立法會 Legislative Council

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Bills Committee on Fire Safety (Industrial Buildings) Bill

Background brief prepared by the Legislative Council Secretariat

Purpose

This paper sets out background information and summarizes the past discussions of the Panel on Security on the Administration's preliminary proposal to empower the Director of Fire Services ("DFS") and the Director of Buildings ("DB") to require owners/occupiers of certain industrial buildings to improve the fire safety measures of such buildings.

Background

- 2. The planning, design and construction of an industrial building required compliance with the prevailing Buildings Ordinance (Cap. 123) as well as the relevant regulations and codes of practice, including the requirements on the provision of means of escape, fire resisting construction, means of access for firefighting and rescue, whereas fire service installations ("FSI") and equipment should be provided according to the Code of Practice on Minimum Fire Service Installations and Equipment ("FSI Code") published by the Fire Services Department ("FSD") which is in force at the time of the submission of the relevant building plans. While existing industrial buildings meet the prevailing fire safety standards at the time of their construction, older industrial buildings may fall short of the modern-day standards. Industrial buildings built before 1973 were subject to a less stringent set of requirements, in that sprinkler installation was only required for compartment exceeding 7 000 m³ (or 250 000 cubic feet) and basement for storage exceeding 500 m² (or 5 000 square feet). Industrial buildings and godowns built after March 1973 were required to be equipped with automatic sprinkler systems at the time of construction only if they were more than two-storey high. In 1987, FSD further revised the FSI Code to govern FSI of buildings built thereafter, including extending the requirement of installing automatic sprinkler systems to all industrial buildings, irrespective of height.
- 3. FSD and Buildings Department ("BD") have jointly conducted a study on the technical feasibility of mandatorily requiring pre-1987 industrial buildings

to upgrade the fire safety provisions of the buildings to modern standards. According to the Administration, the study reveals that it is generally feasible to carry out the necessary fire safety improvement works for the pre-1987 industrial buildings, except that the building structure and actual circumstances would make it difficult for these buildings to add firefighting and rescue stairways or to provide refuge floors or staircases interchanges.

The Fire Safety (Industrial Buildings) Bill

4. The Fire Safety (Industrial Buildings) Bill ("the Bill") was published in the Gazette on 30 November 2018 and received its First Reading at the Council meeting of 12 December 2018. The Bill seeks to provide for a mechanism for DFS and DB ("enforcement authorities") to require the owners and occupiers of certain industrial buildings to provide or improve the fire safety measures in the buildings.

Deliberations of the Panel

<u>Problems encountered by owners and occupiers of old industrial buildings in complying with fire safety standards</u>

- 5. Members were advised that the Administration proposed to introduce a new piece of legislation to make it mandatory for owners and occupiers of pre-1987 industrial buildings to upgrade the provision of FSI and fire safety construction, as per the direction of DFS and DB ("Direction"). DFS and DB would be empowered to issue Directions to require owners and/or occupiers to improve the fire safety measures of their industrial buildings to satisfy the required standards.
- 6. Members were concerned about the possible problems encountered by owners and occupiers of old industrial buildings in implementing fire safety measures. Members also enquired about the number of pre-1987 buildings which might have difficulties in carrying out fire safety improvement works and examples of alternative proposals acceptable to the enforcement agencies.
- 7. The Administration advised that there were some 1 100 pre-1987 industrial buildings in the territory, about 400 were built before 1973 and about 700 were built in or after 1973. Industrial buildings built before 1973 were subject to a less stringent set of requirements at the time of construction, and installation of automatic sprinkler system was not a common requirement back then. All industrial buildings and godowns of more than two storeys built after March 1973 were required to be installed with automatic sprinkler systems at the time of construction. In case there were difficulties for some old industrial buildings to fully comply with the required standards, the enforcement

authorities would adopt a flexible and pragmatic approach in considering acceptance of alternative proposals, on a case-by-case basis with regard to the circumstances of individual buildings, provided that the fire safety of these buildings was not compromised. The Administration further advised that owners of old commercial buildings had been allowed to install sprinkler systems connected to the existing fire service water tanks of fire hydrant/hose reel systems in the buildings, thus be spared from the requirement of a new fire service water tank for the sprinkler systems. Some buildings without a pre-existing fire service water tank had been allowed to install a fire service water tank of a smaller capacity.

- 8. Some members noted with concern that some operators of mini-storages had encountered difficulties in complying with the requirement of providing means of escape with a width of no less than 2.4 metres along the aisles between storage cubicles, as it would substantially reduce the usable floor area of mini-storages.
- 9. According to the Administration, FSD had been in communication with mini-storage operators and business associations of the relevant sector on many occasions. FSD had accepted the alternative proposal put forward by the operators of deploying partitions with adequate fire resistance rating to address the inadequate fire load separation of mini-storages.

Estimated cost for fire safety improvement works

- 10. Some members enquired about whether the responsibility for carrying out fire safety improvement works for industrial buildings rested with owners or occupiers. They were concerned about the costs required for compliance with the fire safety requirements.
- 11. Members were advised that broadly speaking, occupiers of industrial buildings would be responsible for installing emergency lighting and automatic cut-off device for the mechanical ventilating system in their units, and the owners would be responsible for the rest of the improvement works. The estimated cost for installing an automatic sprinkler system in a seven-storey building with a ground floor area of about 600 m² was about \$2 million. The estimated cost for implementation of measures relating to the provision of FSI and equipment was about \$200,000 for each unit. The estimated cost for implementation of measures relating to fire safety construction was about \$30,000 to \$50,000 for each unit.

Enforcement against fire safety irregularities in mini-storages

12. Some members pointed out that the fires at certain old industrial buildings, such as the No. 4 alarm fire at the Amoycan Industrial Centre in Ngau Tau Kok

in June 2016 had heightened public concern over the fire risks. These members enquired whether the Administration would in the longer term consider introducing a licensing scheme for mini-storages, under which requirements on management would be imposed in addition to the hardware requirements. According to the Administration, priority was being given to the improvement of fire safety standard of old industrial buildings. There was not yet a conclusion on the way forward regarding whether a licensing scheme should be introduced, on which the relevant sectors would have to be consulted.

- 13. Some members expressed concern about difficulties of the mini-storage industry in procurement of insurance if the Fire Hazard Abatement Notices ("FHANs") and statutory orders were not complied with by the relevant deadlines. On the other hand, there were concerns in the insurance sector that some of such deadlines were extended by two to three years. With such lengthy extension, there might be a lack of incentive on the part of owners or operators of mini-storages to carry out fire safety improvement works promptly, thus passing fire risks to insurance companies.
- 14. According to the Administration, FHANs and statutory orders issued by FSD and BD respectively had specified the fire safety improvement works required and a reasonable period of time for compliance. In case of non-compliance, the enforcement authorities might consider prosecution or taking other enforcement actions in accordance with the respective laws. An extension of time for compliance would only be granted in cases where the operators were taking substantive actions to comply with the requirements, such as the appointment of authorized persons to undertake improvement works or the submission of alternative proposals for meeting the prescribed fire safety requirements.

Relevant papers

15. A list of the relevant papers on the Legislative Council website is in the **Appendix**.

Council Business Division 2
Legislative Council Secretariat
11 January 2019

${\bf Appendix}$ Relevant papers on improving fire safety of old industrial buildings

Committee	Date of meeting	Paper
Legislative Council	29.4.2015	Official Record of Proceedings
		(Question 13)
Legislative Council	18.11.2015	Official Record of Proceedings
		(Question 7)
Panel on Development	5.7.2016	Agenda
and Panel on Security	(Item II)	Minutes
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Legislative Council	13.7.2016	Official Record of Proceedings
		(Questions 1 and 17)
Panel on Security	7.2.2017	<u>Agenda</u>
	(Item IV)	Minutes
Panel on Security	11.4.2017	Agenda
	(Item IV)	Minutes

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