

**For information  
On 13 December 2004**

**Legislative Council Panel  
on Information Technology and Broadcasting**

**AMENDMENT OF  
THE TELECOMMUNICATIONS  
(TELECOMMUNICATIONS APPARATUS)  
(EXEMPTION FROM LICENSING) ORDER**

**PURPOSE**

This paper sets out the proposal to amend the Telecommunications (Telecommunications Apparatus) (Exemption from Licensing) Order (Cap. 106Z) (“the Order”) in order to exempt more telecommunications apparatus from the need of licensing.

**BACKGROUND**

2. Under section 8(1) of the Telecommunications Ordinance (“the Ordinance”), licences are required for importing, exporting, possessing, using, dealing in the course of trade, and demonstrating with a view to sale, radiocommunications apparatus. Section 39 of the Ordinance (“the Ordinance”) provides that the Chief Executive in Council may by order exempt any person from any of the provisions in the Ordinance.

3. In the light of latest technological and market developments, the Office of the Telecommunications Authority (“OFTA”) considers it desirable to amend the Order, which was made in February 2003, to expand and update the list of apparatus eligible for exemption from the licensing requirement.

**THE PROPOSAL**

4. While several types of telecommunications apparatus (such as wireline telephones, fax terminals, mobile phones, cordless phones, remote controls, wireless microphones, portable radios, smart card readers and wireless local area network equipment) have already been

exempted, under the Order, from the licensing requirement, we recommend the following five more types of telecommunications apparatus to be so exempted -

(a) Radio frequency identification apparatus operating within the 865 – 868 MHz and 920 – 925 MHz bands

Radio frequency identification (“RFID”) is a technology that uses radio waves to automatically identify and track items of products for supply chain management. An RFID system consists of tags attached to product items, each made up of a microchip with an antenna, and an interrogator or reader with an antenna. The reader sends out electromagnetic waves. The tags receive these waves and respond with the information stored in the microchips concerning the particular product items.

Coupled with a global information network, RFID would potentially revolutionize supply chain management, enabling products items to be identified and tracked anywhere in the world from manufacture to sales outlets. Hong Kong, as the regional hub for logistics services, would need to prepare for this new development in supply chain management.

The EPCglobal Inc., the international RFID standardization body, has recommended the 860 – 960 MHz band for RFID applications using passive tags. Spectrum authorities in different countries are required to allocate some spectrum in this band so as to enable the operation of the RFID readers locally. In USA, Canada, European countries, Australia, New Zealand, Japan and Korea, frequencies in the 860 – 960 MHz have already been allocated for RFID applications. OFTA, in consultation with various concerned parties including EPCglobal Hong Kong, Hong Kong Article Numbering Association, Hong Kong Wireless Technology Industry Association and the Radio Spectrum Advisory Committee, has made available the 865 – 868 MHz and 920 – 925 MHz bands for RFID applications in Hong Kong.

For Hong Kong to stay ahead in the logistics industries, we recommend that RFID apparatus operating in the assigned frequency bands should also be exempted from the licensing requirement and hence be covered by the Order. This would enable Hong Kong, as the regional logistics hub, to further

develop its logistics industry with less compliance burden.

(b) Mobile Earth Stations operating within 1518 – 1525 MHz / 1668 – 1675 MHz

Mobile earth stations are apparatus for mobile communications using satellites. There are already licence-exempted mobile earth stations operating in a number of frequency bands in the Order. The International Telecommunication Union (“ITU”) approved in June 2003 a new allocation to mobile-satellite service in the frequency bands 1518 – 1525 MHz (Earth-to-space) and 1668 – 1675 MHz (space-to-Earth). In order to facilitate the use of such mobile earth stations in Hong Kong, we recommend that these paired frequency bands be added to the Order.

(c) Wireless local area network operating within the 5470 – 5725 band

Wireless local area networks are used for connecting computers and their peripherals to telecommunications networks without the use of wires. A typical example of applications is the provision of access to the Internet by portable computers.

There are already a number of licence-exempted frequency bands in the Order for wireless local area networks. As the ITU has, in June 2003, allocated the 5470 – 5725 MHz band for mobile services to facilitate the massive deployment of wireless local area networks worldwide, we recommend that the same new frequency band be added to the Order.

(d) Automotive radar systems operating in the 76 – 77 GHz band

Automobile radar systems are radio devices that use radio waves to detect the conditions within 100 metres of a vehicle. Its main application is to improve vehicle safety.

In Europe, US and Japan, the 76 – 77 GHz band has been allocated for automotive radar systems. To facilitate the use of such automotive radar systems in Hong Kong, we recommend that telecommunications apparatus operating in the 76 – 77 GHz band be added to the Order.

(e) Model flying aircraft apparatus operating in the 35 MHz, 40 MHz and 72 MHz bands

In the Order, the only suitable frequency band for controlling model flying aircraft is 26.96 – 27.28 MHz band. We understand that other economies such as the USA, Canada, most European countries and Australia have allocated the 35 MHz, 40 MHz and 72 MHz frequencies on a licence-exempted basis for model flying aircraft control. We therefore recommend that a few channels in the 35 MHz, 40 MHz and 72 MHz be allocated for air modelling also on a licence-exempted basis.

5. The above proposal aims to facilitate the introduction of such telecommunications apparatus into Hong Kong. The proposal, if adopted, will help improve the business environment of Hong Kong.

6. For the proposal to take effect as soon as possible, we intend to amend the Order in early 2005.

**Communications and Technology Branch  
Commerce, Industry and Technology Bureau  
6 December 2004**