class10/EDGE/HSDPA/HSUPA/WCDMA  
Release 6 Module installed in Laptops.

## 5. EVALUATION RESULTS

Abbreviations used in the VERDICT column of the following tables are:

- C** Compliant with requirements
- NC** Not Compliant with requirements
- NA** Not Applicable
- NE** Not Evaluated

### 5.1. RESULTS FOR ITEM EVALUATED TRANSMITTING ALONE

DOCUMENT/STANDARD	VERDICT			
	NA	C	NC	NE
OET Bulletin 65 Edition 97-01 August 1997 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields FCC 47 CFR § 1.1307 - Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared. FCC 47 CFR § 1.1310 - Radiofrequency radiation exposure limits.		C		
1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)		C		
Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003 ARPANSA RPS No. 3 – Maximum Exposure Levels to Radiofrequency Fields (3 kHz to 300 GHz) AS 2772.2-1998: Radiofrequency radiation - Part 2: Principles and methods of measurement - 300 kHz to 100 GHz		C		
Vodafone requirements [1999/519/EC]		C		

### 5.2. RESULTS FOR ITEM EVALUATED TRANSMITTING SIMULTANEOUSLY WITH OTHER CO-LOCATED TRANSMITTERS

DOCUMENT/STANDARD	VERDICT			
	NA	C	NC	NE
OET Bulletin 65 Edition 97-01 August 1997 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields FCC 47 CFR § 1.1307 - Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared. FCC 47 CFR § 1.1310 - Radiofrequency radiation exposure limits.		C		
1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)		C		

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Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003 ARPANSA RPS No. 3 – Maximum Exposure Levels to Radiofrequency Fields (3 kHz to 300 GHz) AS 2772.2-1998: Radiofrequency radiation - Part 2: Principles and methods of measurement - 300 kHz to 100 GHz	C
Vodafone requirements [1999/519/EC]	C

## 6. REMARKS AND COMMENTS

GSM and GPRS modes have been evaluated together because both modes share the same power class and modulation scheme in the uplink.

WCDMA and HSDPA modes have been evaluated together because HSDPA is an improved mode of operation only for Downlink (equipment reception), but using the normal WCDMA mode for the Uplink (equipment transmission).

## 7. SUMMARY

Considering the results of the performed analysis and evaluation, stated in annexes A and B, the item under evaluation is **IN COMPLIANCE** with the specifications listed in section 3.1 “SERVICES REQUESTED”.

NOTE: The results presented in this report apply only to the particular item under evaluation established in section “4.3. IDENTIFICATION OF ITEM/ITEMS EVALUATED” of this document, as presented for evaluation by the applicant.

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## ANNEX A

### HOST PLATFORMS ANALYSIS

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## A.1. DELL MINI 1110

DELL MINI 1110 is a 11,6" widescreen laptop computer which can be fitted with the following transmitters:

### MAIN/PRIMARY TRANSMITTER:

#### WWAN transmitter:

Type of equipment : Ericsson Mobile Broadband Module  
 Trade mark : Ericsson  
 Model : F3507g  
 FCC ID : VV7-MBMF3507G-D

### ADDITIONAL/SECONDARY TRANSMITTERS:

#### Bluetooth transmitter:

Type of equipment : Bluetooth 2.0 + EDR  
 Trade mark : Dell  
 Model : Wireless 365  
 FCC ID : QDS-BRCM1033

#### WLAN / WiMAX transmitters:

Type of equipment : 802.11bg WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1397  
 FCC ID : QDS-BRCM1030

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1510  
 FCC ID : QDS-BRCM1031

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1520  
 FCC ID : QDS-BRCM1041

Type of equipment : 802.11abgn WLAN and WiMAX transmitter  
 Trade mark : Intel  
 Model : WiMAX/WiFi Link 5150  
 FCC ID : PD9512ANXHD

**NOTE:** - Only one of the listed above WLAN or WLAN/WiMAX transmitters can be installed in the DELL MINI 1110 laptop computer at one time.

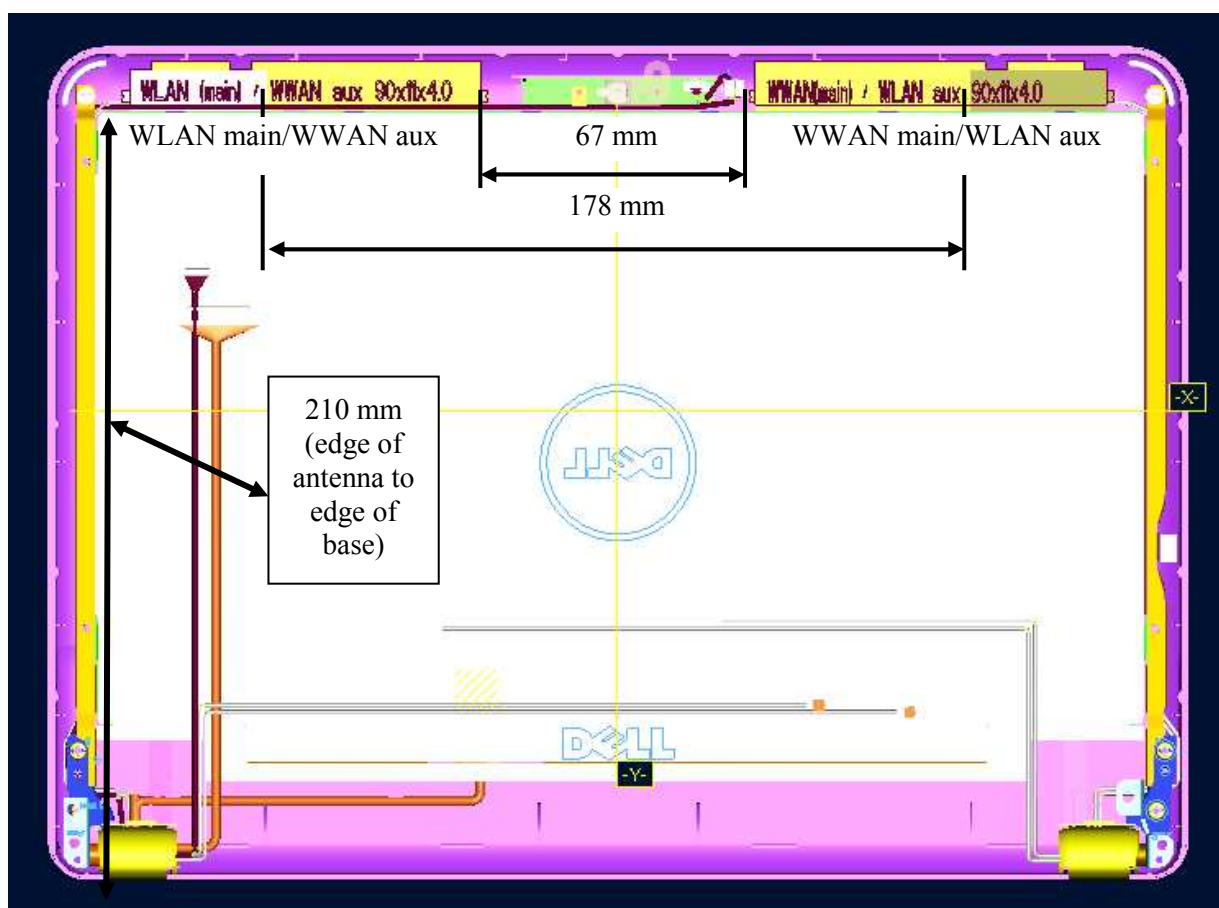
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## ANTENNAS INFORMATION

### Antennas locations and distances:

Antenna	Antenna location	Maximum antenna gain (dBi)	Antenna to user distance (mm)	Antenna to WWAN Tx antenna distance (mm)
WWAN MAIN (824 ~ 960MHz)	Top right corner of the display	0,80	210	-
WWAN MAIN (1710 ~2170MHz)	Top right corner of the display	4,14	210	-
WLAN MAIN	Top left corner of the display	1,74	210	< 200
WLAN AUX	Top right corner of the display	1,74	210	< 200
Bluetooth antenna	Below keyboard	N. A.	< 200	> 200

### Diagram of the WWAN, WLAN and WLAN/WiMAX transmitters' antennas locations:



**CONCLUSIONS:**

- WLAN transmitter is in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to WLAN antennas distance < 20 cm). WLAN contribution has to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL MINI 1110 laptop computer.
- Bluetooth transmitter is NOT in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to Bluetooth antenna distance > 20 cm). Bluetooth contribution does NOT need to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL MINI 1110 laptop computer.
- WWAN transmitter, Ericsson F3507g, and WLAN transmitters are in mobile exposure conditions (antenna to user distance > 20 cm). Bluetooth transmitter is in portable exposure conditions but it is not co-located with WWAN transmitter.
- WiMAX and WiFi modes of Intel WiMAX/WiFi Link 5150 can not co-transmitting simultaneously.

**A.2. DELL STUDIO 14**

DELL STUDIO 14 is a widescreen laptop computer which can be fitted with the following transmitters:

**MAIN/PRIMARY TRANSMITTER:**

**WWAN transmitter:**

Type of equipment : Ericsson Mobile Broadband Module  
 Trade mark : Ericsson  
 Model : F3507g  
 FCC ID : VV7-MBMF3507G-D

**ADDITIONAL/SECONDARY TRANSMITTERS:**

**Bluetooth transmitter:**

Type of equipment : Bluetooth 2.0 + EDR  
 Trade mark : Dell  
 Model : Wireless 365  
 FCC ID : QDS-BRCM1033

**WLAN transmitters:**

Type of equipment : 802.11bg WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1397  
 FCC ID : QDS-BRCM1030

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1510  
 FCC ID : QDS-BRCM1031

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Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5100  
 FCC ID : E2K512ANHMW

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5300  
 FCC ID : E2K533ANH

**NOTE:** - Only one of the listed above WLAN transmitters can be installed in the DELL STUDIO 14 laptop computer at one time.

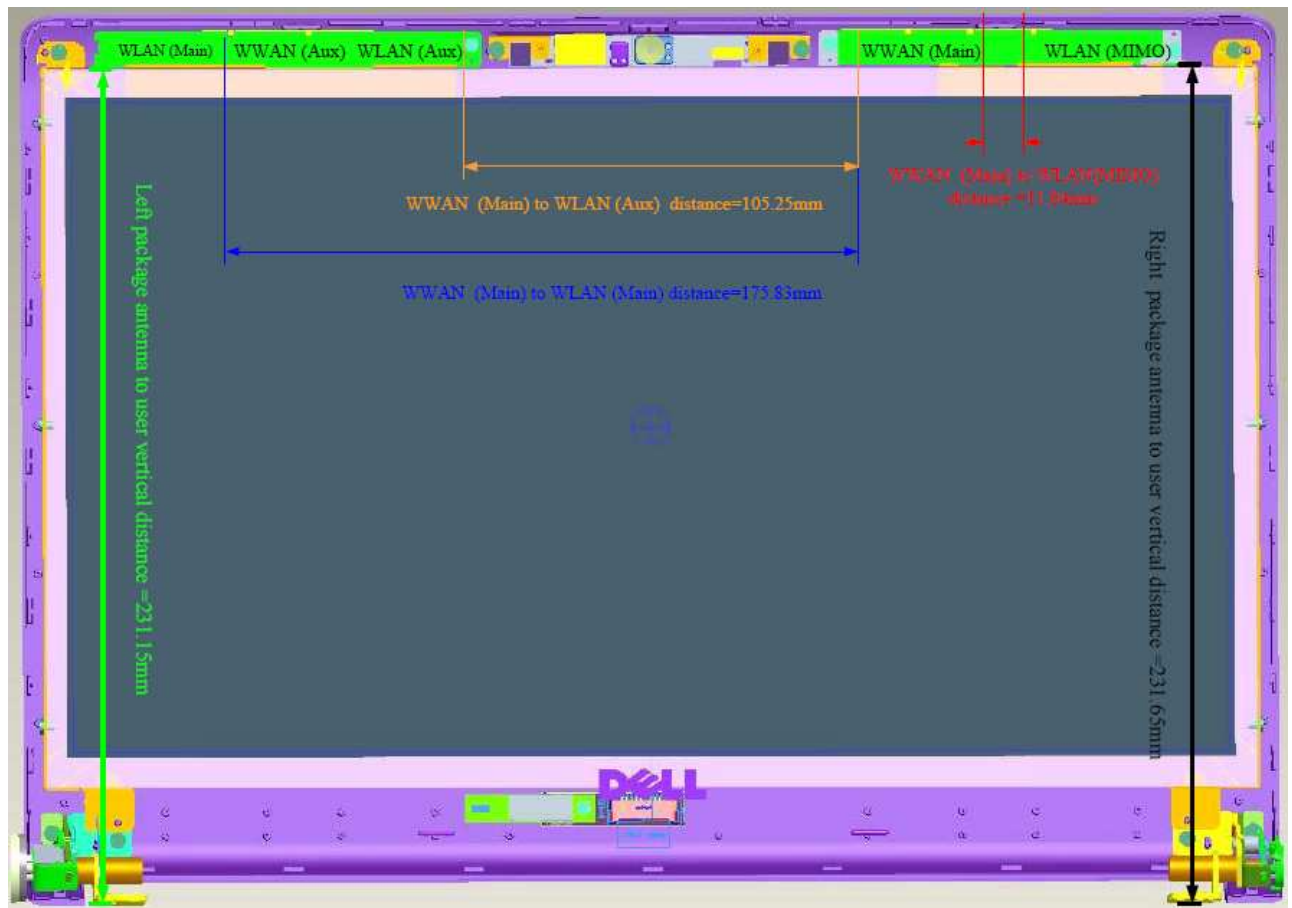
### ANTENNAS INFORMATION

#### Antennas locations and distances – Option 1:

Antenna	Antenna location	Maximum antenna gain (dBi)	Antenna to user distance (mm)	Antenna to WWAN Tx antenna distance (mm)
WWAN MAIN (824 ~ 960MHz)	Top right corner of the display	0,81	231,65	-
WWAN MAIN (1710 ~2170MHz)	Top right corner of the display	2,88	231,65	-
WLAN MAIN	Top left corner of the display	2,855	231,65	175,83
WLAN AUX	Top left corner of the display	2,855	231,65	105,25
WLAN MIMO	Top right corner of the display	2,855	231,65	11,64
Bluetooth antenna	Below keyboard	N.A.	<200	> 200

#### Diagram of the WWAN and WLAN transmitters' antennas locations – Option 1:

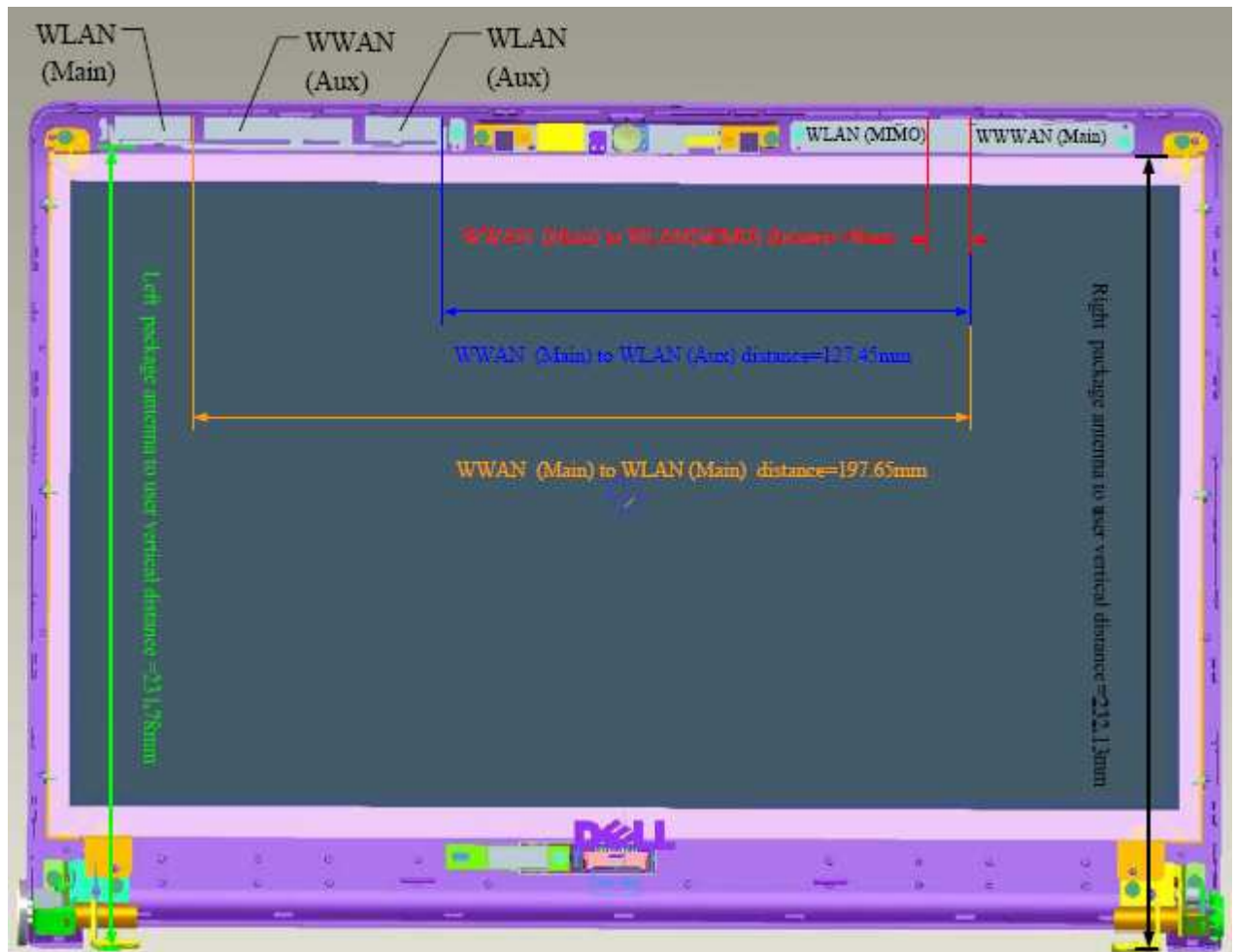
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### Antennas locations and distances – Option 2:

Antenna	Antenna location	Maximum antenna gain (dBi)	Antenna to user distance (mm)	Antenna to WWAN Tx antenna distance (mm)
WWAN MAIN (824 ~ 960MHz)	Top right corner of the display	0,81	231,65	-
WWAN MAIN (1710 ~2170MHz)	Top right corner of the display	2,88	231,65	-
WLAN MAIN	Top left corner of the display	2,855	232,13	197,65
WLAN AUX	Top left corner of the display	2,855	232,13	127,45
WLAN MIMO	Top right corner of the display	2,855	232,13	8
Bluetooth antenna	Below keyboard	N.A.	<200	> 200

**Diagram of the WWAN and WLAN transmitters' antennas locations – Option 2:**



**CONCLUSIONS:**

- WLAN transmitter is in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to WLAN antennas distance < 20 cm). WLAN contribution has to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL STUDIO 14 laptop computer.
- Bluetooth transmitter is NOT in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to Bluetooth antenna distance > 20 cm). Bluetooth contribution does NOT need to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL STUDIO 14 laptop computer.
- WWAN transmitter, Ericsson F3507g, and WLAN transmitters are in mobile exposure conditions (antenna to user distance > 20 cm). Bluetooth transmitter is in portable exposure conditions but it is not co-located with WWAN transmitter.

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### A.3. DELL STUDIO 1745, 1747, 1749

DELL STUDIO 1745, 1747 and 1749 are a 17,3” widescreen laptop computers which can be fitted with the following transmitters:

#### MAIN/PRIMARY TRANSMITTER:

##### WWAN transmitter:

Type of equipment : Ericsson Mobile Broadband Module  
 Trade mark : Ericsson  
 Model : F3507g  
 FCC ID : VV7-MBMF3507G-D

#### ADDITIONAL/SECONDARY TRANSMITTERS:

##### Bluetooth transmitter:

Type of equipment : Bluetooth 2.0 + EDR  
 Trade mark : Dell  
 Model : Wireless 365  
 FCC ID : QDS-BRCM1033

##### WLAN / WiMAX transmitters:

Type of equipment : 802.11bg WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1397  
 FCC ID : QDS-BRCM1030

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1510  
 FCC ID : QDS-BRCM1031

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5100  
 FCC ID : E2K512ANHMW

Type of equipment : 802.11abgn WLAN and WiMAX transmitter  
 Trade mark : Intel  
 Model : WiMAX/WiFi Link 5150  
 FCC ID : PD9512ANXHD

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5300  
 FCC ID : E2K533ANH

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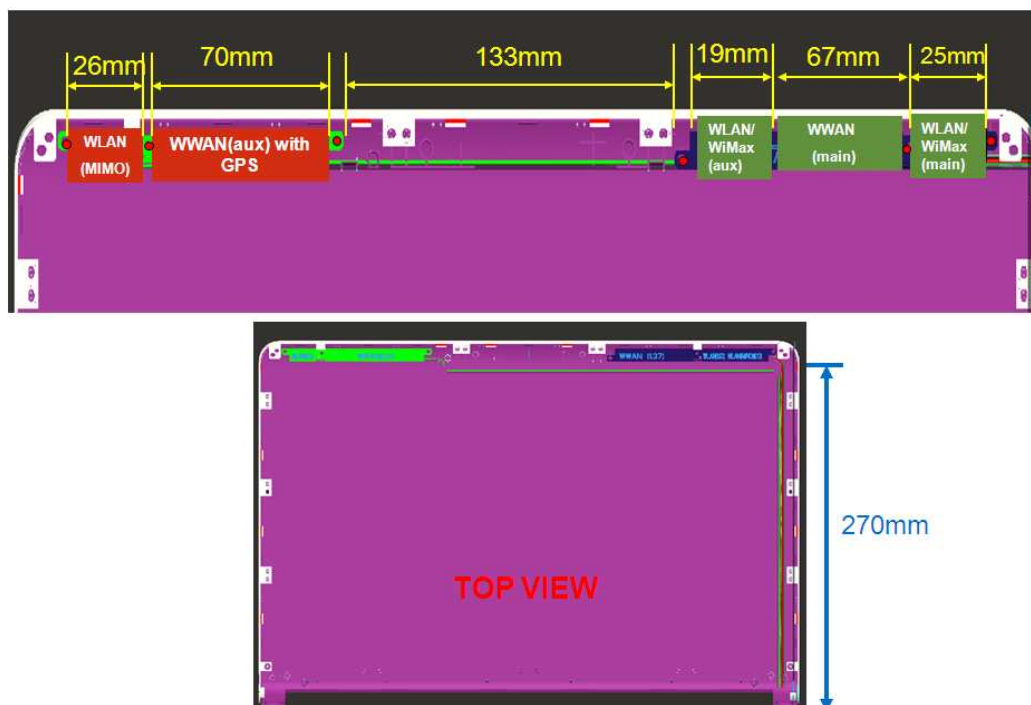
**NOTE:** - Only one of the listed above WLAN or WLAN/WiMAX transmitters can be installed in the DELL STUDIO 1745, 1747 and 1749 laptop computers at one time.

### ANTENNAS INFORMATION

#### Antennas locations and distances:

Antenna	Antenna location	Maximum antenna gain (dBi)	Antenna to user distance (mm)	Antenna to WWAN Tx antenna distance (mm)
WWAN MAIN (824 ~ 960MHz)	Top right corner of the display	1,64	270	-
WWAN MAIN (1710 ~2170MHz)	Top right corner of the display	2,94	270	-
WLAN MAIN	Top right corner of the display	2,86	270	< 200
WLAN AUX	Top right corner of the display	2,86	270	< 200
WLAN MIMO	Top left corner of the display	2,86	270	> 200
Bluetooth antenna	Below keyboard	N.A.	<200	> 200

#### Diagram of the WWAN, WLAN and WLAN/WiMAX transmitters' antennas locations:



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**CONCLUSIONS:**

- WLAN transmitter is in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to WLAN antennas distance < 20 cm) except for the WLAN MIMO antenna. WLAN contribution has to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL STUDIO 1745, 1747 and 1749 laptop computers.
- Bluetooth transmitter is NOT in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to Bluetooth antenna distance > 20 cm). Bluetooth contribution does NOT need to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL STUDIO 1745, 1747 and 1749 laptop computers.
- WWAN transmitter, Ericsson F3507g, and WLAN transmitters are in mobile exposure conditions (antenna to user distance > 20 cm). Bluetooth transmitter is in portable exposure conditions but they are not co-located with WWAN transmitter.
- WiMAX and WiFi modes of Intel WiMAX/WiFi Link 5150 can not co-transmitting simultaneously.

**A.4. DELL STUDIO 14Z**

DELL STUDIO 14Z is a 14,0” widescreen laptop computer which can be fitted with the following transmitters:

**MAIN/PRIMARY TRANSMITTER:**

**WWAN transmitter:**

Type of equipment : Ericsson Mobile Broadband Module  
 Trade mark : Ericsson  
 Model : F3507g  
 FCC ID : VV7-MBMF3507G-D

**ADDITIONAL/SECONDARY TRANSMITTERS:**

**Bluetooth transmitter:**

Type of equipment : Bluetooth 2.0 + EDR  
 Trade mark : Dell  
 Model : Wireless 365  
 FCC ID : QDS-BRCM1033

**WLAN transmitters:**

Type of equipment : 802.11bg WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1397  
 FCC ID : QDS-BRCM1030

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1515  
 FCC ID : PPD-AR5BHB92

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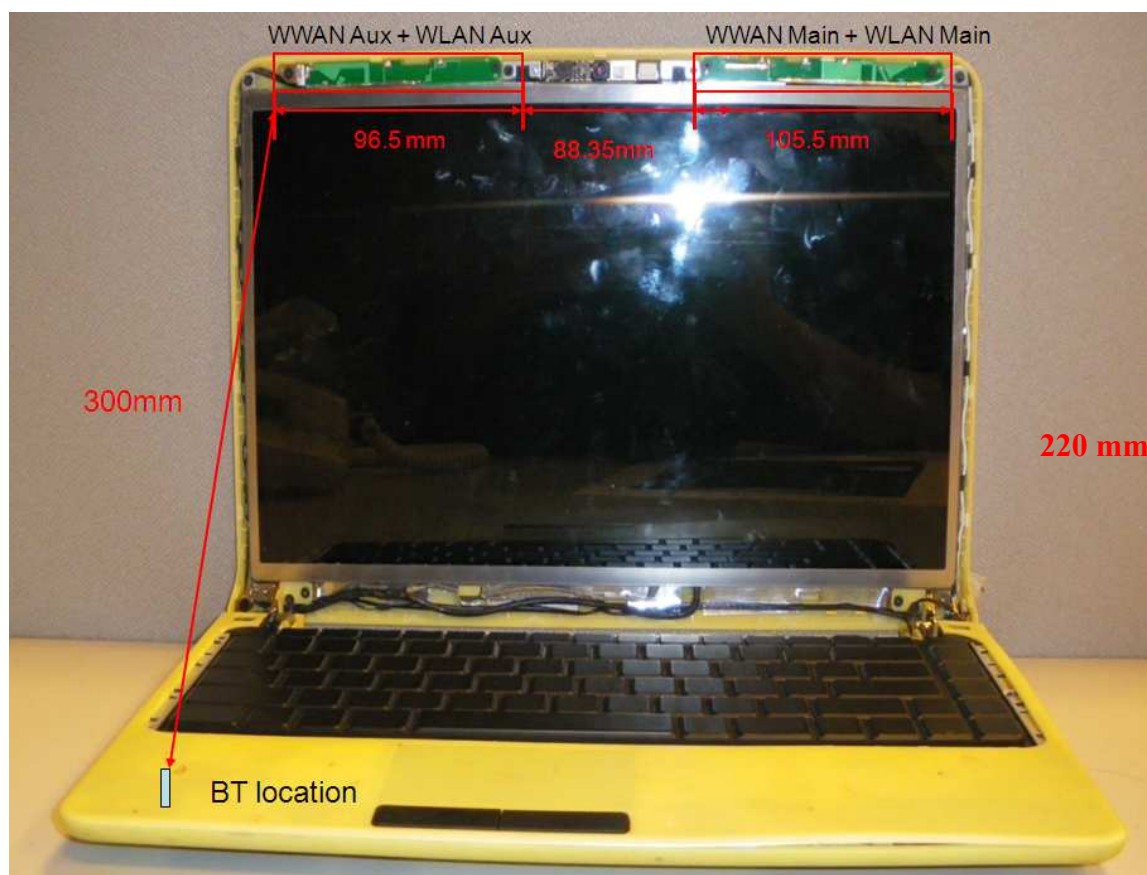
**NOTE:** - Only one of the listed above WLAN transmitters can be installed in the DELL STUDIO 14Z laptop computer at one time.

### ANTENNAS INFORMATION

Antennas locations and distances:

Antenna	Antenna location	Maximum antenna gain (dBi)	Antenna to user distance (mm)	Antenna to WWAN Tx antenna distance (mm)
WWAN MAIN (824 ~ 960MHz)	Top right corner of the display	1,71	220	-
WWAN MAIN (1710 ~2170MHz)	Top right corner of the display	2,15	220	-
WLAN MAIN	Top right corner of the display	0,23	220	< 200
WLAN AUX	Top left corner of the display	0,23	220	< 200
Bluetooth antenna	Below keyboard	N.A.	<200	> 200

Diagram of the WWAN, WLAN and Bluetooth transmitters' antennas locations:



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**CONCLUSIONS:**

- WLAN transmitter is in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to WLAN antennas distance < 20 cm). WLAN contribution has to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL STUDIO 14Z laptop computer.
- Bluetooth transmitter is NOT in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to Bluetooth antenna distance > 20 cm). Bluetooth contribution does NOT need to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL STUDIO 14Z laptop computer.
- WWAN transmitter, Ericsson F3507g, and WLAN transmitters are in mobile exposure conditions (antenna to user distance > 20 cm). Bluetooth transmitter is in portable exposure conditions but it is not co-located with WWAN transmitter.

**A.5. DELL LATITUDE Z600**

DELL LATITUDE Z600 is a 16,0” widescreen laptop computer which can be fitted with the following transmitters:

**MAIN/PRIMARY TRANSMITTER:**

**WWAN transmitter:**

Type of equipment : Ericsson Mobile Broadband Module  
 Trade mark : Ericsson  
 Model : F3507g  
 FCC ID : VV7-MBMF3507G-D

**ADDITIONAL/SECONDARY TRANSMITTERS:**

**Bluetooth transmitter:**

Type of equipment : Bluetooth 2.0 + EDR  
 Trade mark : Dell  
 Model : Wireless 365  
 FCC ID : QDS-BRCM1033

**WLAN / WiMAX transmitters:**

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5100  
 FCC ID : E2K512ANHMW

Type of equipment : 802.11abgn WLAN and WiMAX transmitter  
 Trade mark : Intel  
 Model : WiMAX/WiFi Link 5150  
 FCC ID : PD9512ANXHD

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Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5300  
 FCC ID : E2K533ANH

**NOTE:** - Only one of the listed above WLAN or WiMAX/WLAN transmitters can be installed in the DELL LATITUDE Z600 laptop computer at one time.

## ANTENNAS INFORMATION

### Antennas locations and distances:

Antenna	Antenna location	Maximum antenna gain (dBi)	Antenna to user distance (mm)	Antenna to WWAN Tx antenna distance (mm)
WWAN MAIN (824 ~ 960MHz)	Top right corner of the display	0,85	240	-
WWAN MAIN (1710 ~2170MHz)	Top right corner of the display	2,33	240	-
WLAN MAIN	Top right corner of the display	2,42	240	< 200
WLAN AUX	Top left corner of the display	2,42	240	< 200
WLAN MIMO	Top left corner of the display	2,42	240	< 200
Bluetooth antenna	Below keyboard	N.A.	<200	> 200

### Diagram of the WWAN, WLAN and Bluetooth transmitters' antennas locations:

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## CONCLUSIONS:

- WLAN transmitter is in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to WLAN antennas distance < 20 cm). WLAN contribution has to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL LATITUDE Z600 laptop computer.
- Bluetooth transmitter is NOT in co-location condition in relation to the WWAN transmitter, Ericsson F3507g, (WWAN antenna to Bluetooth antenna distance > 20 cm). Bluetooth contribution does NOT need to be considered when evaluating the exposure to electromagnetic fields due to the F3507g Ericsson Mobile Broadband Module installed in the DELL LATITUDE Z600 laptop computer.
- WWAN transmitter, Ericsson F3507g, and WLAN transmitters are in mobile exposure conditions (antenna to user distance > 20 cm). Bluetooth transmitter is in portable exposure conditions but it is not co-located with WWAN transmitter.
- WiMAX and WiFi modes of Intel WiMAX/WiFi Link 5150 can not co-transmitting simultaneously.

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## A.6. WORST CASE CONSIDERATIONS

- CO-LOCATED TRANSMITTERS:
  - o All the WLAN and WiMAX/WLAN transmitters of every laptop are included.
  - o Bluetooth transmitter is not considered as co-located.
- Antenna-to-user distance: 20 cm.
  - o Any antenna-to-user distance > 20 cm would be covered by the analysis included in this report as far as it would provide better exposure conditions.
- WWAN antenna gains: Low bands: 1.71 dBi // High bands: 4.14 dBi
  - o Any antenna gains below the specified would be covered by the analysis included in this report as far as it would provide better exposure conditions.
- WLAN or WiMAX/WLAN antenna gain: 2,86 dBi
- Antenna-to-antenna distances: 0 cm
  - o Any antenna-to-antenna distance > 0 cm would be covered by the analysis included in this report as far as it would provide better exposure conditions.

## A.7. TRANSMITTERS SPECIFICATIONS

### MAIN/PRIMARY TRANSMITTER:

#### WWAN transmitter:

Type of equipment : Ericsson Mobile Broadband Module  
 Trade mark : Ericsson  
 Model : F3507g  
 FCC ID : VV7-MBMF3507G-D  
 Output power : See table

Frequency Band	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
GSM 850	GSM/GPRS	824,2 - 848,8	33,00	1995,26	25%	498,82	1,71	1,48	739,50
	EDGE	824,2 - 848,8	31,00	1258,93	25%	314,73	1,71	1,48	466,59
FDD V	WCDMA/HSDPA	826,4 - 846,6	23,62	230,14	100%	230,14	1,71	1,48	341,19
	HSUPA	826,4 - 846,6	23,08	203,24	100%	203,24	1,71	1,48	301,30
E-GSM 900	GSM/GPRS	880,2 - 914,8	33,99	2506,11	25%	626,53	1,71	1,48	928,84
	EDGE	880,2 - 914,8	27,00	501,19	25%	125,30	1,71	1,48	185,75
DCS 1800	GSM/GPRS	1710,2 - 1784,8	32,54	1794,73	25%	448,68	4,14	2,59	1163,97
	EDGE	1710,2 - 1784,8	26,10	407,38	25%	101,85	4,14	2,59	264,20
PCS 1900	GSM/GPRS	1850,2 - 1909,8	29,30	851,14	25%	212,78	4,14	2,59	552,00
	EDGE	1850,2 - 1909,8	28,70	741,31	25%	185,33	4,14	2,59	480,77
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	23,00	199,53	100%	199,53	4,14	2,59	517,61
	HSUPA	1852,4 - 1907,6	22,80	190,55	100%	190,55	4,14	2,59	494,31
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	22,40	173,78	100%	173,78	4,14	2,59	450,82
	HSUPA	1922,4 - 1977,6	22,10	162,18	100%	162,18	4,14	2,59	420,73

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**ADDITIONAL/SECONDARY TRANSMITTERS:**

**WLAN transmitters:**

Type of equipment : 802.11bg WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1397  
 FCC ID : QDS-BRCM1030  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Dell Wireless 1397	QDS-BRCM1030	WiFi	2400-2483,5	23,05	202,00	100%	202,00	2,86	1,93	390,26

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1510  
 FCC ID : QDS-BRCM1031  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Dell Wireless 1510	QDS-BRCM1031	WiFi	2400,0 - 2483,5	22,01	159,00	100%	159,00	2,86	1,93	307,18
			5150,0 - 5350,0	18,69	74,00	100%	74,00	2,86	1,93	142,97
			5470,0 - 5725,0	20,29	107,00	100%	107,00	2,86	1,93	206,72
			5725,0-5850,0	19,91	98,00	100%	98,00	2,86	1,93	189,33

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1520  
 FCC ID : QDS-BRCM1041  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Dell Wireless 1520	QDS-BRCM1041	WiFi	2400,0 - 2483,5	24,39	275,00	100%	275,00	2,86	1,93	531,29
			5150,0 - 5350,0	19,49	89,00	100%	89,00	2,86	1,93	171,95
			5470,0 - 5725,0	21,04	127,00	100%	127,00	2,86	1,93	245,36
			5725,0-5850,0	25,47	352,00	100%	352,00	2,86	1,93	680,05

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Dell  
 Model : Wireless 1515  
 FCC ID : PPD-AR5BHB92  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Dell Wireless 1515	PPD-AR5BHB92	WiFi	2400,0 - 2483,5	29,58	907,21	100%	907,21	2,86	1,93	1752,70
			5150,0 - 5350,0	23,68	233,12	100%	233,12	2,86	1,93	450,38
			5470,0 - 5725,0	23,58	227,80	100%	227,80	2,86	1,93	440,10
			5725,0-5850,0	29,85	965,15	100%	965,15	2,86	1,93	1864,64

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5100  
 FCC ID : E2K512ANHMW  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Intel WiFi Link 5100	E2K512ANHMW	WiFi	2400,0 - 2483,5	18,57	72,00	100%	72,00	2,86	1,93	139,10
			5150,0 - 5350,0	16,53	45,00	100%	45,00	2,86	1,93	86,94
			5470,0 - 5725,0	18,51	71,00	100%	71,00	2,86	1,93	137,17
			5725,0-5850,0	17,92	62,00	100%	62,00	2,86	1,93	119,78

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiMAX/WiFi Link 5150  
 FCC ID : PD9512ANXHD  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Intel WiMAX/WiFi Link 5150	PD9512ANXHD	WiFi	2400,0 - 2483,5	27,67	585,00	100%	585,00	2,86	1,93	1130,20
			5150,0 - 5350,0	16,72	47,00	100%	47,00	2,86	1,93	90,80
			5470,0 - 5725,0	16,81	48,00	100%	48,00	2,86	1,93	92,73
			5725,0-5850,0	25,16	328,00	100%	328,00	2,86	1,93	633,69
		WIMAX	2496,0 - 2690,0	24,05	254,00	100%	254,00	2,86	1,93	490,72

Type of equipment : 802.11abgn WLAN transmitter  
 Trade mark : Intel  
 Model : WiFi Link 5300  
 FCC ID : E2K533ANH  
 Output power : See table

Model name	FCC ID	Mode	Frequency range (MHz)	Maximum conducted output power (dBm)	Maximum conducted output power (mW)	Duty Cycle	Equivalent conducted output power (mW)	Maximum antenna gain (dBi)	Maximum antenna gain (numerical)	EIRP (mW)
Intel WiFi Link 5300	E2K533ANH	WiFi	2400,0 - 2483,5	26,41	438,00	100%	438,00	2,86	1,93	846,20
			5150,0 - 5350,0	16,53	45,00	100%	45,00	2,86	1,93	86,94
			5470,0 - 5725,0	16,53	45,00	100%	45,00	2,86	1,93	86,94
			5725,0-5850,0	26,44	441,00	100%	441,00	2,86	1,93	852,00



## ANNEX B

### RF EXPOSURE ASSESSMENT

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## B.1. MAXIMUM PERMISSIBLE EXPOSURE (MPE) LIMITS

### B.1.1. FCC LIMITS

#### Normative documents:

- OET Bulletin 65 Edition 97-01 August 1997 - Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields
- FCC 47 CFR § 1.1307 - Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.
- FCC 47 CFR § 1.1310 - Radiofrequency radiation exposure limits.1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)

#### Reference levels:

The table below is excerpted from Table 1B of 47 CFR 1.1310 titled Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure:

Frequency Range (MHz)	Power density ( $\frac{W}{m^2}$ )	Averaging time (minutes)
300 – 1500	$\frac{f(MHz)}{1500}$	30
1500 – 100.000	1.0	30

#### MPE limits:

- Main/Primary transmitter (F3507g Ericsson Mobile Broadband Module):

Frequency Band	Mode	Frequency Range (MHz)	Reference frequency (MHz)	MPE limit ( $S_{eq}$ ) ( $\frac{mW}{cm^2}$ )
GSM 850	GSM/GPRS	824,2 - 848,8	824,20	0,5495
	EDGE	824,2 - 848,8	824,20	0,5495
FDD V	WCDMA/HSDPA	826,4 - 846,6	826,40	0,5509
	HSUPA	826,4 - 846,6	826,40	0,5509
PCS 1900	GSM/GPRS	1850,2 - 1909,8	1850,20	1,0000
	EDGE	1850,2 - 1909,8	1850,20	1,0000
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	1852,40	1,0000
	HSUPA	1852,4 - 1907,6	1852,40	1,0000

- Additional/Secondary transmitters: All the transmission frequencies for WLAN and Bluetooth modules are above 1.5 GHz, so that the MPE limit is 1 mW/cm<sup>2</sup>.

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## B.1.2. EUROPEAN UNION MPE LIMITS

### Normative document:

- 1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)

### Reference levels:

The table below is excerpted from Table 2 of 1999/519/EC, titled “Reference levels for electric, magnetic and electromagnetic fields (0 Hz to 300 GHz, unperturbed rms values)”:

Frequency range	E-field strength ( $\frac{V}{m}$ )	H-field strength ( $\frac{A}{m}$ )	B-field ( $\mu T$ )	Equivalent plane wave power density $S_{eq}$ ( $\frac{W}{m^2}$ )
400 - 2000 MHz	$1,375 \cdot f(MHz)^{1/2}$	$0,0037 \cdot f(MHz)^{1/2}$	$0,0046 \cdot f(MHz)^{1/2}$	$\frac{f(MHz)}{200}$
2 - 300 GHz	61	0,16	0,2	10

### MPE limits:

- Main/Primary transmitter (F3507g Ericsson Mobile Broadband Module):

Frequency Band	Mode	Frequency Range (MHz)	Reference frequency (MHz)	MPE limit ( $S_{eq}$ ) ( $\frac{mW}{cm^2}$ )
E-GSM 900	GSM/GPRS	880,2 - 914,8	880,20	0,4401
	EDGE	880,2 - 914,8	880,20	0,4401
DCS 1800	GSM/GPRS	1710,2 - 1784,8	1710,20	0,8551
	EDGE	1710,2 - 1784,8	1710,20	0,8551
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	1922,40	0,9612
	HSUPA	1922,4 - 1977,6	1922,40	0,9612

- Additional/Secondary transmitters: All the transmission frequencies for WLAN and Bluetooth modules are above 2 GHz, so that the MPE limit is  $1 \text{ mW/cm}^2$ .

## B.1.3. AUSTRALIA MPE LIMITS

### Normative documents:

- Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003
- ARPANSA RPS No. 3 – Maximum Exposure Levels to Radiofrequency Fields (3 kHz to 300 GHz)
- AS 2772.2-1998: Radiofrequency radiation - Part 2: Principles and methods of measurement - 300 kHz to 100 GHz

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**Reference levels:**

The table below is excerpted from Table 7 of ARPANSA RPS No. 3, titled “Reference levels for time averaged exposure to RMS electric and magnetic fields (unperturbed rms values)”:

Exposure category	Frequency range	E-field strength $\left(\frac{V}{m} \text{ rms}\right)$	H-field strength $\left(\frac{A}{m} \text{ rms}\right)$	Equivalent plane wave power density $S_{eq}$ $\left(\frac{W}{m^2}\right)$	Equivalent plane wave power density $S_{eq}$ $\left(\frac{mW}{cm^2}\right)$
General public	400 MHz - 2 GHz	$1,37 \cdot f(MHz)^{1/2}$	$0,00364 \cdot f(MHz)^{1/2}$	$\frac{f(MHz)}{200}$	$\frac{f(MHz)}{2000}$
General public	2 - 300 GHz	61	0,16	10	1

**MPE limits:**

- Main/Primary transmitter (F3507g Ericsson Mobile Broadband Module):

Frequency Band	Mode	Frequency Range (MHz)	Reference frequency (MHz)	MPE limit ( $S_{eq}$ ) $\left(\frac{mW}{cm^2}\right)$
FDD V	WCDMA/HSDPA	826,4 - 846,6	826,40	0,4132
	HSUPA	826,4 - 846,6	826,40	0,4132
E-GSM 900	GSM/GPRS	880,2 - 914,8	880,20	0,4401
	EDGE	880,2 - 914,8	880,20	0,4401
DCS 1800	GSM/GPRS	1710,2 - 1784,8	1710,20	0,8551
	EDGE	1710,2 - 1784,8	1710,20	0,8551
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	1922,40	0,9612
	HSUPA	1922,4 - 1977,6	1922,40	0,9612

- Additional/Secondary transmitters: All the transmission frequencies for WLAN and Bluetooth modules are above 2 GHz, so that the MPE limit is  $1 \text{ mW/cm}^2$ .

**B.1.4. VODAFONE MPE LIMITS**

**Normative document:**

- 1999/519/EC Council Recommendation on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)

**Reference levels:**

The table below is excerpted from Table 2 of 1999/519/EC, titled “Reference levels for electric, magnetic and electromagnetic fields (0 Hz to 300 GHz, unperturbed rms values)”:

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Exposure category	Frequency range	E-field strength ( $\frac{V}{m}$ rms)	H-field strength ( $\frac{A}{m}$ rms)	Equivalent plane wave power density $S_{eq}$ ( $\frac{W}{m^2}$ )	Equivalent plane wave power density $S_{eq}$ ( $\frac{mW}{cm^2}$ )
General public	400 MHz - 2 GHz	$1,37 \cdot f(MHz)^{1/2}$	$0,00364 \cdot f(MHz)^{1/2}$	$\frac{f(MHz)}{200}$	$\frac{f(MHz)}{2000}$
General public	2 - 300 GHz	61	0,16	10	1

#### MPE limits:

- Main/Primary transmitter (F3507g Ericsson Mobile Broadband Module):

Frequency Band	Mode	Frequency Range (MHz)	Reference frequency (MHz)	MPE limit ( $S_{Lim}$ ) ( $\frac{mW}{cm^2}$ )
GSM 850	GSM/GPRS	824,2 - 848,8	824,20	0,4121
	EDGE	824,2 - 848,8	824,20	0,4121
FDD V	WCDMA/HSDPA	826,4 - 846,6	826,40	0,4132
	HSUPA	826,4 - 846,6	826,40	0,4132
E-GSM 900	GSM/GPRS	880,2 - 914,8	880,20	0,4401
	EDGE	880,2 - 914,8	880,20	0,4401
DCS 1800	GSM/GPRS	1710,2 - 1784,8	1710,20	0,8551
	EDGE	1710,2 - 1784,8	1710,20	0,8551
PCS 1900	GSM/GPRS	1850,2 - 1909,8	1850,20	0,9251
	EDGE	1850,2 - 1909,8	1850,20	0,9251
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	1852,40	0,9262
	HSUPA	1852,4 - 1907,6	1852,40	0,9262
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	1922,40	0,9612
	HSUPA	1922,4 - 1977,6	1922,40	0,9612

- Additional/Secondary transmitters: All the transmission frequencies for WLAN and Bluetooth modules are above 2 GHz, so that the MPE limit is 1 mW/cm<sup>2</sup>.

## B.2. RF EXPOSURE ASSESSMENT – INDIVIDUAL TRANSMITTERS

### B.2.1. INTRODUCTION

Calculations to predict power density levels in the far-field of the antenna are made by use of the following equation:

$$S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$$

where: S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

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## B.2.2. RF EXPOSURE ASSESSMENT FOR F3507g ERICSSON MOBILE BROADBAND MODULE INSTALLED IN WORST CASE LAPTOP COMPUTER

### FCC REQUIREMENTS

Frequency Band	Mode	Frequency Range (MHz)	EIRP (mW)	Evaluation distance (R) (cm)	Power Density ( $S_{eq}$ ) $S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$ $\left(\frac{mW}{cm^2}\right)$	MPE limit ( $S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$	COMPLIANCE ( $S_{eq} < S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$
GSM 850	GSM/GPRS	824,2 - 848,8	739,50	20,00	0,1471	0,5495	COMPLIANT
	EDGE	824,2 - 848,8	466,59	20,00	0,0928	0,5495	COMPLIANT
FDD V	WCDMA/HSDPA	826,4 - 846,6	341,19	20,00	0,0679	0,5509	COMPLIANT
	HSUPA	826,4 - 846,6	301,30	20,00	0,0599	0,5509	COMPLIANT
PCS 1900	GSM/GPRS	1850,2 - 1909,8	552,00	20,00	0,1098	1,0000	COMPLIANT
	EDGE	1850,2 - 1909,8	480,77	20,00	0,0956	1,0000	COMPLIANT
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	517,61	20,00	0,1030	1,0000	COMPLIANT
	HSUPA	1852,4 - 1907,6	494,31	20,00	0,0983	1,0000	COMPLIANT

### EUROPEAN UNION REQUIREMENTS

Frequency Band	Mode	Frequency Range (MHz)	EIRP (mW)	Evaluation distance (R) (cm)	Power Density ( $S_{eq}$ ) $S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$ $\left(\frac{mW}{cm^2}\right)$	MPE limit ( $S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$	COMPLIANCE ( $S_{eq} < S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$
E-GSM 900	GSM/GPRS	880,2 - 914,8	928,84	20,00	0,1848	0,4401	COMPLIANT
	EDGE	880,2 - 914,8	185,75	20,00	0,0370	0,4401	COMPLIANT
DCS 1800	GSM/GPRS	1710,2 - 1784,8	1163,97	20,00	0,2316	0,8551	COMPLIANT
	EDGE	1710,2 - 1784,8	264,20	20,00	0,0526	0,8551	COMPLIANT
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	450,82	20,00	0,0897	0,9612	COMPLIANT
	HSUPA	1922,4 - 1977,6	420,73	20,00	0,0837	0,9612	COMPLIANT

### AUSTRALIA REQUIREMENTS

Frequency Band	Mode	Frequency Range (MHz)	EIRP (mW)	Evaluation distance (R) (cm)	Power Density ( $S_{eq}$ ) $S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$ $\left(\frac{mW}{cm^2}\right)$	MPE limit ( $S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$	COMPLIANCE ( $S_{eq} < S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$
FDD V	WCDMA/HSDPA	826,4 - 846,6	341,19	20,00	0,0679	0,4132	COMPLIANT
	HSUPA	826,4 - 846,6	301,30	20,00	0,0599	0,4132	COMPLIANT
E-GSM 900	GSM/GPRS	880,2 - 914,8	928,84	20,00	0,1848	0,4401	COMPLIANT
	EDGE	880,2 - 914,8	185,75	20,00	0,0370	0,4401	COMPLIANT
DCS 1800	GSM/GPRS	1710,2 - 1784,8	1163,97	20,00	0,2316	0,8551	COMPLIANT
	EDGE	1710,2 - 1784,8	264,20	20,00	0,0526	0,8551	COMPLIANT
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	450,82	20,00	0,0897	0,9612	COMPLIANT
	HSUPA	1922,4 - 1977,6	420,73	20,00	0,0837	0,9612	COMPLIANT

## VODAFONE REQUIREMENTS

Frequency Band	Mode	Frequency Range (MHz)	EIRP (mW)	Evaluation distance (R) (cm)	Power Density ( $S_{eq}$ ) $S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$ $\left(\frac{mW}{cm^2}\right)$	MPE limit ( $S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$	COMPLIANCE ( $S_{eq} < S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$
GSM 850	GSM/GPRS	824,2 - 848,8	739,50	20,00	0,1471	0,4121	COMPLIANT
	EDGE	824,2 - 848,8	466,59	20,00	0,0928	0,4121	COMPLIANT
FDD V	WCDMA/HSDPA	826,4 - 846,6	341,19	20,00	0,0679	0,4132	COMPLIANT
	HSUPA	826,4 - 846,6	301,30	20,00	0,0599	0,4132	COMPLIANT
E-GSM 900	GSM/GPRS	880,2 - 914,8	928,84	20,00	0,1848	0,4401	COMPLIANT
	EDGE	880,2 - 914,8	185,75	20,00	0,0370	0,4401	COMPLIANT
DCS 1800	GSM/GPRS	1710,2 - 1784,8	1163,97	20,00	0,2316	0,8551	COMPLIANT
	EDGE	1710,2 - 1784,8	264,20	20,00	0,0526	0,8551	COMPLIANT
PCS 1900	GSM/GPRS	1850,2 - 1909,8	552,00	20,00	0,1098	0,9251	COMPLIANT
	EDGE	1850,2 - 1909,8	480,77	20,00	0,0956	0,9251	COMPLIANT
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	517,61	20,00	0,1030	0,9262	COMPLIANT
	HSUPA	1852,4 - 1907,6	494,31	20,00	0,0983	0,9262	COMPLIANT
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	450,82	20,00	0,0897	0,9612	COMPLIANT
	HSUPA	1922,4 - 1977,6	420,73	20,00	0,0837	0,9612	COMPLIANT

### B.2.3. RF EXPOSURE ASSESSMENT FOR SECONDARY TRANSMITTERS INSTALLED IN WORST CASE LAPTOP COMPUTER

Model name	FCC ID	Mode	Frequency range (MHz)	EIRP (mW)	Evaluation distance (cm)	Power Density ( $S_{eq}$ ) $S = \frac{P \cdot G}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$ $\left(\frac{mW}{cm^2}\right)$	MPE limit ( $S_{Lim}$ ) $\left(\frac{mW}{cm^2}\right)$	COMPLIANCE ( $S_{eq} < S_{Lim}$ )
Dell Wireless 1397	QDS-BRCM1030	WiFi	2400-2483,5	390,26	20,00	0,0776	1,0000	COMPLIANT
Dell Wireless 1510	QDS-BRCM1031	WiFi	2400,0 - 2483,5	307,18	20,00	0,0611	1,0000	COMPLIANT
			5150,0 - 5350,0	142,97	20,00	0,0284	1,0000	COMPLIANT
			5470,0 - 5725,0	206,72	20,00	0,0411	1,0000	COMPLIANT
			5725,0-5850,0	189,33	20,00	0,0377	1,0000	COMPLIANT
Dell Wireless 1520	QDS-BRCM1041	WiFi	2400,0 - 2483,5	531,29	20,00	0,1057	1,0000	COMPLIANT
			5150,0 - 5350,0	171,95	20,00	0,0342	1,0000	COMPLIANT
			5470,0 - 5725,0	245,36	20,00	0,0488	1,0000	COMPLIANT
			5725,0-5850,0	680,05	20,00	0,1353	1,0000	COMPLIANT
Dell Wireless 1515	PPD-AR5BHB92	WiFi	2400,0 - 2483,5	1752,70	20,00	0,3487	1,0000	COMPLIANT
			5150,0 - 5350,0	450,38	20,00	0,0896	1,0000	COMPLIANT
			5470,0 - 5725,0	440,10	20,00	0,0876	1,0000	COMPLIANT
			5725,0-5850,0	1864,64	20,00	0,3710	1,0000	COMPLIANT
Intel WiFi Link 5100	E2K512ANHMW	WiFi	2400,0 - 2483,5	139,10	20,00	0,0277	1,0000	COMPLIANT
			5150,0 - 5350,0	86,94	20,00	0,0173	1,0000	COMPLIANT
			5470,0 - 5725,0	137,17	20,00	0,0273	1,0000	COMPLIANT
			5725,0-5850,0	119,78	20,00	0,0238	1,0000	COMPLIANT
Intel WiMAX/WiFi Link 5150	PD9512ANXHD	WiFi	2400,0 - 2483,5	1130,20	20,00	0,2248	1,0000	COMPLIANT
			5150,0 - 5350,0	90,80	20,00	0,0181	1,0000	COMPLIANT
			5470,0 - 5725,0	92,73	20,00	0,0184	1,0000	COMPLIANT
		WiMAX	2496,0 - 2690,0	490,72	20,00	0,0976	1,0000	COMPLIANT
Intel WiFi Link 5300	E2K533ANH	WiFi	2400,0 - 2483,5	846,20	20,00	0,1683	1,0000	COMPLIANT
			5150,0 - 5350,0	86,94	20,00	0,0173	1,0000	COMPLIANT
			5470,0 - 5725,0	86,94	20,00	0,0173	1,0000	COMPLIANT
			5725,0-5850,0	852,00	20,00	0,1695	1,0000	COMPLIANT

### B.3. RF EXPOSURE ASSESSMENT – CO-LOCATION CONSIDERATIONS

#### B.3.1. INTRODUCTION

In situations where simultaneous exposure to fields of different equipment and frequencies occurs, the possibility that these exposures will be additive in their effects must be considered. Calculations based on this additivity are performed by the sum of relative exposure for each equipment according to the following compliance criteria:

$$\sum_1^N \frac{S_{eqn}}{S_{Limn}} = \frac{S_{eq1}}{S_{Lim1}} + \frac{S_{eq2}}{S_{Lim2}} + \dots + \frac{S_{eqN}}{S_{LimN}} \leq 1$$

where:

$S_{eq}$  is the power density of the electromagnetic field caused, at a given distance (evaluation distance), by a specific equipment transmitting at a defined frequency.

$S_{Lim}$  is the MPE limit for the evaluated transmission frequency.

#### B.3.2. FCC REQUIREMENTS

##### RELATIVE EXPOSURE FOR F3507g ERICSSON BROADBAND MODULE

Frequency Band	Mode	Frequency Range (MHz)	$S_{eq}$	$S_{Lim}$	$\frac{S_{eq}}{S_{Lim}}$
GSM 850	GSM/GPRS	824,2 - 848,8	0,1471	0,5495	<b>0,2677</b>
	EDGE	824,2 - 848,8	0,0928	0,5495	0,1689
FDD V	WCDMA/HSDPA	826,4 - 846,6	0,0679	0,5509	0,1232
	HSUPA	826,4 - 846,6	0,0599	0,5509	0,1088
PCS 1900	GSM/GPRS	1850,2 - 1909,8	0,1098	1,0000	0,1098
	EDGE	1850,2 - 1909,8	0,0956	1,0000	0,0956
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	0,1030	1,0000	0,1030
	HSUPA	1852,4 - 1907,6	0,0983	1,0000	0,0983

##### RELATIVE EXPOSURE FOR SECONDARY TRANSMITTERS

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Model name	FCC ID	Mode	Frequency range (MHz)	S <sub>eq</sub>	S <sub>Lim</sub>	$\frac{S_{eq}}{S_{Lim}}$
Dell Wireless 1397	QDS-BRCM1030	WiFi	2400-2483,5	0,0776	1,0000	0,0776
Dell Wireless 1510	QDS-BRCM1031	WiFi	2400,0 - 2483,5	0,0611	1,0000	0,0611
			5150,0 - 5350,0	0,0284	1,0000	0,0284
			5470,0 - 5725,0	0,0411	1,0000	0,0411
			5725,0-5850,0	0,0377	1,0000	0,0377
Dell Wireless 1520	QDS-BRCM1041	WiFi	2400,0 - 2483,5	0,1057	1,0000	0,1057
			5150,0 - 5350,0	0,0342	1,0000	0,0342
			5470,0 - 5725,0	0,0488	1,0000	0,0488
			5725,0-5850,0	0,1353	1,0000	0,1353
Dell Wireless 1515	PPD-AR5BHB92	WiFi	2400,0 - 2483,5	0,3487	1,0000	0,3487
			5150,0 - 5350,0	0,0896	1,0000	0,0896
			5470,0 - 5725,0	0,0876	1,0000	0,0876
			5725,0-5850,0	0,3710	1,0000	<b>0,3710</b>
Intel WiFi Link 5100	E2K512ANHMW	WiFi	2400,0 - 2483,5	0,0277	1,0000	0,0277
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0273	1,0000	0,0273
			5725,0-5850,0	0,0238	1,0000	0,0238
Intel WiMAX/WiFi Link 5150	PD9512ANXHD	WiFi	2400,0 - 2483,5	0,2248	1,0000	0,2248
			5150,0 - 5350,0	0,0181	1,0000	0,0181
			5470,0 - 5725,0	0,0184	1,0000	0,0184
			5725,0-5850,0	0,1261	1,0000	0,1261
		WiMAX	2496,0 - 2690,0	0,0976	1,0000	0,0976
Intel WiFi Link 5300	E2K533ANH	WiFi	2400,0 - 2483,5	0,1683	1,0000	0,1683
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0173	1,0000	0,0173
			5725,0-5850,0	0,1695	1,0000	0,1695

### SIMULTANEOUS EXPOSURE

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Equipment		Maximum $\frac{S_{eq}}{S_{Lim}}$	Maximum $\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}}$	COMPLIANCE $\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}} < 1$
Primary transmitter	Ericsson F3507g	0,2677	0,6387	<b>COMPLIANT</b>
Secondary transmitter (WLAN)	Dell Wireless 1397	0,3710		
Secondary transmitter (WLAN)	Dell Wireless 1510			
Secondary transmitter (WLAN)	Dell Wireless 1520			
Secondary transmitter (WLAN)	Dell Wireless 1515			
Secondary transmitter (WLAN)	Intel WiFi Link 5100			
Secondary transmitter (WLAN)	Intel WiMAX/WiFi Link 5150			
Secondary transmitter (WLAN)	Intel WiFi Link 5300			

### B.3.3. EUROPEAN UNION REQUIREMENTS

#### RELATIVE EXPOSURE FOR F3507g ERICSSON BROADBAND MODULE

Frequency Band	Mode	Frequency Range (MHz)	$S_{eq}$	$S_{Lim}$	$\frac{S_{eq}}{S_{Lim}}$
E-GSM 900	GSM/GPRS	880,2 - 914,8	0,1848	0,4401	<b>0,4199</b>
	EDGE	880,2 - 914,8	0,0370	0,4401	0,0840
DCS 1800	GSM/GPRS	1710,2 - 1784,8	0,2316	0,8551	0,2708
	EDGE	1710,2 - 1784,8	0,0526	0,8551	0,0615
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	0,0897	0,9612	0,0933
	HSUPA	1922,4 - 1977,6	0,0837	0,9612	0,0871

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**RELATIVE EXPOSURE FOR SECONDARY TRANSMITTERS**

Model name	FCC ID	Mode	Frequency range (MHz)	S <sub>eq</sub>	S <sub>Lim</sub>	$\frac{S_{eq}}{S_{Lim}}$
Dell Wireless 1397	QDS-BRCM1030	WiFi	2400-2483,5	0,0776	1,0000	0,0776
Dell Wireless 1510	QDS-BRCM1031	WiFi	2400,0 - 2483,5	0,0611	1,0000	0,0611
			5150,0 - 5350,0	0,0284	1,0000	0,0284
			5470,0 - 5725,0	0,0411	1,0000	0,0411
			5725,0-5850,0	0,0377	1,0000	0,0377
Dell Wireless 1520	QDS-BRCM1041	WiFi	2400,0 - 2483,5	0,1057	1,0000	0,1057
			5150,0 - 5350,0	0,0342	1,0000	0,0342
			5470,0 - 5725,0	0,0488	1,0000	0,0488
			5725,0-5850,0	0,1353	1,0000	0,1353
Dell Wireless 1515	PPD-AR5BHB92	WiFi	2400,0 - 2483,5	0,3487	1,0000	0,3487
			5150,0 - 5350,0	0,0896	1,0000	0,0896
			5470,0 - 5725,0	0,0876	1,0000	0,0876
			5725,0-5850,0	0,3710	1,0000	<b>0,3710</b>
Intel WiFi Link 5100	E2K512ANHMW	WiFi	2400,0 - 2483,5	0,0277	1,0000	0,0277
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0273	1,0000	0,0273
			5725,0-5850,0	0,0238	1,0000	0,0238
Intel WiMAX/WiFi Link 5150	PD9512ANXHD	WiFi	2400,0 - 2483,5	0,2248	1,0000	0,2248
			5150,0 - 5350,0	0,0181	1,0000	0,0181
			5470,0 - 5725,0	0,0184	1,0000	0,0184
			5725,0-5850,0	0,1261	1,0000	0,1261
		WiMAX	2496,0 - 2690,0	0,0976	1,0000	0,0976
Intel WiFi Link 5300	E2K533ANH	WiFi	2400,0 - 2483,5	0,1683	1,0000	0,1683
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0173	1,0000	0,0173
			5725,0-5850,0	0,1695	1,0000	0,1695

**SIMULTANEOUS EXPOSURE**

Equipment		Maximum $\frac{S_{eq}}{S_{Lim}}$	Maximum $\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}}$	COMPLIANCE $\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}} < 1$
Primary transmitter	Ericsson F3507g	0,4199	0,7908	<b>COMPLIANT</b>
Secondary transmitter (WLAN)	Dell Wireless 1397	0,3710		
Secondary transmitter (WLAN)	Dell Wireless 1510			
Secondary transmitter (WLAN)	Dell Wireless 1520			
Secondary transmitter (WLAN)	Dell Wireless 1515			
Secondary transmitter (WLAN)	Intel WiFi Link 5100			
Secondary transmitter (WLAN)	Intel WiMAX/WiFi Link 5150			
Secondary transmitter (WLAN)	Intel WiFi Link 5300			

**B.3.4. AUSTRALIA REQUIREMENTS**

**RELATIVE EXPOSURE FOR F3507g ERICSSON BROADBAND MODULE**

Manufacturer	Model name	Frequency range (MHz)	$S_{eq}$	$S_{Lim}$	$\frac{S_{eq}}{S_{Lim}}$
FDD V	WCDMA/HSDPA	826,4 - 846,6	0,0679	0,4132	0,1643
	HSUPA	826,4 - 846,6	0,0599	0,4132	0,1451
E-GSM 900	GSM/GPRS	880,2 - 914,8	0,1848	0,4401	<b>0,4199</b>
	EDGE	880,2 - 914,8	0,0370	0,4401	0,0840
DCS 1800	GSM/GPRS	1710,2 - 1784,8	0,2316	0,8551	0,2708
	EDGE	1710,2 - 1784,8	0,0526	0,8551	0,0615
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	0,0897	0,9612	0,0933
	HSUPA	1922,4 - 1977,6	0,0837	0,9612	0,0871

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**RELATIVE EXPOSURE FOR SECONDARY TRANSMITTERS**

Model name	FCC ID	Mode	Frequency range (MHz)	S <sub>eq</sub>	S <sub>Lim</sub>	$\frac{S_{eq}}{S_{Lim}}$
Dell Wireless 1397	QDS-BRCM1030	WiFi	2400-2483,5	0,0776	1,0000	0,0776
Dell Wireless 1510	QDS-BRCM1031	WiFi	2400,0 - 2483,5	0,0611	1,0000	0,0611
			5150,0 - 5350,0	0,0284	1,0000	0,0284
			5470,0 - 5725,0	0,0411	1,0000	0,0411
			5725,0-5850,0	0,0377	1,0000	0,0377
Dell Wireless 1520	QDS-BRCM1041	WiFi	2400,0 - 2483,5	0,1057	1,0000	0,1057
			5150,0 - 5350,0	0,0342	1,0000	0,0342
			5470,0 - 5725,0	0,0488	1,0000	0,0488
			5725,0-5850,0	0,1353	1,0000	0,1353
Dell Wireless 1515	PPD-AR5BHB92	WiFi	2400,0 - 2483,5	0,3487	1,0000	0,3487
			5150,0 - 5350,0	0,0896	1,0000	0,0896
			5470,0 - 5725,0	0,0876	1,0000	0,0876
			5725,0-5850,0	0,3710	1,0000	<b>0,3710</b>
Intel WiFi Link 5100	E2K512ANHMW	WiFi	2400,0 - 2483,5	0,0277	1,0000	0,0277
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0273	1,0000	0,0273
			5725,0-5850,0	0,0238	1,0000	0,0238
Intel WiMAX/WiFi Link 5150	PD9512ANXHD	WiFi	2400,0 - 2483,5	0,2248	1,0000	0,2248
			5150,0 - 5350,0	0,0181	1,0000	0,0181
			5470,0 - 5725,0	0,0184	1,0000	0,0184
			5725,0-5850,0	0,1261	1,0000	0,1261
		WiMAX	2496,0 - 2690,0	0,0976	1,0000	0,0976
Intel WiFi Link 5300	E2K533ANH	WiFi	2400,0 - 2483,5	0,1683	1,0000	0,1683
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0173	1,0000	0,0173
			5725,0-5850,0	0,1695	1,0000	0,1695

**SIMULTANEOUS EXPOSURE**

Equipment		Maximum $\frac{S_{eq}}{S_{Lim}}$	Maximum	COMPLIANCE
			$\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}}$	$\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}} < 1$
Primary transmitter	Ericsson F3507g	0,4199	0,7908	<b>COMPLIANT</b>
Secondary transmitter (WLAN)	Dell Wireless 1397	0,3710		
Secondary transmitter (WLAN)	Dell Wireless 1510			
Secondary transmitter (WLAN)	Dell Wireless 1520			
Secondary transmitter (WLAN)	Dell Wireless 1515			
Secondary transmitter (WLAN)	Intel WiFi Link 5100			
Secondary transmitter (WLAN)	Intel WiMAX/WiFi Link 5150			
Secondary transmitter (WLAN)	Intel WiFi Link 5300			

**B.3.5. VODAFONE REQUIREMENTS**

**RELATIVE EXPOSURE FOR F3507g ERICSSON BROADBAND MODULE**

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Manufacturer	Model name	Frequency range (MHz)	S <sub>eq</sub>	S <sub>Lim</sub>	$\frac{S_{eq}}{S_{Lim}}$
GSM 850	GSM/GPRS	824,2 - 848,8	0,1471	0,4121	0,3570
	EDGE	824,2 - 848,8	0,0928	0,4121	0,2253
FDD V	WCDMA/HSDPA	826,4 - 846,6	0,0679	0,4132	0,1643
	HSUPA	826,4 - 846,6	0,0599	0,4132	0,1451
E-GSM 900	GSM/GPRS	880,2 - 914,8	0,1848	0,4401	<b>0,4199</b>
	EDGE	880,2 - 914,8	0,0370	0,4401	0,0840
DCS 1800	GSM/GPRS	1710,2 - 1784,8	0,2316	0,8551	0,2708
	EDGE	1710,2 - 1784,8	0,0526	0,8551	0,0615
PCS 1900	GSM/GPRS	1850,2 - 1909,8	0,1098	0,9251	0,1187
	EDGE	1850,2 - 1909,8	0,0956	0,9251	0,1034
FDD II	WCDMA/HSDPA	1852,4 - 1907,6	0,1030	0,9262	0,1112
	HSUPA	1852,4 - 1907,6	0,0983	0,9262	0,1062
FDD I	WCDMA/HSDPA	1922,4 - 1977,6	0,0897	0,9612	0,0933
	HSUPA	1922,4 - 1977,6	0,0837	0,9612	0,0871

#### RELATIVE EXPOSURE FOR SECONDARY TRANSMITTERS

Model name	FCC ID	Mode	Frequency range (MHz)	S <sub>eq</sub>	S <sub>Lim</sub>	$\frac{S_{eq}}{S_{Lim}}$
Dell Wireless 1397	QDS-BRCM1030	WiFi	2400-2483,5	0,0776	1,0000	0,0776
Dell Wireless 1510	QDS-BRCM1031	WiFi	2400,0 - 2483,5	0,0611	1,0000	0,0611
			5150,0 - 5350,0	0,0284	1,0000	0,0284
			5470,0 - 5725,0	0,0411	1,0000	0,0411
			5725,0-5850,0	0,0377	1,0000	0,0377
Dell Wireless 1520	QDS-BRCM1041	WiFi	2400,0 - 2483,5	0,1057	1,0000	0,1057
			5150,0 - 5350,0	0,0342	1,0000	0,0342
			5470,0 - 5725,0	0,0488	1,0000	0,0488
			5725,0-5850,0	0,1353	1,0000	0,1353
Dell Wireless 1515	PPD-AR5BHB92	WiFi	2400,0 - 2483,5	0,3487	1,0000	0,3487
			5150,0 - 5350,0	0,0896	1,0000	0,0896
			5470,0 - 5725,0	0,0876	1,0000	0,0876
			5725,0-5850,0	0,3710	1,0000	<b>0,3710</b>
Intel WiFi Link 5100	E2K512ANHMW	WiFi	2400,0 - 2483,5	0,0277	1,0000	0,0277
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0273	1,0000	0,0273
			5725,0-5850,0	0,0238	1,0000	0,0238

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Intel WiMAX/WiFi Link 5150	PD9512ANXHD	WiFi	2400,0 - 2483,5	0,2248	1,0000	0,2248
			5150,0 - 5350,0	0,0181	1,0000	0,0181
			5470,0 - 5725,0	0,0184	1,0000	0,0184
		5725,0-5850,0	0,1261	1,0000	0,1261	
		WiMAX	2496,0 - 2690,0	0,0976	1,0000	0,0976
Intel WiFi Link 5300	E2K533ANH	WiFi	2400,0 - 2483,5	0,1683	1,0000	0,1683
			5150,0 - 5350,0	0,0173	1,0000	0,0173
			5470,0 - 5725,0	0,0173	1,0000	0,0173
		5725,0-5850,0	0,1695	1,0000	0,1695	

### SIMULTANEOUS EXPOSURE

Equipment		Maximum $\frac{S_{eq}}{S_{Lim}}$	Maximum $\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}}$	COMPLIANCE $\frac{S_{Pri}}{S_{Lim\_Pri}} + \frac{S_{Sec\_WLAN}}{S_{Lim\_Sec\_WLAN}} + \frac{S_{Sec\_BT}}{S_{Lim\_Sec\_BT}} < 1$
Primary transmitter	Ericsson F3507g	0,4199	0,7908	COMPLIANT
Secondary transmitter (WLAN)	Dell Wireless 1397	0,3710		
Secondary transmitter (WLAN)	Dell Wireless 1510			
Secondary transmitter (WLAN)	Dell Wireless 1520			
Secondary transmitter (WLAN)	Dell Wireless 1515			
Secondary transmitter (WLAN)	Intel WiFi Link 5100			
Secondary transmitter (WLAN)	Intel WiMAX/WiFi Link 5150			
Secondary transmitter (WLAN)	Intel WiFi Link 5300			

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