



# SCDF

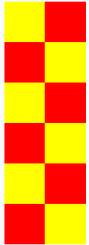
The Life Saving Force

... for a safer Singapore



<https://go.gov.sg/fseworkshop1july20>

22



# Fire Safety Engineer (FSE) Workshop

Friday 1<sup>st</sup> July 2022 from 9:30 am to 12:30 pm (scan QR code for attendance)

- Video Conference via Zoom
- Physical attendance at HQ SCDF Meeting Room 2



# Agenda:

1. PB Regulatory System (Update)
  - FSE Registration
  - Number of PB cases
2. CPE Program (update)
3. Admin Requirements (update)
4. Fire Engineering Technical Requirements (update)
5. QnA



# Performance-Based Regulatory System



# FSE Registration

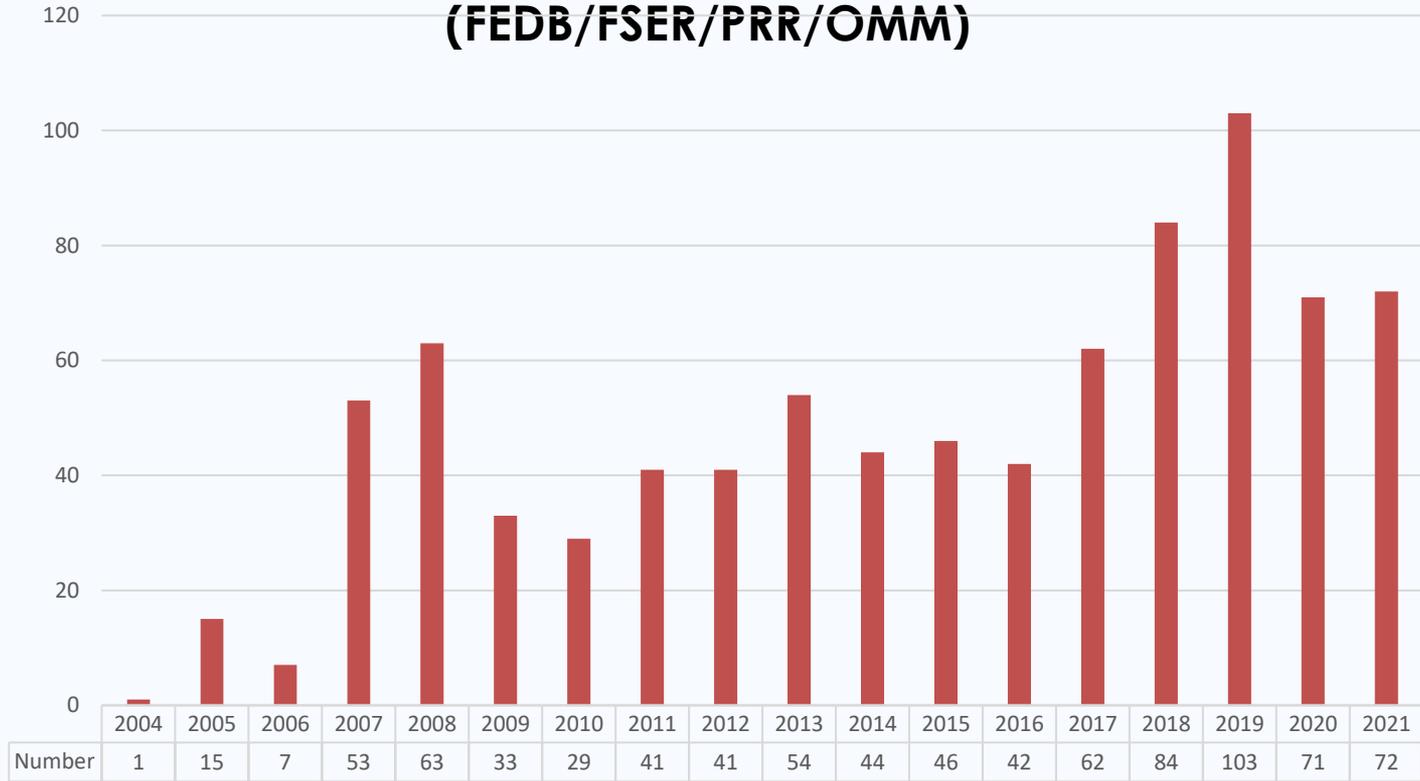
| Year | Number of FSEs registered | Year | Number of FSEs registered | Year | Number of FSEs registered   |
|------|---------------------------|------|---------------------------|------|-----------------------------|
| 2004 | 40                        | 2011 | 0                         | 2018 | 2                           |
| 2005 | 11                        | 2012 | 5                         | 2019 | 0                           |
| 2006 | 5                         | 2013 | 2                         | 2020 | 0                           |
| 2007 | 7                         | 2014 | 1                         | 2021 | 0                           |
| 2008 | 8                         | 2015 | 3                         | 2022 | 1<br>(Register in Sep 2022) |
| 2009 | 7                         | 2016 | 0                         |      |                             |
| 2010 | 3                         | 2017 | 0                         |      |                             |

- Current FSEs (“Practising” & “Restriction of Practice”) – 77
  - Deregistered – 17 (No longer practicing)

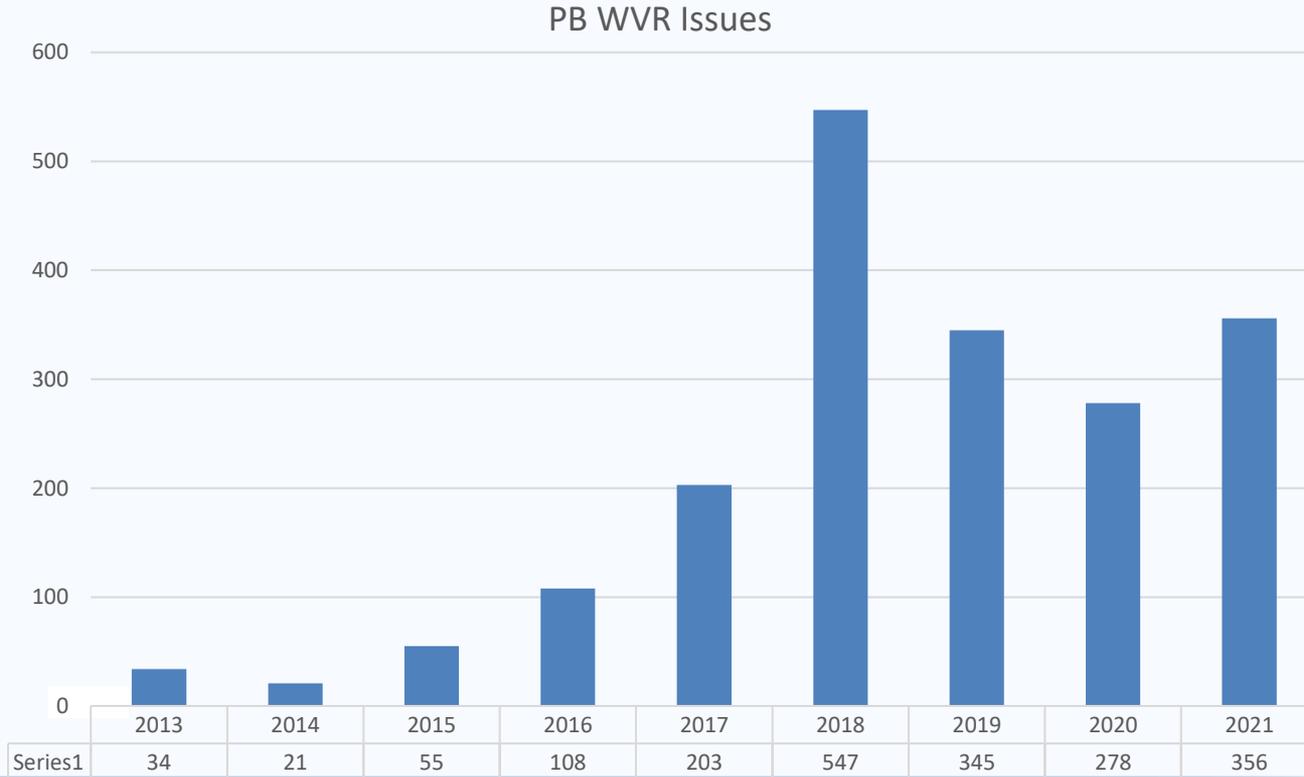


# Number of PB Cases

(FEDB/FSER/PRR/OMM)



# Number of PB WVR Issues



# Continuing Professional Education Program

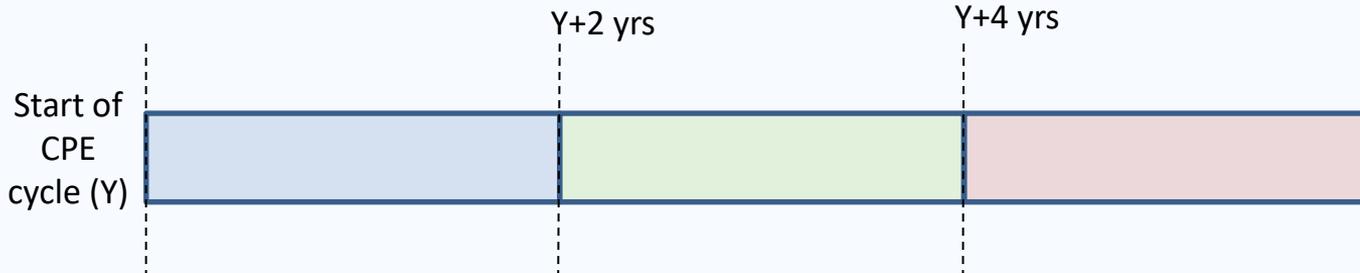
| S/No                       | Approved Course   | Date                       | CPE Hrs |
|----------------------------|---|----------------------------|---------|
| 102                        | Overcoming challenges of occupant fire evacuations from childcare centres (Online)                    | 27 Jan 2022                | 1       |
| 103                        | Fire Modelling (Online)   | 09 Feb 2022 to 02 Mar 2022 | 6       |
| 104                        | Online Seminar - Smoke Control Essentials   | 15 Feb 2022 to 08 Mar 2022 | 15      |
| 105                        | Fire engineering for bush fire protection in NSW (Online)   | 23 Feb 22                  | 1       |
| 106                        | A Framework for More Robust Fire Engineering (Online)   | 07 Mar 2022 to 16 Mar 2022 | 6       |
| 107                        | Understanding Human Behaviour in Fire (Online)  | 07 Mar to 11 Mar 2022      | 7       |
| 108                        | Introduction to PB Design and Regulation in Europe (Online)   | 14 Mar to 18 Mar 2022      | 7       |
| 109                        | SFPE 22 - International Conference on Performance-Based Codes and Fire Safety Design Methods (Online) | 23 Mar 2022 to 25 Mar 2022 | 15      |
| 110                        | Fire and Life Safety of Very Tall Buildings: Challenges and Strategies (Online)                       | 28 Mar 2022 to 1 Apr 2022  | 7       |
| 111                        | Advanced Fire Dynamic Simulator with Pyrosim and Smokeview (Online)                                   | 04 Apr 2022 to 29 Apr 2022 | 22      |
| 112                        | Human Behaviour and Evacuation Modelling  | 1 Aug 2022 to 2 Aug 2022   | 16      |
| 113                        | FISAC conference  | 16 Nov 2022 to 17 Nov 2022 | 18      |
| 114                        | FISAC workshop  | 18 Nov 22                  | 5       |
| Last updated: 17 June 2022 |   |                            |         |

- [www.scdf.gov.sg](http://www.scdf.gov.sg)
  - >> Fire Safety
  - >> Plans and Consultations
  - >> Performance-Based Approach to Fire Safety Design
  - >> List of approved CPE courses
- Emails from the PB team (LTC Tong / Mr Shimon)

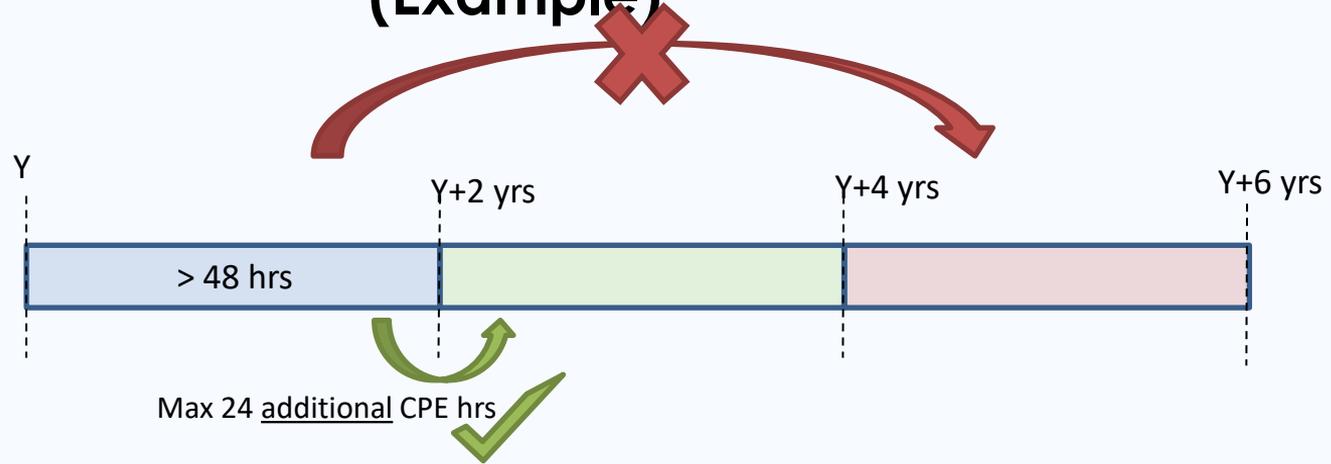


# CPE Program (Recap)

- Attain minimum 48 CPE hours for every 2 year-cycle. Cycle starts on:
  - 1 Sep 2013 (for FSEs registered before 1 Sep 2013)
  - FSE registration date (for FSEs registered after 1 Sep 2013)
- Different FSEs may have different CPE training cycle start/end dates
- FSE's responsibility to track and monitor own CPE training records
  - ✓ Development of CPE portal still on-going



# Carry over of CPE hours (Example)



- Allow extra CPE hours (up to 24 additional CPE hrs in the immediate previous cycle) to be carried forward to the NEXT training cycle only



# Failure to meet CPE requirements

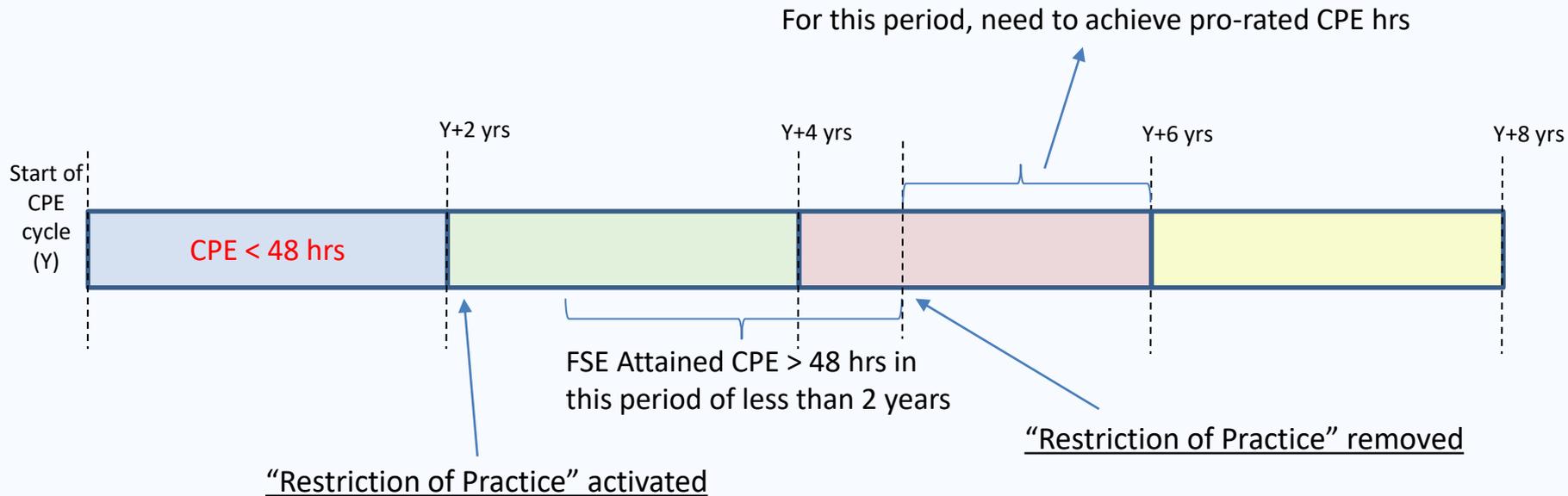
| Registration Number | Registration Date         | Full Name | Correspondence Address / E-mail Address                            | Contact Number (Office / Home / HP) | Status*   |
|---------------------|---------------------------|-----------|--|-------------------------------------|---|
| 025                 | 1 <sup>st</sup> July 2004 |           |  | )                                   | Practising  |
| 026                 | -                         |           | E-mail: <a href="mailto:10580@smgnt.com.sg">10580@smgnt.com.sg</a> |                                     | Not practising                                    |
| 027                 | 1 <sup>st</sup> July 2004 |           |  |                                     | Practising  |
| 028                 | -                         |           |  |                                     | Not practising                                    |
| 029                 | 1 <sup>st</sup> July 2004 |           |  |                                     | Restriction of Practice (From 1 Sep 2017 onwards) |
| 030                 | -                         |           |  |                                     | Not practising                                    |
| 031                 | 1 <sup>st</sup> July 2004 |           |  |                                     | Practising  |
| 032                 | 1 <sup>st</sup> July 2004 |           |  |                                     | Restriction of Practice (From 1 Sep 2017 onwards) |

Practising status listed as “**Restriction of Practice**” instead of “**Practice**” in FSE register

- Unable to submit PB plans & reports
- Existing submissions will not be processed further
- Allow reinstatement once they fulfill 48 CPE hours within a 2 year period (see example in next slide)
  - From the point of reinstatement to the end of the FSE’s cycle, need to attain pro-rated CPE hours to maintain status.
  - FSE to submit reinstatement declaration



# Example





# CPE declaration at end of training cycle

Ensure the time period aligns with your training cycle (or the prorated duration if recently reinstated)

May include carry forward from immediate previous training cycle

Ensure approval from SCDF (for the presentations/lectures to be awarded CPE hours) is obtained prior to the event

Ensure:

- 48 CPE hours or more, or
- exceed the pro-rated CPE hours for recently reinstated FSEs)

Sign and submit in PDF format

FORM FSSD-CPD1

**Singapore Civil Defence Force**  
**Course Declaration for Continuing Professional Education Programme**

Name: \_\_\_\_\_ FSE Registration No: \_\_\_\_\_

Training cycle for the period from: \_\_\_\_\_ (DD MMM YYYY) to: \_\_\_\_\_ (DD MMM YYYY)

|  | Date of Conference/Seminar/Workshop |    | Duration (hrs) | Training hours allotted |
|--|-------------------------------------|----|----------------|-------------------------|
|  | From                                | To |                |                         |
| <b>Conference/seminar/workshop attended</b>  |                                     |    |                |                         |
| Additional CPE hours carried over from previous training cycle (DD MMM YYYY to DD MMM YYYY), up to a max of 24 CPE hours |                                     |    |                |                         |
|  |                                     |    |                |                         |
|  |                                     |    |                |                         |
|  |                                     |    |                |                         |
| <b>Sub-Total</b>   |                                     |    |                | 0.0                     |
| <b>Presentations/lectures at conference/seminar/workshop</b>   |                                     |    |                |                         |
|  |                                     |    |                |                         |
|  |                                     |    |                |                         |
| <b>Sub-Total</b>   |                                     |    |                |                         |
| <b>TOTAL (Minimum training hours required = 48)</b>  |                                     |    |                |                         |

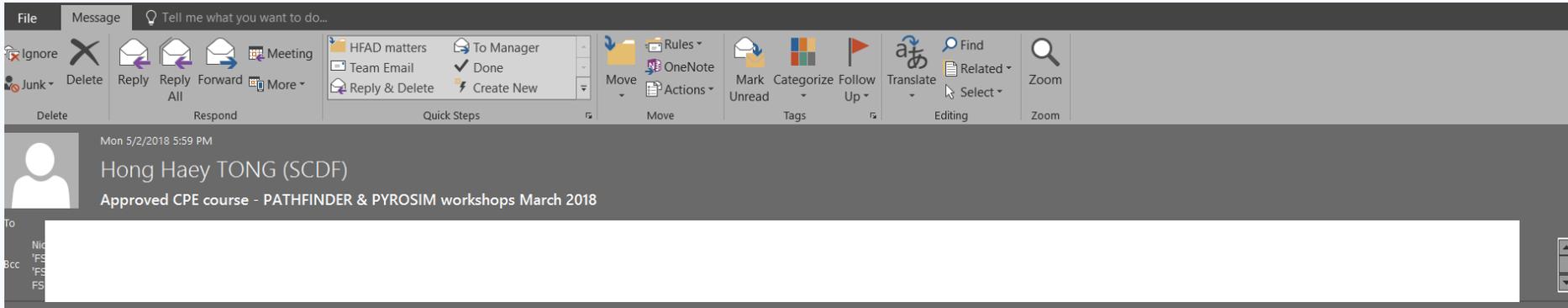
I declare that I: *(please tick an appropriate box below)*

have completed the minimum requirement of 48 hours of training within the 2-year period as shown in the table above so as to continue my practice as a FSE.

have insufficient training hours within the 2-year period, as shown in the table above. I am aware that if I do not have enough training hours during any training cycle, I am unable to practise as a registered Fire Safety Engineer from the next training cycle onwards (i.e from 31 Aug 2017 onwards). I understand that to reinstate my FSE practice status, I will need to attain at least 48 training hours within any two-year period in the subsequent training cycles.

Signature \_\_\_\_\_ Date \_\_\_\_\_





Dear Fire Safety Engineers (FSEs, in bcc)

This is to inform you that the events below will be considered as part of the approved courses for FSE Continuing Professional Education (CPE) programme. You may refer to the attachments for more information and registration details.

| S/N | Event               | Date              | Venue              | Event details   | CPE hours |
|-----|---------------------|-------------------|--------------------|---|-----------|
| 1   | PATHFINDER workshop | 19 to 20 Mar 2018 | 460 Alexandra Road |  20180319-20 Py... | 14        |
| 2   | PYROSIM workshop    | 22 to 23 Mar 2018 |                    |   | 14        |

2 For FSEs who are attending the event, you are required to show documentary proof of participation from the event organiser and forward it to me within 1 month from the end of the event.

3 Just a gentle reminder to FSEs that you will need to submit a declaration at the end of your CPE training cycle to indicate all the approved CPE courses you have attended for your CPE training cycle. A template of the declaration form is attached. If you are unsure of the period of your CPE training cycle, you may contact me for more information.



CPE declaration  
template - dat...

4 For Fire Safety Engineers whose practising status is currently under "Restriction of Practice", if you have attained the reinstatement criteria (i.e. achieve 48 CPE hours within a continuous 2-year period during the restriction), you may apply to reinstate your status to "Practising" by submitting the below CPE declaration form to me. You may refer to your practising status in the FSE Register (Go to [www.scdf.gov.sg](http://www.scdf.gov.sg). Under Fire Safety/Fire Safety Approval, Click on Performance-Based Approach to Fire Safety Design).



CPE declaration  
template (for...

5 Thank you.

**LTC Tong Hong Haey**  
Senior Consultant (Performance-Based Plans)  
Fire Safety & Shelter Department  
Singapore Civil Defence Force  
DID: (65) 6848 1448

# Eligibility as a Peer Reviewer

- Original proposal circulated to FSEs in March 2022:
  - Only FSEs who have practised more than 10 years are eligible to practice as a Peer Reviewer.
- Summary of responses from FSEs (12 responses received):
  - Support – 10 FSEs
  - “RI is not really a PR. Instead RI is an experienced professional who is counter-checking the work of QP. Mainly to facilitate the self-declaration scheme, so 10yrs experience is crucial. However, PR is a peer of the FSE and is to have another set of eyes (and mind) to review the FSE's work. All PB projects are also 100% audited and a RI(FSE) also scrutinizes the study and installation. So in my opinion, the PR need not have 10yrs practice experience.
  - I would recommend that once the FSE has practised for more than 5 years (instead of 10) he should be allowed to practise as a peer reviewer and the reason is as follows:
    - The pre-requisite for an applicant to apply for FSE registration is 5 years of postgraduate practical experience in handling performance-based projects under the supervision of a registered FSE.
    - The applicant would need to have sufficient experience in handling a range of performance-based issues before he would even be considered or called for an interview by SCDF's selection panel.
    - Once the applicant has attained his FSE title and after practising for 5 years, he would have gained a total of 10 years of practical experience i.e. 5 years postgraduate experience + 5 years of experience after being registered as a FSE).
    - With this, the FSE should be skilled enough to practice as a peer reviewer.



# Eligibility as a Peer Reviewer

- Final proposal:
  - ✓ Only FSEs who have practised more than 10 years are eligible to practice as a Peer Reviewer.
    - In line with RI and AC Checker
- Implementation:
  - ✓ SCDF will issue a circular to inform the industry of this change.



# Mandatory attendance at FSE Workshop

- Original proposal: FSEs must attend at least one FSE Workshop during each 2-year training cycle.
- Summary of response from FSEs (12 responses received):
  - Support – 8 FSEs
  - Can have 2 separate sessions in case FSE missed out on the first session. Can also consider having the session after office hours (tight schedule during daytime).
  - It will be good that SCDF can conduct more than 1 FSE workshop each year (so that there are at least 4 FSE workshops for the 2-year training cycle).
  - It will be helpful if the workshop registration cut-off date was stated in the call for registration. I missed the last one because I could not register on time.
  - This is a good idea. But at least 3 to 4 sessions should be arranged over the 2 yrs to allow FSEs to manage their schedule and lock in attendance.



# Mandatory attendance at FSE Workshop

- Final proposal:
  - FSEs must attend at least one FSE Workshop during each 2-year CPE training cycle.
  - Failure to do so – Practising status will be converted to “Restriction of Practice” at the end of the training cycle.
    - Reinstatement – by attending an FSE Workshop thereafter.
- Support from all stakeholders:
  - SCDF will organise at least 1 FSE Workshop each year.
  - SCDF monitor FSE’s participation, and organise more sessions of FSE Workshop where deemed necessary.
  - If FSEs are unable to participate in the FSE Workshops during their CPE training cycle, they must provide valid reasons, and SCDF will then evaluate whether additional sessions of FSE Workshops are necessary.



# Admin Requirements Update



# CORENET 2.0 & NetTrust token

- CORENET 2.0 is scheduled to roll out **by end 2022**
- Allows all FSEs to submit FEDBs and sign off FSER/PR reports via CORENET, regardless of whether the FSE is a QP.
- More details will be shared once the system is ready.



# Update of Fire Safety Act

- Prior to 31 Dec 2021
  - Fire Safety Act (Chapter 109A)
- With Effect From 31 Dec 2021
  - Rename to Fire Safety Act 1993
- Only change is the numbering of the sections in the FSA.
  - Need to be careful when making reference to any sections in the FSA
- No change to the Fire Safety Regulations



# Changes to relevant PB forms due to update of FSA

- Download latest forms from [www.scdf.gov.sg](http://www.scdf.gov.sg)
  - >> Downloads >> Forms >> Plan Approval
    - Declaration Form for PB plans (amended)
    - Letter of Undertaking (amended)
    - Letter for PB audit closure (no change)



# Fire Engineering Technical Requirements Update



# Acceptance Criteria for exit staircases.

At all staircase landings at  $Z=1.7\text{m}$  :

1. Temperature  $< 60^{\circ}$
2. Visibility  $> 10\text{m}$

Throughout whole exit stair

3. FED  $< 0.3$

Above was left out of the FSE Dialogue 2019 materials. Already reinstated.



# Activation of smoke control systems

Clause 7.4.5 k.(1)(a) : The engineered smoke ventilation system shall be activated by **smoke detectors** located in the smoke control zone.....

Must be activated by smoke detectors (not by sprinklers or other means), except in carpark, loading bays/driveways ~~of industrial developments~~ where there is a build-up of exhaust fumes.

Engineered Smoke Control system must activate upon activation of the 1<sup>st</sup> smoke detector.

- No double-knock proposals.
- No delayed activation.
- No manual activation in lieu of automatic activation.



# Situations that could be unsuitable for a PB study (General Guidelines to share with FSEs for reference)

## 4 main categories:

1. There is no suitable fire engineering methodology available and relevant to attain the fire safety objectives.
2. The consequences of the Fire Code deviation (regardless of whether there is a PB methodology to address the Fire Code deviation) are considered severe.
3. The risk is not easily quantifiable, i.e. fire risks involving probabilities.
4. The proposal does not align with prescriptive-based fire safety design policies.



[www.scdf.gov.sg](http://www.scdf.gov.sg)

>> Fire Safety

>> Plans and Consultations

>> Performance-Based Approach to Fire Safety Design

### **Performance-Based Approach to Fire Safety Design**

- Registration for Fire Safety Engineers
- List of Projects involving Performance-Based Fire Safety Design
- **Situations deemed unsuitable for the Use of Performance-Based (PB) Approach**
- List of approved CPE course
- Fire Safety Engineers (FSE) Dialogue Session
- Register of Fire Safety Engineers
- Performance-Based Plan Approval Process
- Performance-Based Provisions
- Performance-Based Provisions Code Structure
- Frequently Asked Questions
- Circulars on Performance-Based Fire Safety Issues
- Singapore Fire Safety Engineering Guidelines

Let's try to download the file now and refer to the list.

# Mark-Up drawings

## Bad example



Based on SCDF appeal committee opinion to "consider the extension of smoke free lobby to the secondary internal corridor with all requirements on smoke free lobby (i.e. protected and sterile space, ventilation requirement, services not serving lobby to be protected etc) duly complied with.

All dormitory bedrooms shall escape into the NV corridor ventilated via existing high jack roof. The ventilation requirement for the internal corridor serving dormitories' bedrooms will need to be supported with a fire safety engineering study conducted by a registered Fire Safety Engineer. The Fire Safety Engineer may consult SCDF Performance-Based (PB) officers if necessary".

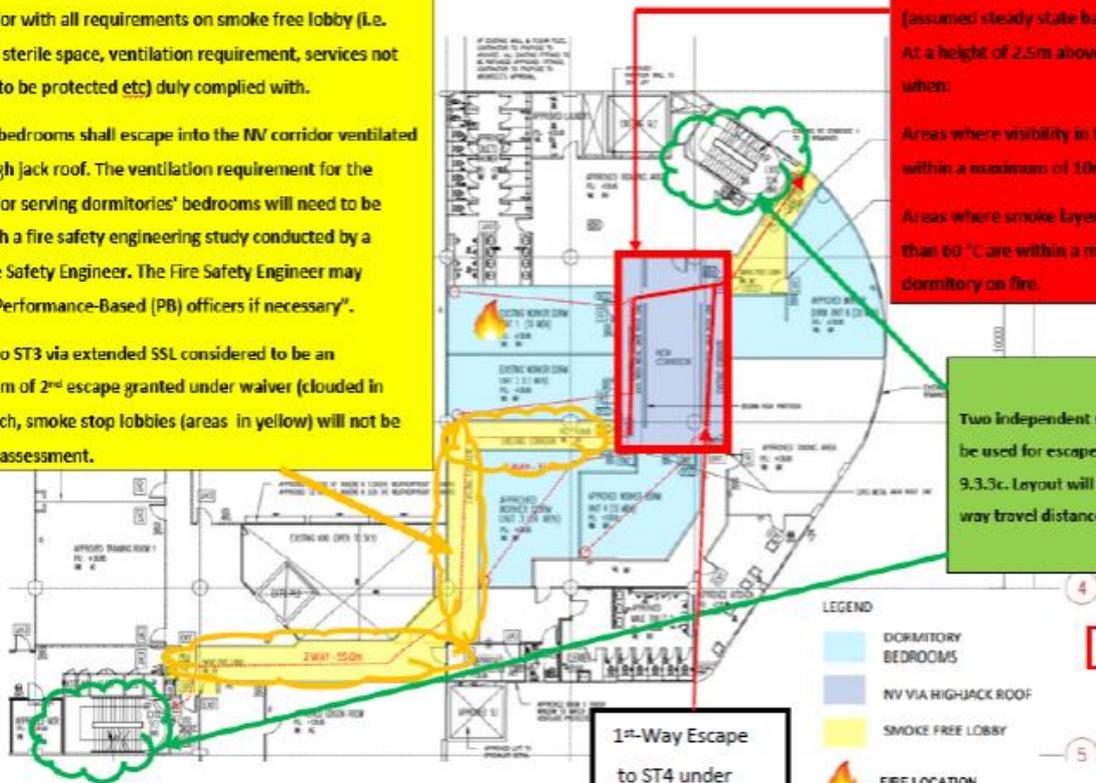
Escape route to ST3 via extended SSL considered to be an acceptable form of 2<sup>nd</sup> escape granted under waiver (clouded in orange). As such, smoke stop lobbies (areas in yellow) will not be covered in PB assessment.

All dormitory bedroom fire doors open into NV corridor (area covered in red). PB assessment to show NV corridor is tenable for 800s (assumed steady state based on CFD results) after the door is opened. At a height of 2.5m above FFL, tenability considered to be achieved when:

Areas where visibility in the LS internal corridor is less than 10m are within a maximum of 10m distance from the door of dormitory on fire.

Areas where smoke layer temperature at LS internal corridor are more than 60 °C are within a maximum of 10m distance from the door of dormitory on fire.

Two independent staircases ST3 and ST4 will be used for escape, complying to Clause 9.3.3c. Layout will also comply to required 2-way travel distance set out in Table 2.2A.



1<sup>st</sup>-Way Escape to ST4 under PB assessment

4

5

LEGEND

- DORMITORY BEDROOMS
- NV VIA HIGH-JACK ROOF
- SMOKE FREE LOBBY
- FIRE LOCATION

Area of PB Assessment (NV Internal Corridor)

Figure 2. Scope of fire engineering assessment (5<sup>th</sup> Storey Level)



# Waiver Description

Description of clause and issue needs to be clear and specific.

**Issue No : 1**

**Description:** See attached MEA\_FSSD Appendix A

**Status:** Disapproved

**Bad  
examples**

**Issue No : 1**

**Description:** Refer filename: waiver form.docx

**Status:** Disapproved



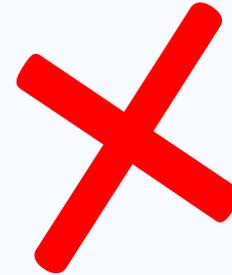
# Building with multiple fire safety non-compliances

WVR/00001/22

FER

Will be REJECTED

- PB 1
- PB 2
- PB 3
- PB 4
- Prescriptive 1
- Prescriptive 2
- Prescriptive 3
- Prescriptive 4
- Prescriptive 5



# Building with multiple fire safety non-compliances

WVR/00001/18 **FER**

- PB 1
- PB 2
- PB 3
- PB 4



WVR/00002/18

- Prescriptive 1
- Prescriptive 2
- Prescriptive 3
- Prescriptive 4
- Prescriptive 5



# Declaration of compliance by QP, FSE and Peer Reviewer

PERFORMANCE-BASED SUBMISSION DECLARATION FORM 2  
(FOR QP WHO IS ALSO THE FSE FOR THE SUBMISSION)

FIRE SAFETY ACT 1993

FIRE SAFETY (BUILDING FIRE SAFETY) REGULATIONS

The Commissioner  
Singapore Civil Defence Force  
91 Ubi Avenue 4  
Singapore 408827

Proposal \_\_\_\_\_

\*Lot/Plot \_\_\_\_\_ \*TS/MK \_\_\_\_\_

Address/Road \_\_\_\_\_

Part I

*To be completed by the qualified person who is a fire safety engineer and who prepares the plans of fire safety works which include any alternative solution, and the fire safety engineering report.*

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a qualified person and a fire safety engineer under the Fire Safety Act, hereby certify that —

- (a) the fire safety works as shown on these plans have been designed in accordance with the provisions of the Fire Code, the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to modifications or waivers under section 59 of the Fire Safety Act; and
- (b) the alternative solution in the plans, and the fire safety engineering report, satisfy the fire performance requirements in the Fire Code, and comply with the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of  
qualified person/fire safety engineer)

\_\_\_\_\_  
(Address of qualified person/  
fire safety engineer)

Date: \_\_\_\_\_

Peer Reviewer

Part II

*To be completed by the peer reviewer who reviews the alternative solution in the plans of fire safety works and the fire safety engineering report.*

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a peer reviewer under the Fire Safety Act, hereby certify that the alternative solution shown on these plans, and the fire safety engineering report satisfy the fire performance requirements in the Fire Code, and comply with the provisions of the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of peer reviewer)

\_\_\_\_\_  
(Address of peer reviewer)

Date: \_\_\_\_\_

QP/FSE

# Declaration of compliance by QP, FSE and Peer Reviewer

PERFORMANCE-BASED SUBMISSION DECLARATION FORM 2  
(FOR QP WHO IS ALSO THE FSE FOR THE SUBMISSION)

FIRE SAFETY ACT 1993

FIRE SAFETY (BUILDING FIRE SAFETY) REGULATIONS

The Commissioner  
Singapore Civil Defence Force  
91 Ubi Avenue 4



## Declaration form :

Proposal \_\_\_\_\_

1. Must be endorsed by QP who is FSE, and PR \_\_\_\_\_

\*Lot/Plot \_\_\_\_\_

2. Must be a single document (*Not in 2 separate parts*)

To be completed by the qualified person who is a fire safety engineer and who prepares the plans of fire safety works which include any alternative solution, and the fire safety engineering report.

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a qualified person and a fire safety engineer under the Fire Safety Act, hereby certify that —

- (a) the fire safety works as shown on these plans have been designed in accordance with the provisions of the Fire Code, the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to modifications or waivers under section 59 of the Fire Safety Act; and
- (b) the alternative solution in the plans, and the fire safety engineering report, satisfy the fire performance requirements in the Fire Code, and comply with the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of qualified person/fire safety engineer)

\_\_\_\_\_  
(Address of qualified person/ fire safety engineer)

Date: \_\_\_\_\_

Part II

To be completed by the peer reviewer who reviews the alternative solution in the plans of fire safety works and the fire safety engineering report.

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a peer reviewer under the Fire Safety Act, hereby certify that the alternative solution shown on these plans, and the fire safety engineering report satisfy the fire performance requirements in the Fire Code, and comply with the provisions of the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of peer reviewer)

\_\_\_\_\_  
(Address of peer reviewer)

Date: \_\_\_\_\_



# Declaration of compliance by QP, FSE and Peer Reviewer

PERFORMANCE-BASED SUBMISSION DECLARATION FORM 3  
(FOR QP WHO IS NOT THE FSE FOR THE SUBMISSION)

FIRE SAFETY ACT 1993

FIRE SAFETY (BUILDING FIRE SAFETY) REGULATIONS

The Commissioner  
Singapore Civil Defence Force  
91 Ubi Avenue 4  
Singapore 408827

Proposal \_\_\_\_\_

\*Lot/Plot \_\_\_\_\_ \*TS/MK \_\_\_\_\_

Address/Road \_\_\_\_\_

Part I

*To be completed by a qualified person who is not a fire safety engineer and who prepares the plans of fire safety works and prepares the alternative solution in the plans under the supervision of a fire safety engineer.*

I, \_\_\_\_\_, Qualified Person (e.g. Professional Engineer / Architect) Registration No. \_\_\_\_\_ being a qualified person under the Fire Safety Act, hereby certify that —

- (a) the fire safety works as shown on these plans have been designed in accordance with the provisions of the Fire Code, the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to modifications or waivers under section 59 of the Fire Safety Act; and
- (b) the alternative solution in the plans adheres to the fire safety engineering report.

\_\_\_\_\_  
(Name and signature of qualified person)

\_\_\_\_\_  
(Address of qualified person)

Date: \_\_\_\_\_

FSE

Part II

*To be completed by the fire safety engineer who is not a qualified person and who supervises the preparation of the alternative solution in the plans of fire safety works, and prepares the fire safety engineering report.*

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a fire safety engineer under the Fire Safety Act, hereby certify that the alternative solution shown on these plans, and the fire safety engineering report, satisfy the fire performance requirements in the Fire Code, and comply with the provisions of the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of fire safety engineer)

\_\_\_\_\_  
(Address of fire safety engineer)

Date: \_\_\_\_\_

PART III

*To be completed by the peer reviewer who reviews the alternative solution in the plans of fire safety works and the fire safety engineering report.*

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a peer reviewer under the Fire Safety Act, hereby certify that the alternative solution shown on these plans, and the fire safety engineering report satisfy the fire performance requirements in the Fire Code, and comply with the provisions of the Fire Safety Act and its regulations, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of peer reviewer)

\_\_\_\_\_  
(Address of peer reviewer)

Date: \_\_\_\_\_

Peer Reviewer

QP



# Declaration of compliance by QP, FSE and Peer Reviewer

PERFORMANCE-BASED SUBMISSION DECLARATION FORM 3  
(FOR QP WHO IS NOT THE FSE FOR THE SUBMISSION)

FIRE SAFETY ACT 1993

FIRE SAFETY (BUILDING FIRE SAFETY) REGULATIONS

The Commissioner  
Singapore Civil Defence Force  
11 Ubi Avenue 1  
Singapore 408722

## Declaration form :

1. Must be endorsed by QP, FSE and PR

2. Must be a single document (*Not in 2 or 3 separate parts*)

QP

*To be completed by a qualified person who is not a fire safety engineer and who prepares the plans of fire safety works and prepares the alternative solution in the plans under the supervision of a fire safety engineer.*

I, \_\_\_\_\_, Qualified Person (e.g. Professional Engineer / Architect) Registration No. \_\_\_\_\_ being a qualified person under the Fire Safety Act, hereby certify that —

- (a) the fire safety works as shown on these plans have been designed in accordance with the provisions of the Fire Code, the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to modifications or waivers under section 59 of the Fire Safety Act; and
- (b) the alternative solution in the plans adheres to the fire safety engineering report.

\_\_\_\_\_  
(Name and signature of qualified person)

\_\_\_\_\_  
(Address of qualified person)

Date: \_\_\_\_\_

FSE

*To be completed by the fire safety engineer who is not a qualified person and who supervises the preparation of the alternative solution in the plans of fire safety works, and prepares the fire safety engineering report.*

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a fire safety engineer under the Fire Safety Act, hereby certify that the alternative solution shown on these plans, and the fire safety engineering report, satisfy the fire performance requirements in the Fire Code, and comply with the provisions of the Fire Safety Act and any regulations made thereunder, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of fire safety engineer)

Date: \_\_\_\_\_

PART III

*To be completed by the peer reviewer who reviews the alternative solution in the plans of fire safety works and the fire safety engineering report.*

I, \_\_\_\_\_, Fire Safety Engineer Registration No. \_\_\_\_\_ being a peer reviewer under the Fire Safety Act, hereby certify that the alternative solution shown on these plans, and the fire safety engineering report satisfy the fire performance requirements in the Fire Code, and comply with the provisions of the Fire Safety Act and its regulations, the relevant codes of practice and design guidelines, subject to any deviation or modification approved by the Commissioner.

\_\_\_\_\_  
(Name and signature of peer reviewer)

\_\_\_\_\_  
(Address of peer reviewer)

Date: \_\_\_\_\_



# Q&A





**FSE-CPE = 3 hours  
for FSE Workshop 2022 attendees**

Virtual participants need to complete the quiz by Fri 01 July 2022 with all the correct answers to qualify for the 3 CPE hours.

<https://go.gov.sg/fseworkshop2022quiz>

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Scan QR code for Quiz.

