Radio Spectrum and Technical Standards **Advisory Committee**

SSAC Paper 10/2018 for Information:



12 December 2018



Interference from Nontelecommunications apparatus

Unintentional radiators - Electrical and

electronic apparatus

Make-break switching operations of electrical apparatus

Oscillators of electronic devices

Electromagnetic Disturbance

Motor brushes of electrical apparatus

Power and signals in circuits or cables of electronic and electrical devices



Cap. 106B (1)

Under Section 37 of Telecommunications Ordinance (Cap. 106), Chief Executive in Council (CE in Council) may provide regulations for:

- the operation and use of apparatus for telecommunications or apparatus that generates and emits radio waves
- prohibition and control of electrical or radiated interference with the working of apparatus for telecommunications apparatus



Cap. 106B (2)

- First came into force in 1966, amended in 1993 and 2014
- Regulates manufacturers, assemblers and importer of electrical and electronic apparatus
- Cover six classes of apparatus
- No certification requirement



Cap. 106B (3)

- Make reference to widely recognised international/regional/national standards in major markets (e.g. US, Europe and Mainland)
- No specific test methods prescribed, however, the CA is the sole authority to determine the measurements and computation methods in order to assess if an apparatus comply with the applicable control limits



Class of Apparatus

Propulsion systems - internal combustion engine, electrical means, or both in boats or vehicles

Devices - equipped with internal combustion engines or traction batteries

Information technology equipment

Sound and television broadcast receivers and associated equipment

Electrical lighting and similar equipment

Household appliances, electric tools and similar apparatus



Reference Standards



International
Electrotechnical
Commission (CISPR
standards)

National Standards (GB standards) of the People's Republic of China



for Electrotechnical
Standardization
(EN standards)

Code of Federal Regulations (CFR) of Federal Communications
Commission (FCC) of USA

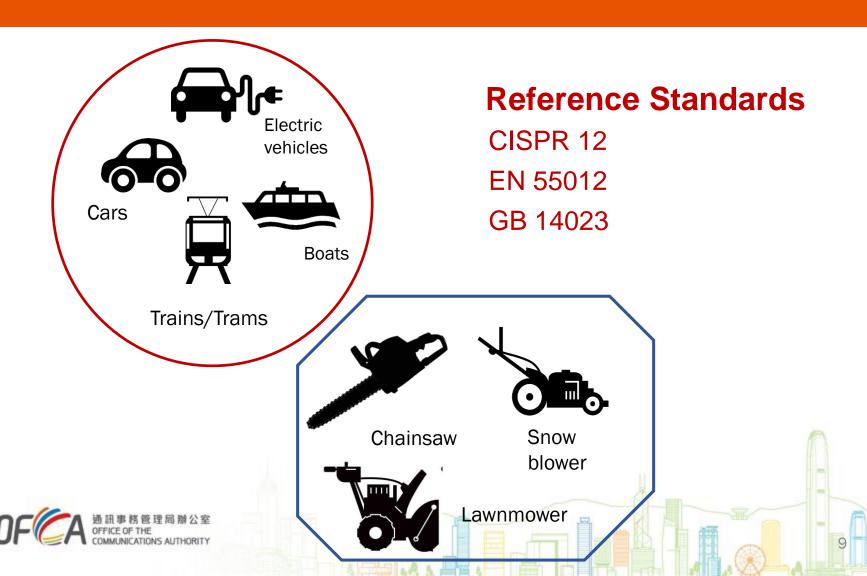


Compliance Requirements of Apparatus

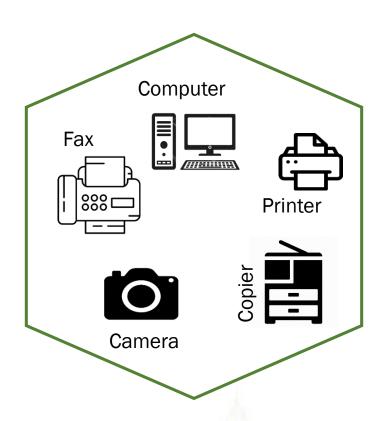
 For each class of apparatus, compliance with any one of the referenced standards in Cap 106B is acceptable



Propulsion Systems and Devices



Information Technology Equipment



Reference Standards

CISPR 22

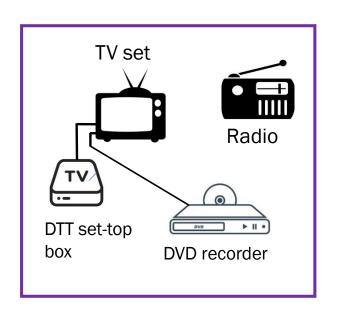
EN 55022

GB 9254

47 CFR Part 15 Subpart B



Sound and television broadcast receivers and associated equipment



Reference Standards

CISPR 13

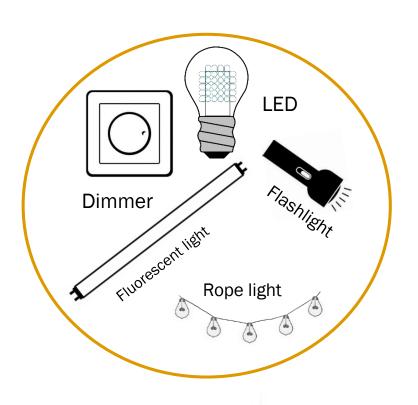
EN 55013

GB 13837-2003

47 CFR Part 15 Subpart B



Electrical lighting and similar equipment



Reference Standards

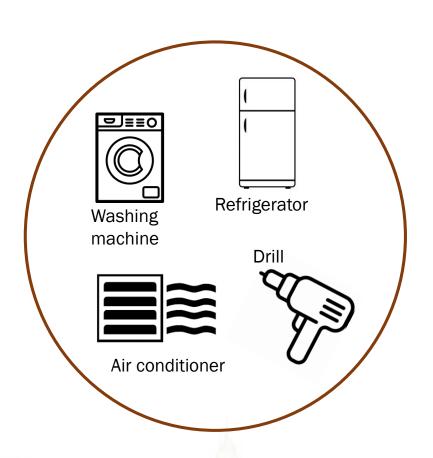
CISPR 15

EN 55015

GB 17743



Household appliances, electric tools and similar apparatus



Reference Standards

CISPR 14-1

EN 55014-1

GB 4343.1



Future Updates of Cap 106B (1)

- Regulation 10 of Cap 106B provides that CA may amend the control limits, by order published in the Gazette, if the limits are set out in the standards published by any one of the standardization bodies
- Allows flexibility for the Communications Authority to update the control limits without prior approval of CE in Council



Review of Reference Standards (1)

- New editions of reference standards published from time to time
- OFCA conducts annual review to study the latest editions of the reference standards to determine if updating of control limits is necessary



Review of Reference Standards (2)

- New editions update, amongst others, types of devices in apparatus category without material changes in control limits
- No updates of the control limits required based on the results of reviews



Way Forward

 OFCA will keep in view the reference standard developments to ensure the interference control regime in Hong Kong are up to date and on par with international practice



