

流動通訊的輻射安全

Radiation Safety of Mobile Communications

無線電基站 (基站) Radio Base Stations (RBS)

- 基站是流動通訊網絡其中一項基礎組成部分，流動網絡營辦商需要在全港各處設置基站，從而向市民提供高傳輸速度及無間斷的通訊服務。
RBS are one of the fundamental components of mobile communications network. It is necessary for mobile network operators to install RBS throughout the territory in order to provide high transmission speed and uninterrupted communications services to the public.
- 香港約有10,000個地點安裝了基站。在5G時代，更多基站會需要安裝用於提供5G服務。
About 10,000 locations in Hong Kong are installed with RBS. In the 5G era, more RBS are installed for the provision of 5G services.

什麼是非電離輻射？ What is Non-ionising Radiation?

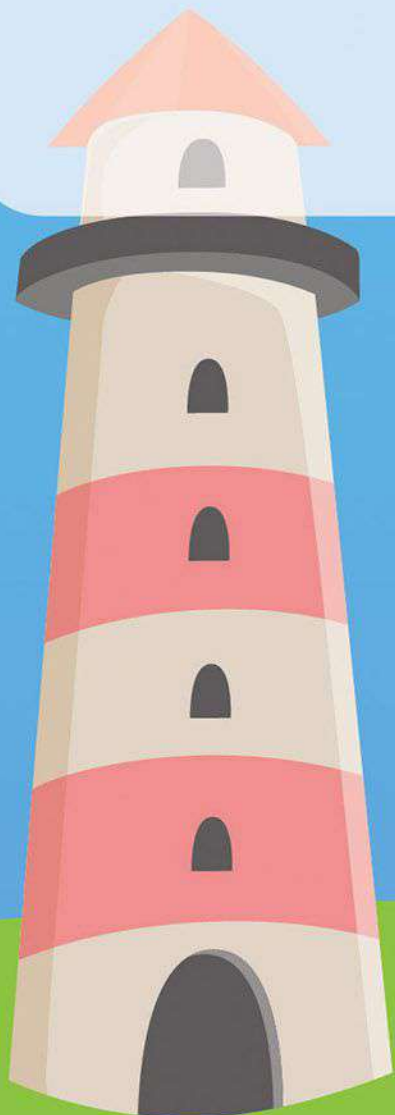
- 基站所產生的「射頻電磁場」，屬非電離輻射的一種，與X光、核輻射等電離輻射並不相同。
Unlike ionising radiation such as X-rays and nuclear radiation, radiofrequency electromagnetic fields generated by RBS are a type of non-ionising radiation (NIR).
- 非電離輻射的能量低，不足以改變物質的化學性質，亦不能打破人體內的化學鍵而造成傷害。
NIR has lower energy and is insufficient to change the chemical properties of substances. It cannot cause harm by breaking chemical bonds in the human body.

基站的輻射安全 Radiation Safety of RBS

- 通訊局在諮詢衛生署後，採用國際非電離輻射防護委員會 (ICNIRP) 所制定的非電離輻射限值，作為輻射安全標準。
The CA, in consultation with the Department of Health, has adopted the NIR limits as set by the International Commission on Non-ionizing Radiation Protection (ICNIRP) as the radiation safety standard.
- 世界衛生組織認為現時沒有充分科學證據顯示人體暴露於該限值水平以下的非電離輻射，會對健康造成不良影響。
According to the World Health Organization, there is no sufficient scientific evidence indicating that exposure to NIR levels below the ICNIRP limits will cause adverse health effects.
- 市民如對在家居附近或公眾地方的基站輻射水平有疑慮，可致電**2961 6648**，通訊辦會派員到場測量輻射水平，並向市民解釋有關測量結果。
Members of the public may call **2961 6648** if they are concerned about the radiation levels at their homes or in public places. OFCA will conduct on-site measurements of radiation level, and will explain to members of the public the measurement results.

睇短片瞭解更多

To know more, watch the short video.





流動通訊的輻射安全

Radiation Safety of Mobile Communications

5G流動電話的輻射安全

Radiation Safety of 5G Mobile Phones

- 5G流動電話產生的非電離輻射與前世代（2G / 3G / 4G）的流動電話相若，可以安全使用。與前世代流動電話一樣，大多數5G流動電話在6 GHz以下頻帶操作，並具相同的電磁特性。

Non-ionising radiation (NIR) generated by 5G mobile phones is on a par with those of the previous generations (2G / 3G / 4G) of mobile phones and is safe to use. Most 5G mobile phones operate in the sub-6 GHz bands and have electromagnetic characteristics same as those of the previous generations.

- 5G流動電話須遵從通訊局所訂明的技術要求，符合ICNIRP建議的輻射安全限值。

5G mobile phones shall meet the technical requirements prescribed by the CA and comply with the radiation safety limits as recommended by ICNIRP.

- 如大家仍有疑慮，可考慮採取一些審慎措施，例如避免持續使用流動電話及在通話時使用免提裝置。此外，由於流動電話在接收欠佳的地區會發射出較強的訊號，大家可考慮在該等地區減少使用流動電話。

If you still have concerns, you may consider taking some prudent measures such as avoiding continuous use of mobile phones and making phone calls with a hands-free device. In addition, as a mobile phone transmits stronger signal in areas of poor reception, you may wish to minimise the use of mobile phones in such areas.



手提流動通訊器材的輻射安全

Radiation Safety of Hand-held Mobile Communications Devices (HMCD)

- 手提流動通訊器材（包括手機）的輻射水平是以「比吸收率」量度。
- 通訊局採用ICNIRP建議的比吸收率安全限值，作為手提流動通訊器材的輻射安全標準。
- 所有在本地市場上銷售的手提流動通訊器材必須符合通訊局訂明的輻射安全標準，通過驗證的器材會列入載於通訊辦網站的名單內，並可貼上通訊局標籤（見右圖）：

The radiation level of HMCD (including mobile phones) is measured by "Specific Absorption Rate" (SAR). The CA has adopted the SAR limits recommended by the ICNIRP as the radiation safety standard for HMCD. All HMCD for sale on the local market must comply with the radiation safety standard adopted by the CA. Certified HMCD are listed on OFCA's website, and may be affixed with a label prescribed by the CA (see the picture on the right) :



查閱已獲認證的流動通訊器材和其比吸收率值：

Check the list of certified models of mobile communications devices and their SAR values:

