Fire Safety Standards Advisory Group (FSSAG) Matter Discussed in the 64th FSSAG Meeting held on 9 February 2021

1. Review of the Requirements for Emergency Lighting

- > Routine Inspection & Tests for Self-contained Emergency lighting System
- > Review of PPA 104 (Issued under cover of FSD Circular Letter No. 1/2006)

The draft Technical Guidance (TG) for BS 5266-1:2016 and BS 1838:2013 were prepared and distributed to members for comment on 23.10.2020. Having incorporated the comments received, the finalized version of the Technical Guidance was distributed to members on 19.11.2020 for proposed endorsement in this FSSAG meeting. Since there were no further comments received by the time of the meeting, the TG was recommended to be endorsed in the meeting. The circular letter for the first issuance of the TG would be prepared and issued in complementary to the circular letter for the 5th Revision of PPA-104 and PPA104A.

Since the contents of 104 and 104A had been endorsed in the last FSSAG meeting, the relevant Circular Letter would be issued in due course. Regarding the TG for BS 5266-1:2016, the draft had been circulated to Members for consideration. Comments received had been incorporated in the draft where appropriate. As no further comments were raised in the meeting, the contents of the Technical Guidance for BS 5266-1:2016 were endorsed. The Circular Letter concerned would be issued in due course. To allow the trade more time to acquaint with the new requirement, the implementation date might be 6 months after the issue of the Circular Letter. The actual implementation date would be stated in the Circular Letter.

When making FS Notes, the number and date of the relevant Circular Letter should be quoted to show that the updated requirement had been applied.

2. Enhancement on Application Procedure for Approval/Acceptance of Fire Service Installations and Equipment (FSI) and other Products

FSD Circular Letter No. 3/2020 in respect of the facilitation measures of application procedure for approval/acceptance of FSI and other Products was issued on 15.7.2020. As the relevant Circular Letter had been issued, this item could be deleted.

The facilitation measures of application procedure for approval/acceptance of FSI and other Products had only been implemented since January 2021, there might be minor issues/problems not covered in the relevant Circular Letter found later when executing the measures.

Whenever a new measure or a new requirement was implemented, it was not uncommon that minor issues might be generated or observed that needed to be handled. If such situation happened, RFSICs and stakeholders were always welcomed to contact the subject officer of FSD for clarification/discussion.

As the relevant Circular Letter had been issued, it was proposed to delete this item in the next meeting. Members had no objection to the proposal.

3. Implementation of BS 5839: 2017 "Fire Detection and Fire Alarm Systems for Buildings – Part 1: Code of Practice for Design, Installation, Commissioning and Maintenance of Systems in Non-domestic Premises"

The draft Technical Guidance (TG) for BS 5839-1:2017 together with Testing and Commissioning Checklist (TCC) were prepared and distributed to Members for comment on 17.11.2020. Since there were no major comments received by the time of the meeting, the TG and TCC were recommended to be endorsed in this meeting. The circular letter would be prepared and issued in due course.

The draft TG and TCC had been reviewed for some time. Gratitude was expressed to members of the SWG for their effort and contribution towards the subject matter. The TG and TCC had been circulated to Members before and their comments had been incorporated, where appropriate, in the final draft. As no further comment had been received before the meeting, it was proposed to endorse the contents of the TG and TCC in this meeting so that the relevant Circular Letter could be prepared and issued afterwards. The implementation date of the new requirement would be stated in the relevant Circular Letter. Members had no objection to the proposal.

4. Review on LPC Sprinkler Rules 2015 incorporating BS EN 12845

The Technical Guidance on Application of LPC Rules for Automatic Sprinkler Installations 2015 incorporating BS EN 12845 in Hong Kong had been published together with FSD Circular Letter No. 5/2020 on 10.9.2020. Gratitude was expressed to members of the SWG for their great contribution in this regard. As there was no issue to follow up, it was suggested to delete this item in the next FSSAG meeting.

Members' attention was drawn to the detailed discussion made under item 2 of the last FSSAG meeting in which members had been advised that according to LPC Rules for automatic sprinkler installations, PRV was not adopted for pressure adjustment/balancing in the hydraulic system. Instead, orifice plates should be used if this was required technically. In local

practice, PRV would only be allowed for regulating the high-water pressure of water supply to the sprinkler inlets via fire engine before connecting to sprinkler pumps in case they also served the function of intermediate booster pumps in high rise sprinkler installations. Members agreed to delete this item in the next meeting.

5. Automatic Operated Total Flooding Systems complying with NFPA Standard 2001

Subsequent to the discussions in the last meeting regarding integrity test for newly installed total gas flooding system of A&A nature in existing premises, FSICA returned their views as below:

- (i) For newly installed system in existing building under major A&A works involving Authorised Person (AP), the enclosure integrity test report prepared by FSIC / other party shall be signed by AP.
- (ii) For newly installed system in existing building under minor A&A works without involving AP, the same test report shall be signed by FSIC.

The proposal of FSICA from practical point of view and the convenience of implementation, it was suggested that regardless of the scale of the A&A works, the test report should be signed by FSIC as they were the qualified parties to installed FSI to meet the Code requirements. Members were invited to give their views for an agreed practice for implementation.

After a detailed discussion on the subject matter, Members had different views on the following two issues:

- (i) For new A&A works, irrespective of whether a project Authorised Person had been employed, if a gas suppression system would be installed, a test report on the system should have been counter-signed by a RFSIC; and
- (ii) the way to handle the integrity test report regarding the annual maintenance.

Members were invited to consult their relevant stakeholders and partners concerned to see if a consent could be reached. The issue would be further discussed in the next meeting.

6. Inspection, Maintenance, Modification and Repair of Fire Service Installations and Equipment with Moving Parts

The AI checklist for Sprinkler System was promulgated by issuance of FSD Circular Letter No. 8/2020 on 15.12.2020. To allow more time for the trade to acquaint themselves with the new arrangement and practice, the AI checklist for sprinkler systems would take effect on 1.6.2021

and the new arrangement would be reviewed 12 months after its implementation. Chinese version of the checklist would be published in due course.

An FSD Circular Letter No. 9/2020 regarding Pressure Reducing Valves for FH/HR Systems was published on 24.12.2020. The circular letter served as a reminder of the requirement that FH/HR systems, including PRVs fitted to the systems, shown on the record drawings of FSIs submitted to the D of FS, should be maintained in good order and condition at all time.

PRVs were fitted to FH/HR systems to ensure that performance of the systems met the technical requirements specified in the CoP. FH/HR systems equipped with PRVs were able to maintain the integrity and functionality of its piping and components such that no part of the internal pipework was subjected to excessive water pressure. Where PRVs were installed, a bypass arrangement should be incorporated to enable isolation of any defective PRV for necessary repair or replacement. Under no circumstances should the bypass be used as a permanent means of water supply for the FH/HR systems.

RFSICs were reminded that FSIs should conform to the submitted plans and be maintained at all time in good condition to the satisfaction of the D of FS. Any removal of PRVs in the FH/HR systems of a building would be deemed to be a fire hazard if it was not hydraulically necessary to do so for compliance with the requirements of system performance specified in the Codes, and submissions for applying for such removal under the item "Alteration and Addition works to FSIs" in FSI/314A would not be accepted by FSD.

According to paragraph 2 of FSD Circular Letter No. 9/2020, "Where PRVs are installed, a bypass arrangement shall be incorporated to enable isolation of any defective PRV for necessary repair or replacement." FSD was requested to clearly define the meaning of "a bypass". It was replied that the term referred to one piping with the provision of two PRVs. If one of the two PRVs was defective, the bypass could be used as a replacement on a temporary basis. Nevertheless, the bypass should not be used as a permanent means of water supply for the FH/HR systems.

7. FSI Provisions for Car Parking Facilities with Automated Parking System (APS)

An Information Paper had been issued to relevant departments in July 2020 to invite comments and views. Replies from a few departments were still pending for consolidation. Further development on the FSI provisions for Car Parking Facilities with APS would be reported in next meeting.

8. Demarcation and Extent of Fire Resisting Cables for FSI and interfacing with other Building Services Installations

Having reviewed the proposal made by FSICA in detail, the cables requirements for various FSI systems had been explicitly stated in FSD Circular Letter No.2/2017. Particularly, the requirements for cables used for all parts of the critical signal paths should refer to the recommendation given under Clause 26.2 of British Standard 5839: Part 1:2002+A2:2008 and FSD Circular Letter No.1/2009.

9. Operation Procedure of Fire Shutter (All Types) under Fire Alarm Mode

The operation flow chart after refinement was attached to Item 11 of the *Matter Discussed in the 63th FSSAG Meeting* as Appendix 2a. It was generalized in point form to list the testing procedures in a more direct approach for easy understanding and implementation. Should members have no further comment, it was suggested to delete this item in the next meeting. Members agreed to delete this item in the next meeting.

10. Spacing of Smoke Detectors (Actuation Devices) and Cross Zone Arrangement for Gas Flooding System (FSICA)

Smoke detectors for gas flooding system was considered as Automatic Actuating Devices (AAD). To ensure the responsibility and reliability of the system, the cross-zone arrangement should be made in each detection space. The detectors should be installed as far as practicable to the provisions of British Standard 5839: Part 1, according to the requirement. The proposed arrangement could not represent all the possible scenarios and would not be taken as reference here. Members exchanged views on the issue.