

消防分部

香港工程師學會消防分部及消防界別顧問小組支持註冊消防工程師計劃的實施

香港工程師學會消防分部及消防界別顧問小組謹此聯署,重申我們對根 據《消防條例》(第95章)第25條所提出的擬議決議案的明確支持。該決議 案旨在制定《消防(註冊消防工程師)規例》,並推行註冊消防工程師計劃。

- 在保障公眾安全的大前提下,註冊消防工程師計劃的實施,是香港消防 2. 安全規管發展的重要里程碑。透過建立一套完善的專業註冊及監管機制,為合 資格的專業人士在進行消防安全風險評估、制定發牌程序所需的消防安全要求 以及檢查和測試消防裝置及設備和通風系統時,提供了堅實的法律及專業基礎, 並有效配合現時由消防處提供的服務。
- 3. 多年來,從事消防工程的專業人士一直在維持和提升本港消防安全標準 方面擔當着重要角色,而消防安全亦是社會不可妥協的重要基石。消防工程是 一門高度專業目複雜的學科,尤其在採用以性能化消防安全設計 (Performance-based Design)處理未能以訂明的消防設計(Prescriptive Code Design)應對的項目時,對專業知識和判斷的要求更為嚴格。在這些情 況下,消防工程師必須運用深入的工程知識及專業判斷,於設計、分析及評估 建築物的消防安全規定時作出適切決策。註冊消防工程師的職責遠不止於遵循 訂明的守則,更須具備如消防科學(例如流體力學和工程微積分)、火災時人 類行為學、消防系統(例如消防裝置及設備和通風系統)等範疇的專業知識, 從而作出合理的專業判斷,並為各類的消防安全設計上面對的挑戰提供科學化 的解決方案。這種專業能力在發牌過程中尤其重要,因為全面的風險評估及有 效的消防安全要求制定,對保障生命及財產安全至關重要。
- 4. 我們認同並支持政府提出的註冊消防工程師學歷及經驗的規管機制。該 機制嚴謹且經過深思熟慮,能確保所有獲註冊的消防工程師具備履行相關專業 職責所需的資歷、知識及專業能力。我們亦留意到,消防處自 2007 年首次諮 詢以來,已就有關要求進行了廣泛諮詢及審慎評估。值得一提的是,現時建議 的規管框架設有靈活機制,容許個別評核申請人的能力(即具備不少於十五年



相關工作經驗的資深從業員,或持有由消防處處長認可的同等或更高學歷的申請人),從而兼容不同學術背景,同時維持高水平的專業標準。這種平衡的機制不僅保障了專業的完整性,亦確保只有具備適當資歷及經驗的人士,方可在註冊消防工程師計劃下肩負保障公眾安全的重任。

5. 我們再次重申對註冊消防工程師計劃的堅定支持,並已於**附件**(只備英文本)致立法會的信函中表達相關立場。我們深信,註冊消防工程師計劃將進一步提升業界的專業能力,最重要的是,使業界能持續為保障香港市民的公眾安全作出貢獻。我們將繼續與政府及各持份者緊密合作,確保該計劃能夠早日順利推行及有效運作。

香港工程師學會消防分部 香港工程師學會消防界別顧問小組

二零二五年九月十三日

27 July 2025

The Hon Benson LUK Hon-man Room 706, Legislative Council Complex, 1 Legislative Council Road, Central, Hong Kong

Dear The Hon Benson LUK

Views from The Hong Kong Institution of Engineers Fire Division and Fire Discipline Advisory Panel on the Proposed Resolution under Section 25 of the Fire Services Ordinance (Cap. 95)

Further to the letter from the Hong Kong Institution of Engineers to your good self dated 30 June 2025, we would like to express our fullest and utmost support for the implementation of the Registered Fire Engineer ("RFE") Scheme. In parallel, we wish to draw your attention to the following:

- 2. Registered Professional Engineers ("RPE") in the Fire Discipline are highly specialised in the field of fire engineering. We possess in-depth knowledge of fire science, including fluid dynamics and engineering calculus, and are well-versed in the rationales concerning implementation of fire engineering principles, formulation of fire engineering solution, application of fire engineering approaches and functional testing of fire service installations and equipment ("FSI") and ventilating systems.
- 3. We are subject to a rigorous registration process. For example, under the "General Experience" route, one must hold an honorary engineering degree, complete at least five years of general training, acquire at least one year of responsible experience, and pass a professional assessment covering six domains such as Active Fire Protection and Fire Science in order to be registered. These qualifications equip us with the expertise essentially required in the fire engineering field, ensuring the highest standards of fire safety are maintained.



- 4. This is further exemplified by the fact that we are specialised to design, analyse and evaluate specific types of FSI, such as Dynamic Smoke Extraction Systems. In circumstances where insurmountable challenges arise, such as large atriums in hotels where prescriptive fire safety requirements are not applicable, performance-based designs have to be adopted. In such cases, we are responsible for compiling professional Fire Engineering Reports, formulating method statements, conducting acceptance tests to FSI and ventilating systems, and verifying compliance with relevant statutory requirements to uphold exemplary fire safety standard.
- 5. We have maintained ongoing dialogue and communication with the Fire Services Department ("FSD") since their initial consultation with the industry in 2007 regarding the introduction of the RFE Scheme. While we fully support the Scheme, we opine that professionals performing duties of the RFE should have sound engineering knowledge and professional experience in order to ensure various aspects of fire safety such as fire and smoke behaviour, development of fire, propagation of smoke, human behaviour in case of fire, operation principles of various FSI, fire safety risk assessment, computational fire simulation, etc., have been well taken care of. This ensures the responsibilities and expertise of RFE remain fully aligned with those of RPE in the Fire Discipline. We highly support FSD's proposal that professionals eligible for registering as either one class of RFE should possess sufficient relevant working experience. Such applicants should be actively and personally involved in the design, implementation and acceptance of various FSI instead of project management or administrative work only. Such practical experience can ensure the competency of the engineer in performing the duties of RFE in safeguarding fire safety.
- 6. In the construction industry, professionals play distinct roles. For instance, RPEs from various disciplines (e.g. civil, structural) handle their respective engineering domains. Each professional is an expert in their respective field, which justifies the need for distinct registration regimes tailored to different professionals in the same construction industry, as highlighted in the Government's Consolidated Response [LC Paper No. CB(2)1471/2025(01)].



- 7. Lastly, we thank you for your efforts in the legislative process towards implementing the RFE Scheme, which is now at an advanced stage. After years of discussion and evaluation since the first consultation in 2007 and having reviewed the current draft of the Fire Services (Registered Fire Engineers) Regulation, we observed that FSD has undertaken a comprehensive and prudent assessment on the Scheme's implementation and operation. The proposed registration regime is able to ensure the selection of qualified and competent professionals to perform the duties of RFE which is crucial to the safeguarding of public safety in respect of fire safety a priority that must never be compromised under any circumstances.
- 8. We hope that you will bring the above points to the attention of the Subcommittee members for their due and thorough consideration.

Yours sincerely

Ir Prof. Eric Wai Ming Lee

Deputy Chairman of HKIE Fire Division Deputy Chairman of HKIE Fire Discipline Advisory Panel (2025 - 2026)

CC: Ir Alice CHOW Kin Tak, President of The Hong Kong Institution of Engineers