

THE NEW REGULATORY FRAMEWORK FOR SECURITY-BY-DESIGN UNDER THE INFRASTRUCTURE PROTECTION ACT

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1 In the face of the growing terrorism threat around the world, the enactment of the Infrastructure Protection Act 2017¹ (“IPA”), which seeks to improve security at buildings deemed to be potential targets for terrorist attacks in Singapore, is both important and timely.

I. Aims and objectives of Infrastructure Protection Act 2017

2 The IPA was passed by Parliament on 2 October 2017 and was assented to by the President on 23 October 2017. As part of Singapore’s comprehensive strategy to fight against the rising threat of terrorism, the IPA aims to protect key infrastructures and buildings in Singapore by ensuring that critical infrastructure, buildings with high public footfall and iconic buildings are designed with security considerations taken into account, through the implementation of a process known as “security-by-design”.²

3 Among other things, the IPA establishes a new regulatory framework for the integration of security measures into the design of designated developments and buildings before construction or renovation. Examples of such security measures include:

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1 Act 41 of 2017.

2 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

- (a) hardening of structural elements, such as walls and columns, to resist bomb blast effects;
- (b) providing for a stand-off distance using security barriers to prevent unauthorised vehicles from coming close to the building; and
- (c) combining security technology with operational processes, such as monitoring CCTVs, operating access control systems, or implementing security procedures.³

4 The IPA also empowers the Commissioner of Infrastructure Protection (appointed under s 5 of the IPA) (“Commissioner”) to issue directives and orders to protect buildings in Singapore. For buildings which are not required to implement security-by-design, the IPA empowers the Commissioner to introduce or issue directives for owners or occupiers to put in place appropriate security measures. In the event of an imminent security threat, the IPA empowers the Minister to issue emergency orders to protect these buildings.⁴

5 As of the date of this article, the IPA has not yet come into operation. The IPA will come into operation on a date that the Minister appoints by notification in the *Gazette*.

6 This article focuses on the following aspects of the IPA which interested parties, including developers, existing building owners and managers intending to conduct renovations and extensions to their buildings, and acquirers of existing buildings, should be aware of:

- (a) differences between “Special Developments” and “Special Infrastructures”;
- (b) criteria for designation;
- (c) obligations post-designation in relation to security-by-design;
- (d) costs implications; and
- (e) expertise and resources supporting the new framework.

3 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

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II. Differences between “Special Developments” and “Special Infrastructures”

7 Under the IPA, buildings designated by the Minister as Special Developments or Special Infrastructures are required to undergo security-by-design. Special Developments refer to any *new* development (or any class of new developments that have not yet been built) that meet the designation criteria, while Special Infrastructures refer to any *existing* premises (or any class of existing premises) that meet the designation criteria.⁵

8 While Special Developments will need to undergo security-by-design before construction starts, Special Infrastructures will only undergo security-by-design when they undergo major renovations. The Ministry of Home Affairs (“MHA”) will engage the relevant owner and assess the need for security measures, taking into consideration the building’s actual land use and profile. Any further requirements to be imposed will be reasonable and practical, taking into account the fact that these are existing and not new buildings.⁶

9 Once the certificate of works completion for a Special Development has been approved by the Commissioner of Infrastructure Protection, that Special Development will be treated as if it has been designated as a Special Infrastructure.⁷

III. Designation criteria

10 While the designation criteria for Special Developments and Special Infrastructures have not been published in the *Gazette* pursuant to ss 34 and 41 of the IPA, Parliamentary speeches have already set out the potential designation criteria in broad strokes.

A. Critical infrastructures

11 Under the IPA, all critical infrastructures (*ie*, buildings which are vital to the delivery of essential services such as

5 Infrastructure Protection Act 2017 (Act 41 of 2017) ss 34 and 41.

6 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

7 Infrastructure Protection Act 2017 (Act 41 of 2017) s 40.

water, power and transport), whether existing or new, will be designated as Special Developments or Special Infrastructures. The requirement for such infrastructures to undergo security-by-design is not a new one, as Government agencies have already begun identifying critical infrastructures for the incorporation of security into design in the past decade. This will continue under the IPA.⁸

B. Large or iconic buildings with high public footfall or symbolic significance

12 New buildings that have potential for high public footfall may be designated as Special Developments. Buildings will be identified based on objective criteria such as gross floor area, whether they are zoned for commercial, community or mixed use, and whether they are in certain planning areas.⁹

13 New developments that do not meet the high public footfall criteria, but are iconic, may also be designated as Special Developments.¹⁰

14 Existing buildings that meet the high public footfall criteria will generally be designated as Special Infrastructures.¹¹

15 In order to enable building owners to factor their obligations under the IPA into their business decisions, the Government will inform owners on the designation of their buildings as Special Developments or Special Infrastructures as early as possible, and will publish the criteria which will be used to designate a class of Special Developments and Special Infrastructures under a *Gazette* order.¹² Further clarity on the designation criteria should be forthcoming once the IPA comes into operation and subsidiary legislation is also put in place.

8 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

9 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

10 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

11 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

12 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

IV. Obligations post-designation

16 Buildings designated as Special Developments and Special Infrastructures will be required to observe the process for the implementation of security-by-design set out under ss 34 to 40 and 41 to 48 of the IPA, respectively, including:

- (a) obtaining the Commissioner’s approval of a security plan prepared by a person approved by the Commissioner;
- (b) obtaining the Commissioner’s approval if any amendments to the security plan are required;
- (c) ensuring the security measures in the security plan are implemented in accordance with the approved security plan and stipulated timelines; and
- (d) ensuring that the security measures are maintained after completion.

A. Obtaining Commissioner’s approval of security plan

17 Under ss 35 and 42 of the IPA, the responsible person of a Special Development or Special Infrastructure must not carry out, or cause to allow the carrying out of, any specified works for the Special Development or Special Infrastructure unless the responsible person has obtained the Commissioner’s approval of a security plan for the Special Development or Special Infrastructure in connection with those specified works.

18 Under s 32 of the IPA, the “responsible person” would generally be the owner(s) of the relevant Special Development or Special Infrastructure and, in the case where an existing building is designated as a Special Infrastructure, may be the occupier(s) instead if so specified at the time of designation.

19 The term “specified works” is defined in s 2 of the IPA. For Special Developments, specified works refer to any works for or affecting the foundation, retaining structure, substructure or superstructure of any building to be or being constructed under the Special Development. For Special Infrastructures, specified works refer to any extension of the Special Infrastructure, any major renovation to the Special Infrastructure or any other type of works prescribed by the Minister. The term “major renovation” is defined in s 2 of the

IPA and refers to any alteration, extension, repair, dismantling or demolition works (“Renovation Works”) carried out to the structure or glazing of any part of a building that contains a critical asset or is a public place or is otherwise accessible to vehicles or vessels, any Renovation Works affecting the perimeter of the premises, and any installation or relocation of a critical asset in the premises.

20 Under s 33 of the IPA, the security plan must be prepared by a person approved by the Commissioner in connection with those specified works (the “Competent Person”) and must contain the Competent Person’s security risk assessment and security measures required for that Special Development or Special Infrastructure. There is no pre-approved list of Competent Persons. The MHA will provide broad guidelines on the requirements that Competent Persons should meet, but the approval process for such Competent Persons will be on a project basis, as some projects may require special expertise or may be of a sensitive nature.¹³

21 The security plan may be required to cover areas outside of the specified works, so that security risks to the designated premises may be addressed adequately. The scope of such security measures will be reasonable, for example, to install or upgrade access control or video surveillance systems.¹⁴

22 Section 62 of the IPA provides for appeals to the Minister against the Commissioner’s rejection of a security plan or amended security plan for the Special Development or Special Infrastructure within 14 days after the rejection. In cases where independent technical advice is needed, the Minister may refer the appeal to an Appeal Advisory Board established under s 63 of the IPA before deciding an appeal. The Minister’s decision on the appeal is final.

13 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

14 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

B. Obtaining Commissioner’s approval of amendments to security plan

23 Under ss 37 and 44 of the IPA, the Commissioner may, at any time and by written notice to the responsible person, require the approved security plan for the Special Development and Special Infrastructure to be amended and submitted for the Commissioner’s approval within the time specified in the notice. The responsible person may also, at any time, apply for the Commissioner’s approval to amend the approved security plan.

C. Implementing and maintaining security measures in accordance with security plan

24 Under ss 39 and 46, after the Commissioner approves the security plan, the responsible person of the Special Development or Special Infrastructure must implement, or cause to be implemented, every security measure that is required to be implemented before or upon the completion of the specified works.

25 After completion of the specified works for the Special Development or Special Infrastructure, the responsible person must submit to the Commissioner a certificate of works completion (“CWC”) for the Commissioner’s approval. The CWC must be prepared by a person approved by the Commissioner and contain the approved person’s certification that the security measures have been implemented in accordance with the approved security plan. If a Temporary Occupation Permit (“TOP”) is required from the Building and Construction Authority for the occupation of the Special Development or Special Infrastructure, the CWC must be submitted for the Commissioner’s approval before any TOP is obtained. In any other case, the CWC must be submitted within the prescribed time after completion of the specified works.

26 Under ss 40 and 47, after the CWC for the Special Development or Special Infrastructure is approved, the responsible person must implement, or cause to be implemented, every security measure that is required to be implemented after the Commissioner’s approval of the CWC. The responsible person must also maintain every security measure that is implemented under the approved security plan

until the Special Infrastructure ceases to be a Special Infrastructure.

D. Sanctions for non-compliance under Infrastructure Protection Act 2017

27 Fines and/or imprisonment will be imposed on the responsible person of Special Developments or Special Infrastructures for instances of non-compliance with their security-by-design obligations under the IPA.

V. Costs implications

28 Under s 80 of the IPA, the costs of complying with security-by-design obligations under the IPA shall be borne by the responsible person of the Special Development or Special Infrastructure.

29 To help manage costs, the MHA will try to make known as early as possible which buildings need to undergo security-by-design, so that developers can factor in the costs of security measures in their bid price for the land.¹⁵

30 Building owners and developers of Special Developments and Special Infrastructures should be mindful of the additional time that may be required for the construction process, and the potentially higher design and construction costs associated with implementing the requisite security measures under the IPA. Having said that, security-by-design may offer cost savings to businesses in the longer term. For example, when security measures are properly planned and seamlessly integrated into the design of the building, the use of technology, such as CCTV and access control systems, coupled with the appropriate processes, can help save on manpower costs. For Special Developments, by factoring in elements of protective security early in the design stage, the developer will be able to avoid costly retrofitting subsequently, which may be required in an elevated threat environment. This will help

15 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

minimise the impact of additional security measures and thus control costs more effectively.¹⁶

VI. Expertise and resources supporting the new framework

31 In order to support the new infrastructure protection framework under the IPA, the MHA and Professional Engineers Board have established a new category of specialist Professional Engineers in Protective Security, or the PE (PS) scheme, to recognise and develop local expertise in the area of building security.¹⁷ The requirements for registration as a specialist Professional Engineer in Protective Security are set out in the Fourth Schedule of the Professional Engineers Rules,¹⁸ as amended by the Professional Engineers (Amendment) Rules 2018.¹⁹

32 In the longer term, the MHA will consider making the involvement of Professional Engineers in Protective Security in the security-by-design process a legal requirement.²⁰

33 The MHA also publishes updated Guidelines for Enhancing Building Security in Singapore. These guidelines provide building owners, developers, engineers and architects with a resource for determining security-oriented design approaches to protect buildings against terrorism-related incidents. The Centre for Protective Security Studies will conduct training and outreach on the guidelines.²¹

VII. Conclusion

34 While the IPA undoubtedly addresses the safety and security needs of critical infrastructure and key assets in Singapore at a time when the threat of terrorism in Singapore cannot be ignored, the implementation of the IPA would

16 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

17 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

18 Cap 253, R 1, 1990 Rev Ed.

19 S 26/2018.

20 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

21 *Singapore Parliamentary Debates, Official Report* (2 October 2017) vol 94 (Josephine Teo, Second Minister for Home Affairs).

potentially lead to additional costs for building owners, developers and occupiers. It may also have an impact on the construction process, including the time required to incorporate such requirements. Owners, developers and occupiers should therefore bear in mind the possibility of their developments being designated as Special Developments or Special Infrastructures under the IPA, and factor in the additional time and cost that may be required to comply with their new security-by-design obligations under the Act.