# TELECOMMUNICATIONS ORDINANCE (Chapter 106)

#### CLASS LICENCE

#### **IN-BUILDING TELECOMMUNICATIONS SYSTEMS**

The Telecommunications Authority, in exercise of the powers conferred on him by sections 7(5) and 7B(2) of the Telecommunications Ordinance (Cap 106), issues this Licence which shall come into effect on 11 November 2002.

#### 1. Interpretation

- 1.1 In this Licence
  - "Authority" means the Telecommunications Authority<sup>1</sup> appointed under section 5 of the Ordinance;
  - "building" includes any "building" as defined in the Buildings Ordinance (Cap 123) and any land upon which that building is erected and any other land which
    - (a) is in common ownership with that building or land; or
    - (b) is owned or held by any person for the common use, enjoyment and benefit (whether exclusively or otherwise) of the owners and occupiers in that building; and

"buildings" shall be construed accordingly;

"common parts" mean –

(a) where an occupation permit has been issued by the Building Authority under the Buildings Ordinance, the whole of a building, except –

<sup>&</sup>lt;sup>1</sup> Pursuant to Section 27 of the Communications Authority Ordinance, the "Telecommunications Authority" referred to in this Class Licence shall be construed as the "Communications Authority".

- (i) such parts as have been specified or designated in a lease as being for the exclusive use, occupation or enjoyment of a lessee; and
- (ii) such parts which have not been leased but have been reserved for the exclusive use, occupation or enjoyment by the owner or any person permitted by the owner;
- (b) where an occupation permit has not been issued by the Building Authority under the Buildings Ordinance, the whole of a building; and
- (c) "common parts" as defined in the Building Management Ordinance (Cap 344);

"deed of mutual covenant" means a document which -

- (a) defines the rights, interests and obligations of owners among themselves; and
- (b) is registered in the Land Registry;
- "development" means the building or group of buildings erected upon any land under the ownership of one owner, or the common ownership of more than one owner, in accordance with the relevant Government lease and deed of mutual covenant;

"entity" means any body corporate;

- "IBCCDS" means the in-building coaxial cable distribution system;
- "interconnection" means interconnection as defined in sections 2 and 36A of the Ordinance ;
- "Licensee" means a person licensed under Condition 2.1 of this Licence;
- "Ordinance" means the Telecommunications Ordinance (Cap 106);
- "System" means an in-building telecommunications system more particularly described in the First Schedule.

- 1.2 Any word or expression used in this Licence shall, unless otherwise provided, have the same meaning as it has in the Ordinance or regulations made under the Ordinance.
- 1.3 For the purposes of interpreting this Licence, headings and titles shall be disregarded.

# 2. Grant of Licence

- 2.1 Any person who falls within the class described or defined in the Second Schedule is licensed, subject to the terms and conditions of this Licence, to
  - (a) install, establish, maintain and operate the System;
  - (b) provide all forms of telecommunications services to a resident or occupier of the building or buildings within the development through the System, provided that the services do not involve communications between a location inside the building or buildings within the development and another location outside of the building or buildings within the development in which the System is installed, and are for communications between or among points within the building or buildings within the development;
  - (c) provide the service to connect the residents or occupiers of the building or buildings within the development to points of interconnection with public telecommunications networks or services licensed, or deemed to be licensed, or exempted from licensing under the Ordinance outside the building or buildings within the development; and
  - (d) receive and distribute to residents or occupiers of the building or buildings within the development terrestrial sound or television broadcasting services transmitted by radio.
- 3. General

- 3.1 This Licence shall not be construed as granting an exclusive right to the Licensee.
- 3.2 This Licence replaces any licence or any exemption from licensing, however described, which the Authority may have granted to the Licensee.
- 3.3 This Licence shall remain in full force unless expressly revoked by the Authority.

# 4. Compliance Generally

- 4.1 The Licensee shall comply with the Ordinance, regulations made under the Ordinance, licence conditions or any other instruments which may be issued by the Authority under the Ordinance and such guidelines or Codes of Practices which may be issued by the Authority as in his opinion are suitable for the purpose of providing practical guidance on any particular aspect of any conditions of this Licence.
- 4.2 The Licensee shall not use the System to provide a public telecommunications service.

# 5. System Maintained in Satisfactory Manner

5.1 The Licensee shall at all times and from time to time during the subsistence of this Licence install, establish, maintain and operate the System in a manner satisfactory to the Authority.

#### 6. Interference and Obstruction

- 6.1 The Licensee shall take reasonable measures to install, establish, operate and maintain the System in such a way as not to cause any direct or indirect harmful interference with or physical obstruction to any lawful telecommunications service, or the installation, maintenance, operation, adjustment, repair, alteration, removal or replacement of the facilities of any lawful telecommunications or utility service provider.
- 6.2 The Authority may give such reasonable directions as he thinks fit to

avoid any direct or indirect harmful interference or physical obstruction referred to in Condition 6.1. The Licensee shall comply with the directions.

# 7. Interconnection

- 7.1 The Licensee shall interconnect the System, on a non-discriminatory basis, with public telecommunications networks and services licensed, or deemed to be licensed, or exempted from licensing under the Ordinance.
- 7.2 The Licensee shall use all reasonable endeavours to ensure that interconnection is done promptly, efficiently and at fair and reasonable charges.

#### 8. Use of Channel within the IBCCDS

- 8.1 The Licensee shall not use any frequency channel within the IBCCDS of the System to carry telecommunications or broadcasting services of which a licence is required but not obtained under respectively the Ordinance and the Broadcasting Ordinance (Cap 562).
- 8.2 The Licensee shall comply with the directions, guidance notes, codes of practice, technical specifications and statements issued by the Authority from time to time regarding the use of the frequency channels within the IBCCDS.
- 8.3 Where the number of frequency channels within the IBCCDS to be used for carrying television broadcast and security signals exceeds the number prescribed by the Authority from time to time in the directions, guidance notes, codes of practice, technical specifications or statements referred to in Condition 8.2, the Licensee shall submit the transmission plan, including the exact channels of the services to be carried, to the Authority for approval.

# 9. Safety

9.1 The Licensee shall take proper and adequate safety measures for the safeguarding of life and property in connection with all installations,

equipment, apparatus operated or used, including safeguarding against exposure to any electrical or radiation hazard emanating from the installations, equipment or apparatus used under this Licence.

9.2 The Licensee shall comply with the safety requirements laid down in any safety specification issued by the Authority and any directions of the Authority in relation to any safety matter.

#### **10. Requirement for Permission of Installation**

- 10.1 No wire shall be laid or maintained by the Licensee across any public street or unleased Government land.
- 10.2 Direct interconnection may not be made between buildings not within the development without the consent in writing of the Authority.

#### 11. System Layout Plan

- 11.1 The Licensee shall at all times maintain an updated layout plan of the System which shall contain at least the following information:
  - (a) routes of the trunking system;
  - (b) types of cables with capacities or quantities;
  - (c) number of outlets; and
  - (d) locations of antennas, receiving systems, repeaters, amplifiers, distribution boxes, if any.
- 11.2 The Licensee shall provide the Authority with an updated layout plan of the System within 14 days upon the written request from the Authority.

# FIRST SCHEDULE

# **In-Building Telecommunications System**

- 1. Subject to paragraphs 2, 3 and 4, an in-building telecommunications system means a telecommunications system installed, established, operated and maintained within the common parts of a building or buildings within the development so long as the telecommunications system does not cross unleased Government land or public streets.
- 2. An in-building telecommunications system includes a wireline and / or wireless system. Where the system includes a wireless system, the transmitters and receivers in the wireless system shall operate only at the frequencies and power level, and conform to the emission characteristics, specified in the Third Schedule.
- 3. For the purpose of this Licence, an in-building telecommunications system includes
  - (a) the necessary ancillary equipment such as antennas and associated equipment for the reception and distribution of terrestrial sound and television broadcasting services; and
  - (b) the extension of the system up to the point of termination at the wall sockets within individual units or flats which are under the exclusive occupation of the residents or occupiers of the building or buildings within the development.
- 4. For the avoidance of doubt, an in-building telecommunications system under this Licence does not include
  - (a) an in-building telecommunications system which is installed, established, operated and maintained by a fixed carrier licensee or a fixed telecommunications network services licensee who has the right to provide local telecommunications services;
  - (b) an in-building telecommunications system which is already subject to a licence issued by the Authority under the Ordinance;

- (c) dish aerials or antennas and the associated equipment for the reception and distribution of non-terrestrial broadcasting services; and
- (d) an in-building telecommunications system only for private communications, and for the purpose of this Licence and without affecting the generality of the foregoing paragraphs in this Schedule, "private communications" means communications between users of the same entity or organisation.

#### **SECOND SCHEDULE**

#### The Class of Persons Qualified as Licensees

- 1. Subject to paragraph 2, the class of persons who is qualified as Licensees shall be all those persons (whether they be sole owners, joint tenants or tenants in common) who are vested with the legal estate or an equitable interest in the common parts of a building or buildings within a development in which the System is installed, established, operated and maintained.
- 2. Where the property interest in a building or buildings within the development is held in the form of undivided shares, the class of persons who is qualified as Licensees shall be determined as follows:
  - (a) if there is a corporation registered under section 8 of the Building Management Ordinance (Cap 344) in respect of the building or buildings within the development, the corporation is qualified;
  - (b) if paragraph 2(a) is not fulfilled, but there is an entity which is assigned with legal estate or interest in the share or shares in the common parts of a building or buildings within the development and is duly appointed to manage the common areas on the owners' behalf, such an entity is qualified;
  - (c) if paragraphs 2(a) and (b) are not fulfilled, but there is an entity currently appointed under the deed of mutual covenant to manage the common parts of a building or buildings within a development and is authorised by the registered owners of not less than 50% of the shares to manage the in-building telecommunications system, such an entity is qualified.

# THIRD SCHEDULE

# Frequencies, Power Level and Emission Characteristics Referred to in Paragraph 2 of the First Schedule

#### 1. Interpretation

"carrier power", "effective radiated power (e.r.p.)", "emission", "equivalent isotropically radiated power (e.i.r.p.)", and "spurious emission" have the meanings assigned to them respectively by Article 1 of Chapter 1 of the Radio Regulations published by the General Secretariat of the International Telecommunication Union, edition of 2001, as revised from time to time.

**"modulation"** has the meaning assigned to it by the Recommendation ITU-R V.662 "Terms and Definitions" approved by the International Telecommunication Union as revised from time to time.

"frequency hopping spread spectrum modulation" means a modulation system which hops to channel frequencies that are selected at the system hopping rate from a pseudorandomly ordered list of hopping frequencies.

"digital modulation" means the process by which the characteristics of a carrier wave are varied among a set of predetermined discrete values in accordance with a digital modulating function as specified in document ANSI C63.17-1998 published by American National Standards Institute.

2. Where an in-building telecommunications system under the Licence includes a wireless system, the transmitters and receivers in the wireless system shall be in compliance with the standards and / or certification requirements as may be prescribed by the Authority pursuant to sections 32D and / or 32E of the Ordinance, and operate only at such frequencies, power level and emission characteristics as set out in the following table:

<b>Frequency Band</b>	Maximum Output Level	Spurious Emission Limit
1880 – 1900 MHz <sup>[1]</sup>	Peak power not to exceed 250 mW for apparatus with antenna output terminal or peak e.i.r.p. not to exceed 250 mW for	250 nW e.r.p. for frequency below 1 GHz; and 1 $\mu$ W e.r.p. for frequency above or equal to 1 GHz
1895 – 1906.1 MHz <sup>[2]</sup>	apparatus with integral antenna Carrier power not to exceed 10 mW for apparatus with antenna output terminal or e.r.p. not to exceed 10 mW for apparatus with integral antenna	250 nW e.r.p. for frequency within 1895 – 1906.1 MHz; and 2.5 $\mu$ W e.r.p. for frequency within 30 MHz – 10 GHz excluding 1895 – 1906.1 MHz
2400 – 2483.5 MHz	Peak e.i.r.p. not to exceed 4 W for frequency hopping spread spectrum modulation or digital modulation systems, or aggregate e.r.p. not to exceed 100 mW for any modulation	e.r.p. not to exceed 10 µW outside the frequency band in which the fundamental frequencies are located
5150 – 5350 MHz	e.i.r.p. not to exceed 200 mW using only digital modulation. See also <sup>[3]</sup>	e.r.p. not to exceed 10 μW
5725 – 5850 MHz	Peak e.i.r.p. not to exceed 4 W for frequency hopping spread spectrum modulation or digital modulation systems, or aggregate e.r.p. not to exceed 100 mW for any modulation	e.r.p. not to exceed 10 $\mu$ W outside the frequency band in which the fundamental frequencies are located

- <sup>[1]</sup> The carrier frequencies of the apparatus shall be  $1880.064 + (1.728 \times n)$  MHz, where n is an integer in the range 1 to 10.
- <sup>[2]</sup> The carrier frequencies of the apparatus shall be  $1895.15 + (n 1) \times 0.3$  MHz, where n is an integer in the range 1 to 37.
- <sup>[3]</sup> Use of the band 5150 5350 MHz is restricted to indoor operations until the requirements of the International Telecommunication Union as applicable to the band are available, by which time the use of the band shall be in compliance with the requirements as laid down by the International Telecommunication Union.