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19 May 2011

Chartered Institute of Housing, Asian Pacific Branch Room 2709-11. Shui On Centre 6-8 Harbour Road Wanchai Hong Kong (Attn: Mr. Poon Yuen Fong, Sanford

Dear Mr. Poon.

Chairman)

Control of LED Lighting Equipment and Associated Power Supplies

I am writing to you further to our previous letter of 26 November 2010 and the associated information note dated November 2010 about the control of LED lighting equipment.

After issuance of the information note dated November 2010, we have received some feedback and concerns from the industry and other relevant parties. After consideration of the feedback, we have prepared an additional information note dated May 2011 to provide further information on the matter. We believe this information has addressed the concerns of the industry. A copy of this additional information note is also enclosed. Your assistance to pass on it to your members for their reference and onward transmission to their contractors, project managers and consultants who are involved in projects related to LED lighting and associated power supplies will be highly appreciated.

If you need further information, please feel free to contact me or my colleague, Mr. C H Chan at 2961 6718 (email: chchan@ofta.gov.hk).

Yours sincerely,

(Warren Wong) for Director-General of Telecommunications





FURTHER INFORMATION TO NOTES ON AVOIDING RADIO INTERFERENCE CAUSED BY LED LIGHTING EQUIPMENT AND ASSOCIATED POWER SUPPLIES

In November 2010, OFTA issued an information note drawing the attention of manufacturers, suppliers, dealers, contractors, users of LED lighting equipment and other relevant parties to the potential harmful interference that may be caused by LED lighting equipment and the associated power supplies to the lawful radiocommunications services. Subsequently, OFTA has received feedback from the industry and other relevant parties. This information note serves to provide further information on the issue, as follows -

- (a) The control limits for radio frequency disturbances of certain classes of electrical apparatus (including LED lighting equipment) are set out in the Telecommunications (Control of Interference) Regulations (Cap 106B) (the "Regulations"). These control limits are generally based on the recommendations of or standards specified by the International Special Committee on Radio Interference (CISPR) of the International Electrotechnical Commission (IEC).
- (b) Currently, the control limits of the Regulations are based on the CISPR standards in force some years ago. The Administration is now taking steps to amend the Regulations to bring the control in line with the updated standards which may include the CISPR standards as well as other applicable international, regional or national standards. Consideration will also be given to the introduction of a transitional arrangement so that mandatory compliance with the updated standards is required only after the amendment Regulations have come into operation for a specified period of time, say, one year. Further information will be released when there is a clearer picture of the way forward.
- (c) In the information note of November 2010, OFTA expressed concern on some "large LED lighting systems" which might cause interference to legitimate radiocommunications services operating at frequencies above 300 MHz for which CISPR 15 (for electrical lighting and similar equipment) does not contain the radiated disturbance limits. One example of such large systems is the outdoor LED advertisement panel (including associated power supplies) which employs a large number of LED lighting units and consumes total power in the order of hundreds of watts or above. For such system, if it is

computer-controlled or is part of a data processing system, it may be dealt with under standards that contain provisions governing the radiated disturbance at frequencies above 300 MHz, e.g. CISPR 22 covering information technology equipment.

(d) As regards LED lighting equipment (including the associated power supplies) designed for general lighting and illumination purpose, for the purpose of avoidance of interference with other telecommunications installations, compliance with CISPR 15 may be sufficient. However, in case there is complaint of interference to other legitimate radiocommunications services from an installation comprising LED lighting equipment and the associated power supplies, OFTA may handle the case in accordance with the provisions of the Telecommunications Ordinance (Cap 106), e.g. sections 32D and 32J. In such case, OFTA may require the person possessing the installation and the concerned equipment to take necessary measures to prevent the interference. Such measures may include making modifications to the installation and the concerned equipment to ensure compliance with the relevant standards, which may include CISPR 15 and IEC 61204-3 as mentioned in our information note of November 2010, as well as other appropriate standards which contain limits on radiated disturbance at frequencies above 300 MHz.

If further information is required on the issue, please send email to chchan@ofta.gov.hk or call Mr. C H Chan at telephone no. 2961 6718.

Office of the Telecommunications Authority May 2011