

Section 57 of the Competition Act (Cap. 50B)

Grounds of Decision issued by the Competition Commission of Singapore

In relation to the proposed acquisition by Samwoh Premix Pte. Ltd. of certain property and assets from Ley Choon Constructions and Engineering Pte. Ltd.

24 August 2016

Case number: CCS 400/006/16

Confidential information in the original version of this Decision has been redacted from the published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [%]

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I. Introduction

The notification

- 1. On 13 July 2016, Samwoh Corporation Pte. Ltd. (referred to as the "Samwoh") filed a sole notification pursuant to section 57 of the Competition Act (Cap. 50B) (the "Act") for a decision by the Competition Commission of Singapore ("CCS") as to whether the proposed acquisition (the "Proposed Transaction") by Samwoh Premix Pte. Ltd. ("SWPPL"), a wholly-owned subsidiary of Samwoh, of the following property and assets for a consideration of S\$12.3 million in cash, from Ley Choon Constructions and Engineering Pte. Ltd. ("LCCE"), a wholly-owned subsidiary of Ley Choon Group Holdings Limited ("Ley Choon"), will infringe the section 54 prohibition, if carried into effect:
 - (a) the property comprised in Lot 3465C of Mukim 11 (also known as Private Lot A1276500) together with the building erected known as 55 Kranji Crescent, Singapore 728662 (the "Property"); and
 - (b) the asphalt premix manufacturing plant together with all plant and equipment in connection therewith (the "Plant and Equipment") situated at the Property, as set out in Schedule 1 of the Agreement Relating to the Sale and Purchase of 55 Kranji Crescent Singapore 728662 entered into between LCCE and SWPPL on 19 May 2016 (the "SPA"),

(collectively, the "Disposal Assets")

- 2. In reviewing the Proposed Transaction, CCS contacted three (3) competitors engaged in asphalt premix manufacturing (including Ley Choon) and nine (9) customers for the asphalt premix (collectively referred to as "Third-Parties"). CCS also engaged three (3) government agencies ("Agencies") for information as well as their respective views on asphalt premix manufacturing and supply in Singapore.
- 3. Of the Third-Parties and Agencies contacted, nine replied, with five of them providing substantive responses to CCS's questions. These Third Parties⁴ and Agencies⁵ indicated they have no competition concerns with the Proposed Transaction and did not raise any concern that the Transaction is likely to have a major adverse impact for them.

¹ Paragraph 46.1 of Form M1.

² Paragraphs 32.1, 46.3 and 46.4 of Form M1.

³ [**※**].

^{4 [3&}lt;].

⁵ [**≫**].

4. At the end of the consultation process and after evaluating all the evidence, CCS concludes that the Proposed Transaction, if carried into effect, will not infringe section 54 of the Act.

II. The Parties to the Proposed Transaction

Samwoh

- 5. Samwoh and SWPPL are companies registered in Singapore.⁶
- 6. SWPPL is a wholly-owned subsidiary of Samwoh, which in turn belongs to the Samwoh group of companies that are under common shareholding and control (the "Samwoh Group").⁷
- 7. The Samwoh Group provides products and services in Singapore under the following trading names, business names or brand names:⁸
 - (a) "Samwoh";
 - (b) "Highway" or "Highway International";
 - (c) "Megastone";
 - (d) "ECO CDW";
 - (e) "Samgreen";
 - (f) "Samwoh Resources";
 - (g) "Samwoh Ready Mix"; and
 - (h) "Tong Seng".
- 8. The Samwoh Group is involved in the following areas of business in Singapore:9
 - (a) building materials:
 - (i) supply and lay of asphalt premix;
 - (ii) ready-mixed concrete; and
 - (iii) quarrying and supply of building materials;
 - (b) construction: civil engineering and infrastructure;
 - (c) special products and services:

⁶ Paragraph 10.1 of Form M1.

⁷ Paragraph 7.1 of Form M1.

⁸ Paragraph 10.4 of Form M1.

⁹ Paragraph 10.7 of Form M1.

- (i) explosives and controlled blasting systems;
- (ii) precast concrete components;
- (iii) specialised pavement products; and
- (iv) logistics and machinery rentals;
- (d) recycling: recycling of construction waste; and
- (e) R&D:
 - (i) R&D centre; and
 - (ii) consultancy services.
- 9. The Samwoh Group is involved to some extent in the quarrying of building materials in Indonesia sold [%]. The Samwoh Group is also involved in providing consultancy services and road condition surveys outside of Singapore, such as in [%]. Other than this, [%].
- 10. Specific to SWPPL, SWPPL's activities in Singapore are in road milling, and supply and laying of asphalt premix.¹¹
- 11. The Samwoh Group has the following physical facilities and sites in Singapore:¹²
 - (i) 25E Sungei Kadut Street 1, Singapore 729333: head office, [≯];
 - (ii) 42A Sungei Kadut Street 1, Singapore 729347: [✗];
 - (iii) 51 Kranji Crescent, Singapore 728661 (the "51 Kranji Crescent Site"): **asphalt premix plant**, ready-mixed concrete plant and R&D centre;
 - (iv) 52A Sungei Kadut Street 1, Singapore 729356: asphalt premix plant;
 - (v) 18 Kranji Way, Singapore 739429: manufacturing of pre-cast concrete products (operated under Tong Seng Concrete Products Trading Pte Ltd);
 - (vi) Sarimbun Recycling Park (off Lim Chu Kang Road) (two sites): construction waste recovery facilities; and
 - (vii) 13 Sungei Kadut Street 4, Singapore 729064, and 15 Sungei Kadut Street 4, Singapore 729043: **asphalt premix plant** (operated under Highway), office premises.

¹⁰ Paragraph 10.8 of Form M1.

¹¹ Paragraph 10.9 of Form M1.

¹² Paragraph 10.17 of Form M1.

12. The total (group) worldwide revenue for the Samwoh Group in the financial year ended 31 December 2015 was approximately [X]. ¹³ The total (group) revenue for the Samwoh Group in Singapore in the financial year ended 31 December 2015 was approximately [X]. For completeness, Samwoh submitted that [X]. ¹⁴

Ley Choon

- 13. Ley Choon is incorporated as a limited liability company and is domiciled in Singapore. LCCE is a company registered in Singapore. LCCE is a wholly-owned subsidiary of Ley Choon. Ley Choon has been listed on the Main Board of the SGX-ST since 2012. 15 Zheng Choon Holding Pte Ltd is the immediate and ultimate holding company of Ley Choon and is incorporated in Singapore. 16
- 14. Prior to the Proposed Transaction, products manufactured by the Disposal Assets were sold only under the trading name of "Ley Choon". 17
- 15. Broadly, the Ley Choon group of companies, including but not limited to Ley Choon and LCCE, ("Ley Choon Group") is involved in the following areas of business in Singapore: 18
 - (a) pipes and roads segment, consisting of underground utilities infrastructure construction and maintenance, sewer pipeline rehabilitation, and road and airfield construction and maintenance which include supply and laying of graded stone, cement treated base, milling and laying of asphalt premix¹⁹; and
 - (b) construction materials segment, comprising asphalt premix production and construction waste recycling.
- 16. The Ley Choon Group is also involved in business, outside of Singapore, in Yantai, the People's Republic of China, for the provision of construction waste recycling and the development, production and sale of eco-green construction materials.²⁰

¹³ Paragraph 13.1 of Form M1.

¹⁴ Paragraph 13.3 of Form M1.

¹⁵ Paragraph 7.3 of Form M1.

¹⁶ Paragraph 10.3 read with Annex 4, pages 54 and 79 of Form M1.

¹⁷ Paragraph 10.5 of Form M1.

¹⁸ Paragraph 10.13 of Form M1.

¹⁹ Paragraph 1.2(b) of Rajah & Tann Singapore LLP, counsel for Ley Choon and LCCE, "Responses to CCS' Invitation For Comments On Application By Samwoh Corporation Pte. Ltd. For Decision Under Section 58 Of The Competition Act" dated 3 August 2016.

²⁰ Paragraph 10.14 of Form M1.

- 17. The Plant and Equipment, which commenced production of asphalt premix in 2003, was the first asphalt premix manufacturing plant of the Ley Choon Group.²¹
- 18. On 19 September 2014, the Ley Choon Group officially opened its second asphalt premix manufacturing plant at 3 Sungei Kadut Drive, Singapore 729556 (the "LC Second Plant"), which was commissioned in July 2013. The LC Second Plant does not form part of the Disposal Assets, and after the Proposed Transaction, the Ley Choon Group will continue to manufacture asphalt premix for supply in Singapore through the LC Second Plant.²²
- 19. The total (group) worldwide revenue for the Ley Choon Group in the financial period from 1 January 2015 to 31 March 2016 was approximately S\$109.1 million.²³ The total (group) revenue for the Ley Choon Group in Singapore in the financial period from 1 January 2015 to 31 March 2016 was approximately S\$96.9 million.²⁴

III. The Proposed Transaction

- 20. The Proposed Transaction only involves the sale of the Disposal Assets comprising of the Property and the Plant and Equipment by LCCE to SWPPL:
 - (a) No employees of the Ley Choon Group will be directly or indirectly transferred to the Samwoh Group, either as part of the Proposed Transaction, or post-Proposed Transaction. The Samwoh Group also [%];²⁵ and
 - (b) No customers, purchases of customers, supply contracts or production commitments (in whole or in part) of the Ley Choon Group will be transferred to SWPPL or the Samwoh Group, either as part of the Proposed Transaction, or post-Proposed Transaction.²⁶
- 21. The aggregate consideration for the Disposal Assets is an amount in cash equal to the sum of S\$12.3 million.²⁷

²¹ Paragraph 10.11 of Form M1.

²² Paragraph 10.12 of Form M1.

²³ Paragraph 13.2 of Form M1.

²⁴ Paragraph 13.4 of Form M1.

²⁵ Paragraphs 5.1 and 5.2 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

²⁶ Paragraph 19.1 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

²⁷ Paragraph 11.19 of Form M1.

- 22. The Plant and Equipment are estimated to contribute approximately [✗], or [✗] out of [✗]²⁸ MT/h in total of the Ley Choon Group's total asphalt premix production capacity (not actual production) in Singapore prior to the Proposed Transaction.²⁹
- 23. Following the Proposed Transaction, the Ley Choon Group will retain its activities in the production of asphalt premix in Singapore through the LC Second Plant, which does not form part of the Disposal Assets and is not impacted by the Proposed Transaction.³⁰
- 24. With regard to the Disposal Assets, the Plant and Equipment are situated at the Property, i.e. 55 Kranji Crescent, Singapore 728662. The Property is adjacent to Samwoh's existing site at the 51 Kranji Crescent Site.³¹
- 25. Samwoh understands from announcements made by Ley Choon³² that the Ley Choon Group has been undergoing a debt restructuring programme with the lenders which encompasses disposal of non-core assets and non-core businesses. According to Ley Choon's announcement, in line with this, the Ley Choon Group has been actively looking for potential buyers for the Disposal Assets since the last quarter of 2015. Ley Choon reviewed the offers received and decided to proceed with the offer from SWPPL.
- As the disposal undertaken by the Ley Choon Group involves the disposal of both the Property and the Plant and Equipment, Samwoh will also acquire the Plant and Equipment, [X].³³
- 27. Samwoh submitted that the Proposed Transaction fell within section 54(2)(c) of the Act as:
 - (a) The Proposed Transaction involves the acquisition by SWPPL of a not insubstantial part of the assets of LCCE, the result of which is to place SWPPL in a position to substantially replace LCCE in the part of the asphalt production business, in which LCCE was engaged through the Plant and Equipment, immediately before the Proposed Transaction;³⁴ and

²⁹ Paragraph 11.4 of Form M1.

²⁸ Paragraph 16.1 of [**≫**].

³⁰ Paragraphs 11.1 and 11.18 of Form M1.

³¹ Paragraph 10.18 of Form M1.

³² See paragraph 2.1 of Ley Choon's announcement "Proposed Disposal of 55 Kranji Crescent, Singapore 728662 Together with the Plant and Equipment" dated 19 May 2016, at http://www.leychoon.com/?p=2865.

³³ Paragraph 12.2.3 of Form M1.

³⁴ Paragraph 11.3 of Form M1.

- (b) The Plant and Equipment are assets of LCCE that, on their own, can comprise a business that is capable of generating revenue on the market for asphalt premix.³⁵
- 28. From Samwoh's perspective, the strategic and economic rationale for the Proposed Transaction for Samwoh is as follows:
 - (a) ³⁶Shifting other manufacturing facilities to the Property [×].³⁷
 - (b) [X]³⁸
 - (c) [**%**].³⁹
 - (d) [X] 40
 - (e) The Property is also adjacent to Samwoh's existing site at the 51 Kranji Crescent Site [≫]⁴¹
 - (i) [**%**]
 - (ii) dismantling the Samwoh Group's existing asphalt premix manufacturing plant situated [X]. Subsequently, Samwoh indicated to CCS a possibility that the Samwoh Group may ultimately commercially decide to [X]. 42
 - (f) Samwoh intends to replace the [X] with [X] or vice versa. [X] the replacement of the [X] with the [X] does not increase the Samwoh Group's overall production capacity of asphalt premix in Singapore, and in fact reduces the capacity to some extent. [X].⁴³

CCS Assessment of whether the transaction constitutes a merger

- 29. Section 54(2)(c) of the Competition Act (Cap.50B) ("Act") provides that:
 - (2) For the purposes of this Part, a merger occurs if—

³⁵ Paragraph 11.4 read with paragraph 16.3 of Form M1.

³⁷ Paragraph 12.2.1 read with Annex 7 of Form M1.

³⁸ Paragraph 12.2.1 Annex 6 of Form M1.

³⁹ Paragraph 12.2.1 of Form M1.

⁴⁰ Paragraphs 10.17.1, 10.17.2, 10.17.4 and 12.2.1 read with Annex 7 of Form M1.

⁴¹ Paragraph 12.2.2 of Form M1.

⁴² Paragraph 3 of Annex A of Allen & Gledhill's letter titled "Application for decision under Section 57 of the Competition Act, Chapter 50B of Singapore - Responses to CCS' letter dated 25 July 2016 - Update" dated 19 August 2016.

⁴³ Paragraph 12.2.4 of Form M1.

- (c) the result of an acquisition by one undertaking (the first undertaking) of the assets (including goodwill), or a substantial part of the assets, of another undertaking (the second undertaking) is to place the first undertaking in a position to replace or substantially replace the second undertaking in the business or, as appropriate, the part concerned of the business in which that undertaking was engaged immediately before the acquisition.
- Assets (which forms a substantial part of the assets of LCCE) will place SWPPL in a position to replace LCCE in the part of the asphalt production business attributable to the Disposal Assets immediately before the Proposed Transaction, and that the Disposal Assets are, on their own, revenue-generating business. In 2015, LCCE produced [X] MT of asphalt premix and generated \$[X] in sales from the Disposal Assets.
- 31. As such, CCS takes the view that the Proposed Transaction constitutes a merger within the meaning of section 54(2)(c) of the Act.

IV. Competition Issues

- 32. Both SWPPL and Ley Choon are involved in the provision of road milling services, as well as the supply and laying of asphalt premix.⁴⁴ However, the Proposed Transaction involves only the Disposal Assets, which function as an asphalt premix manufacturing plant.⁴⁵ Therefore, horizontal overlap occurs only in the production of asphalt premix in Singapore.⁴⁶
- 33. In evaluating the potential impact of the Proposed Transaction, CCS considered whether the Proposed Transaction will lead to coordinated, non-coordinated and vertical effects that would substantially lessen competition or raise competition concerns in the asphalt premix business as described above in paragraph 32.

V. Counterfactuals

34. As stated in paragraph 4.6 of the CCS Guidelines on the Substantive Assessment of Mergers ("CCS Merger Guidelines"), CCS will, in assessing mergers and applying the Substantial Lessening of Competition ("SLC") test, evaluate the prospects for competition in the future with and without the merger. The competitive situation without the merger is referred to as the "counterfactual". The SLC test will be applied prospectively, that is, future competition will be assessed with and without the merger.

⁴⁴ Paragraph 10.9 of Form M1.

⁴⁵ Paragraph 10.11 of Form M1.

⁴⁶ Paragraph 15.1 of Form M1.

35. The *CCS Merger Guidelines* also states that in most cases, the best guide to the appropriate counterfactual will be prevailing conditions of competition, as this may provide a reliable indicator of future competition without the merger. However, CCS may need to take into account likely and imminent changes in the structure of competition in order to reflect as accurately as possible the nature of rivalry without the merger.⁴⁷

Samwoh's submissions

- 36. Samwoh submitted that in the absence of the Proposed Transaction, the existing competitors in the production of asphalt premix in Singapore [X] would continue to compete in the production of asphalt premix. 48 Ley Choon would continue its production of asphalt premixes through its second asphalt premix manufacturing plant ("LC Second Plant"), which does not form part of the Disposal Assets.
- 37. Specific to Samwoh, however, [≯].⁴⁹
- 38. From Ley Choon's perspective, even if the Proposed Transaction does not take place, [%]. 50

CCS's Assessment and Conclusion on the Relevant Counterfactual

- 39. CCS notes Samwoh's submission that the Proposed Transaction would result in the transfer of asphalt premix production capacity from LCCE to SWPPL. CCS also notes that there will be no transfer of customers, purchases of customers, supply contracts, production commitments or employees. Therefore, the Proposed Transaction does not result in any change of the quantity of asphalt premix produced by Samwoh Group or Ley Choon Group to meet their respective customers' demand for asphalt premix.
- 40. CCS considers that the appropriate counterfactual at this time is the sale of the Disposal Assets to another party which could either be another competitor or a party that will use the Property for purposes other than the production of asphalt premix. However, as the Disposal Assets constitutes production capacity only without customers, purchases of customers, supply contracts or production commitments, the existing competitors in the production of asphalt premix in Singapore, including Samwoh Group, Ley Choon Group and the potential buyer, if a competitor, under the

⁴⁷ Paragraph 4.7 of the CCS Merger Guidelines.

⁴⁸ Paragraph 23.2 of Form M1.

⁴⁹ Paragraph 23.2 of Form M1.

⁵⁰ Paragraph 5.1 of Rajah & Tann Singapore LLP, counsel for Ley Choon and LCCE, "Responses to CCS' Invitation For Comments On Application By Samwoh Corporation Pte. Ltd. For Decision Under Section 58 Of The Competition Act" dated 3 August 2016.

counterfactual, would continue to compete independently in the production of asphalt premix. In particular, Ley Choon Group indicated that it can meet existing customer purchases and contracts of asphalt premix through LC Second Plant.⁵¹

VI. Relevant Markets

41. Samwoh submitted that the relevant market definition in relation to the Overlapping Product is the market for the production of asphalt premix in Singapore.⁵²

PROVISION OF ASPHALT PREMIX IN SINGAPORE

(A) Overview of Industry

- 42. Asphalt premix is the main product used for surfacing roads and pavements. It is used in the provision of asphalt laying services in Singapore (i.e. services related to the laying of asphalt as surfacing for roads and pavements), which in turn is part of the wider provision of civil engineering works in Singapore.⁵³
- 43. In Singapore generally, asphalt premix can be provided by asphalt premix manufacturers either:⁵⁴
 - (a) Together with asphalt premix laying services, on a "supply and lay" basis (which Samwoh submitted is the case for the majority of asphalt premix supplied in Singapore); or
 - (b) On an ex-plant basis (i.e. the sale of asphalt premix directly from the asphalt premix manufacturing plant, not inclusive of any laying services or transportation of the asphalt premix) to third parties for use in providing asphalt laying services in Singapore.
- 44. Competition for the production of asphalt premix is closely linked to, and a derived demand from, the provision of asphalt laying services (whether by vertically-integrated competitors on a "supply and lay" basis, or providers who procure their asphalt inputs on an ex-plant basis), which is

⁵¹ Paragraph 2.2 of Rajah & Tann Singapore LLP, counsel for Ley Choon and LCCE, "Responses to CCS' Invitation For Comments On Application By Samwoh Corporation Pte. Ltd. For Decision Under Section 58 Of The Competition Act" dated 3 August 2016.

⁵² Paragraph 17.1 of Form M1

⁵³ Paragraph 18.1 of Form M1.

⁵⁴ Paragraph 18.2 of Form M1

in turn also closely linked to, and a derived demand from, the provision of civil engineering works in general. To elaborate:⁵⁵

- (a) a significant portion of the contracts for asphalt laying services in Singapore is awarded by the Land Transport Authority ("LTA"), often as a part of wider contracts for the provision of civil engineering services; and
- (b) civil engineering contractors would participate in tenders for civil engineering projects or projects with civil engineering elements. Once the tender is awarded, these contractors may subcontract part of the work requirements to other suppliers, such as asphalt laying services, subject to the terms of the tender.
- 45. There are accordingly multiple tiers in which competition takes place and which have impact on competition between asphalt premix manufacturers in Singapore. There is also competition between the competitors in each tier of competition.⁵⁶
- (B) Overview of the production of asphalt premix in Singapore
- 46. Samwoh submitted that asphalt premix is the key product used for surfacing roads and pavements. While other types of materials such as concrete and block paving, stone chippings, granite tiles, and synthetic rubber may be used for road and pavement surfacing in Singapore, such types of surfacing were used only to a limited extent. The predominant material used to surface roads and pavements in Singapore would be asphalt premix, including recycled asphalt premix. ⁵⁷ The end-user customers of asphalt premix tend to be large customers that award civil engineering contracts, such as LTA or real estate developers. This is because the demand for asphalt premix is ultimately derived from such large customers' demand in respect of wider civil engineering works. ⁵⁸
- 47. Samwoh also explained that manufacturers of asphalt premix:
 - (a) provide asphalt laying services (i.e., together with asphalt premix on a "supply and lay" basis; and/or
 - (b) supply asphalt premix on an ex-plant basis,

⁵⁵ Paragraph 18.3 of Form M1.

⁵⁶ Paragraph 18.3, read with Diagram 2 of Form M1.

⁵⁷ Paragraph 19.9 of Form M1.

⁵⁸ Paragraph 18.6 of Form M1.

to other civil engineering contractors and independent asphalt laying service providers who are not able to source asphalt premix internally.⁵⁹ All manufacturers of asphalt premix in Singapore are vertically-integrated civil engineering contractors and they are able to source asphalt laying services and produce asphalt premix internally.⁶⁰ All manufacturers of asphalt premix would be able to sell asphalt premix to end-user customers directly.⁶¹ Although production and laying of asphalt premix are two distinct functional levels of asphalt premix manufacturers, there are no manufacturers of asphalt premix in Singapore who only supply asphalt premix, or who only provide asphalt laying services.⁶²

- 48. In such instances, the direct customers of asphalt premix manufacturers would be (i) providers of asphalt laying services; (ii) vertically-integrated civil engineering contractors who source asphalt laying services internally but require asphalt premix on an ex-plant basis; and (iii) non-vertically integrated civil engineering contractors who outsource their entire needs for asphalt "supply and lay" services. ⁶³ In particular, there are a number of independent asphalt laying service providers (i.e. who source for asphalt premix on an ex-plant basis from the asphalt premix manufacturers). ⁶⁴ There are also civil engineering contractors who are not able to source asphalt laying services and produce asphalt premix internally and would outsource their asphalt laying services and asphalt premix requirements to the asphalt premix manufacturers, or to the independent asphalt laying service providers who would then procure the asphalt premix from the manufacturers (including Samwoh). ⁶⁵
- 49. **Table 1** below further details how end-user customers may procure asphalt premix, and the corresponding tiers in which competition takes place at each level.

⁵⁹ Paragraph 8.1 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

⁶⁰ The Samwoh Group, the Ley Choon Group, UE&P (through Lian Beng and Chuan Lim Construction Pte Ltd ("CL Construction")) and Yun Onn Company (Private) Limited. See Paragraph 8.1 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

⁶¹ Paragraph 19.8 of Form M1.

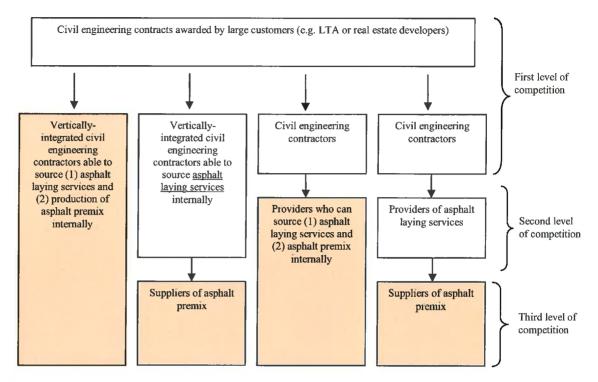
⁶² Paragraph 8.3 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

⁶³ Paragraph 18.4 to 18.5 of Form M1.

⁶⁴ These include Double-Trans Pte. Ltd. / Samco Civil Engineering Pte. Ltd., Asphalt Specialist Services Pte. Ltd., Asphalt Resources Pte. Ltd., United Asphalt Pte. Ltd., Instant Tpt Svc Pte. Ltd., Wee Guan Construction Pte Ltd, TS & T Construction Pte Ltd, Eng Xian Construction Pte Ltd, C.K. Toh Construction Pte. Ltd., and Citi Construction & Engineering Pte. Ltd. See paragraph 8.1 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

⁶⁵ Paragraph 8.4 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

Table 1: Illustration of tiers of competition for civil engineering works⁶⁶



(C) Regulatory environment

- 50. Samwoh submitted that there are no regulatory standards or tests for the quality of asphalt premix. 67 There is also no specific licensing or regulatory requirements to build a new asphalt premix manufacturing plant in Singapore. There may, however, be requirements imposed by government agencies on operators of asphalt premix manufacturing facilities as part of their general regulatory regimes. This includes:
 - (a) JTC: Approvals from JTC are required if the land on which the asphalt premix manufacturing plant is to be built is leased from JTC; and
 - (b) NEA: The operation of asphalt premix manufacturing plants is subject to air pollution control requirements regulated by NEA.⁶⁸

(D) Product market

51. Samwoh submitted that the relevant market is the market for the production of all asphalt premixes (including recycled asphalt premix).⁶⁹

⁶⁶ Paragraph 18.3, Diagram 2 of Form M1.

⁶⁷ Paragraph 18.8 of Form M1.

⁶⁸ Paragraph 18.10 to 18.12 of Form M1.

⁶⁹ Paragraph 20.1 of Form M1.

52. Samwoh also referred to the decisions of the European Commission ("EC") in Anglo American/Tarmac⁷⁰ and Hanson/Pioneer⁷¹, and the Competition Markets Authority (formerly the Office of Fair Trading ("OFT")) in "Decision for the anticipated acquisition by Anglo American plc of Johnston Group plc" as supporting persuasive cases. The EC had found in Anglo American/Tarmac and Hanson/Pioneer that other types of surfacing (e.g., concrete, and block paving, stone chippings and recycled asphalt) may only be partial substitutes for asphalt in its main use of surfacing roads and pavements. The EC made the finding in Anglo American/Tarmac that:

"...the Commission's enquiries suggest that differences in cost, appearance, durability and useful life all mean that there is only limited substitutability between asphalt and the other materials, suggesting that asphalt should, as in the request, be regarded as a distinct product market."

"...all these alternatives together make up only some 37% of the total surfacing market, against 63% for asphalt. The figures are 24% and 76% respectively if recycled asphalt, which can only be partially substituted (maximum 30% of the total surface) – is included alongside the fresh product, and none of the other alternatives individually has more than c.10%."

53. The OFT, in its "Decision for the anticipated acquisition by Anglo American plc of Johnston Group plc", had also determined that asphalt should be regarded as a distinct product market⁷³:

"Asphalt (coated stone) is produced by heating and mixing bitumen and aggregates and is primarily used as a surfacing for roads. High specification asphalt products are used for applications such as racing tracks and coloured mixes. The specification of each type of asphalt is a function of the mix of aggregates, bitumen and additives and is made to customers' specifications. The OFT has previously considered there to be a relevant product market for the production and supply of asphalt."

54. With respect to recycled asphalt premix, Samwoh explained that recycled asphalt premix can now be readily used as a substitute for asphalt premix that is produced from fresh raw material inputs, as evidenced by the "Green Pavement" trial conducted by LTA prior to its approval of the use of reclaimed asphalt pavement in asphalt mixtures for road construction in March 2010.⁷⁴

⁷⁰ EC Case No. COMP/M.1779 – Anglo American/Tarmac.

⁷¹ EC Case No. COMP/M.1827 – Hason/Pioneer.

⁷² Paragraph 20.3 of Form M1.

⁷³ Paragraph 8 of OFT's Decision regarding the "Anticipated acquisition by Anglo American plc of Johnston Group plc".

⁷⁴ Paragraph 20.4 of Form M1.

- 55. Samwoh submitted that from a customer's perspective, there is limited substitutability for asphalt premix for the purposes of surfacing roads and pavements. The predominant material used for surfacing roads and pavements in Singapore is asphalt premix, with recycled asphalt premix also increasingly used since 2010. 75
- of types of asphalt premixes that can be, and are, developed by manufacturers (e.g., premium asphalt premixes co-developed between suppliers and customers). Such mixes are generally non-proprietary and may be easily prepared by other asphalt premix manufacturers for customers using the same formulation. There are also generally no significant differences between the types of asphalt premix produced by different manufacturers. The time and cost required for any existing manufacturer to switch between supplying different types of asphalt premixes is generally also negligible, as the same asphalt premix manufacturing plant can be utilized for the production of different types of asphalt premix, albeit that only one type of asphalt premix can be produced at a time in a plant.

CCS's assessment

- 57. CCS identifies the supply of asphalt premix as the 'focal product' due to the horizontal overlap between Samwoh Group and Ley Choon Group with respect to the Disposal Assets. Even though both companies are also involved in asphalt laying services, the latter does not constitute a focal product or a relevant market, as the business is not included as part of the Disposal Assets under the Proposed Transaction.
- 58. With respect to the regulatory conditions in the supply of asphalt premix, CCS notes that approvals would be required from JTC to build a new asphalt premix manufacturing plant. Asphalt premix manufacturers would also need to adhere to the air pollution control requirements imposed by NEA. However, CCS notes that there are currently four asphalt premix manufacturers in Singapore. This includes a new entrant, United E&P Pte. Ltd. ("UE&P"), who entered the market in the third quarter of 2013. Lian Beng, a Singapore-based building construction group with integrated civil engineering and construction support service capabilities that is listed on the Main Board of the SGX-ST, holds 40 per cent of the total and issued paid-up capital of UE&P while the remaining 60 per cent of the total and issued paid-up capital of UE&P is indirectly majority-owned by Mr Elvin Koh Oon Bin, who is the former Managing Director of Samwoh.

⁷⁵ Paragraph 19.9 of Form M1.

⁷⁶ Paragraph 19.10 of Form M1.

⁷⁷ Paragraph 19.14 of Form M1.

- 59. CCS is therefore of the view that the current regulatory requirements do not pose an undue constraint to the demand-side and supply-side substitutability for the provision of asphalt premix.
- 60. With regard to the market for the production of asphalt premix, CCS notes Samwoh's submission that from a demand-side substitution perspective, there is limited substitutability for asphalt premix for the purposes of surfacing roads and pavements. ⁷⁸
- 61. In this regard, feedback from one of the Third Parties confirms that there are limited substitutes for asphalt premix. ⁷⁹ An asphalt premix manufacturer also indicated that the closest substitute product for asphalt premix is chip seal, where liquid bitumen is sprayed followed by the spreading of granite chipping. However, this product is not used in Singapore, as it is not as durable as asphalt premix, and it is not accepted by end-user customers, such as [X] and the [X].
- 62. From the supply-side perspective, feedback from one of the Third Parties also suggested that while there are differences in the contents for different asphalt premixes, a single asphalt premix supplier in Singapore would be able to supply all types of asphalt premixes to the Singapore market.⁸¹
- 63. This would also be consistent with the CCS's earlier decision in the Samwoh/Highway Decision⁸², where CCS had indicated that:

"[...] CCS agrees that there are no substitutes to asphalt premix [...]. Asphalt premixes are generally homogenous and they have very unique characteristics and are intended for very specific functions."

64. In light of the above, CCS is of the view that the relevant product market for the purpose of this assessment, is the market for the production of asphalt premix.

(a) Geographic Market

65. Samwoh submitted that the relevant geographic market for the production of asphalt premix is Singapore, with manufacturers of asphalt premix able to supply asphalt premix to the whole of Singapore.⁸³

⁷⁸ Paragraph 19.9 of Form M1.

⁷⁹ Paragraph 12.5 of [**≫**].

⁸⁰ Paragraph 12.5 of [%].

⁸¹ Paragraph 7b of [**※**].

⁸² CCS 400/004/10, Acquisition by Samwoh Corporation Pte. Ltd. of control of Highway International Private Limited ("CCS Samwoh/Highway Decision").

⁸³ Paragraph 20.6 of Form M1.

- 66. Samwoh submitted that based on decisions of the EC and the OFT⁸⁴, the relevant geographic markets for asphalt premix should be defined by a maximum supply distance of 50 to 100 kilometres from the production centre and a maximum possible transport time (regardless of distance) of less than three hours.⁸⁵
- 67. Accordingly, Samwoh submitted that a relevant geographic market that encompasses the whole of Singapore would be consistent with the decisions of EC and the OFT as well as CCS's Samwoh/Highway Decision.⁸⁶

CCS's assessment

- 68. CCS has considered Samwoh's submissions regarding the geographic market. Feedback from one of the Third Parties indicated that customers sourced for asphalt premixes from manufacturers located in Singapore.⁸⁷ It would not be feasible for customers to obtain asphalt premix from overseas as it would need to be delivered to the project site at a high temperature. In addition, it would be costly to transport asphalt premix from overseas to Singapore.⁸⁸
- 69. A Singapore-wide geographical market definition would also be consistent with CCS's earlier decision in the Samwoh/Highway Decision, where CCS had found that⁸⁹:

"Feedback from third parties indicates that asphalt premix is sourced from suppliers within Singapore and cannot be sourced from suppliers overseas as asphalt has to be transported in such a way that it remains heated for it to be in a state suitable for laying.

In view of this, and the fact that current suppliers have demonstrated capability of supplying asphalt premix to the whole of Singapore, CCS agrees with Samwoh's submission that the relevant geographic market is Singapore."

70. In light of the above, CCS is of the view that the relevant geographic market for the production of asphalt premix is Singapore.

⁸⁴ EC Case No IV/M.678 – Minorco/Tilcon, EC Case No. COMP/M.1779 – Anglo American/Tarmac and EC Case No. COMP/M.1827 – Hanson/Pioneer, and OFT's Decision regarding the "Anticipated acquisition by Anglo American plc of Johnston Group plc".

⁸⁵ Paragraph 20.7 of Form M1.

⁸⁶ CCS 400/004/10, Acquisition by Samwoh Corporation Pte. Ltd. of control of Highway International Private Limited.

⁸⁷ Paragraph 7d of [≫].

⁸⁸ [≫]'s response to Question 7 of CCS's RFI dated 26 July 2016.

⁸⁹ CCS 400/004/10, Acquisition by Samwoh Corporation Pte. Ltd. of control of Highway International Private Limited.

OVERALL ASSESSMENT ON RELEVANT MARKET

71. CCS is therefore of the view that the relevant market for the purpose of this assessment is the market for the production of asphalt premix in Singapore ("Relevant Market").

VII. Market Structure

Change in market structure as a result of the Proposed Transaction.

Samwoh's submission

- 72. The Proposed Transaction only involves the sale of the Disposal Assets comprising of the Property and the Plant and Equipment by LCCE to SWPPL. It does not involve any transfer of customers, purchase of customers, supply contract, production commitment or employees⁹⁰, either as part of the Proposed Transaction, or post-Proposed Transaction.⁹¹
- 73. The Samwoh Group intends for the $[\times]$ to replace the $[\times]$ in its current function as $[\times]$.
- 74. Ley Choon had indicated that the Proposed Transaction will have a minimal impact on Ley Choon's business in Singapore. This is because Ley Choon is already operating its LC Second Plant which does not form part of the Disposal Assets and it would be not impacted by the Proposed Transaction. The LC Second Plant is newer and has a larger maximum production capacity, and [X]. Therefore, the existing production through the Disposal Assets can be readily absorbed by the LC Second Plant and the Proposed Transaction would have no material impact on Ley Choon's asphalt premix production volumes or its business. Ley Choon, through the LC Second Plant, will continue to be a competitor to Samwoh in the production of asphalt premix in Singapore, post-Proposed Transaction. Page 1974.

CCS's assessment

 $^{^{90}}$ Paragraphs 5.1 and 5.2 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

⁹¹ Paragraph 19.1 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

⁹² Paragraph 12.2.4 of Form M1.

⁹³ Paragraph 2.2 of Rajah & Tann Singapore LLP, counsel for Ley Choon and LCCE, "Responses to CCS' Invitation For Comments On Application By Samwoh Corporation Pte. Ltd. For Decision Under Section 58 Of The Competition Act" dated 3 August 2016.

⁹⁴ Paragraph 24.2 of Form M1.

75. CCS notes that Ley Choon would continue to be an independent competitor to Samwoh in the production of asphalt premix in Singapore, post-Proposed Transaction. Given that customer contracts from Ley Choon are not transferred to Samwoh as part of the Proposed Transaction, the Proposed Transaction would only involve the transfer of asphalt premix production capacity.

Market shares and market concentration

76. As set out in the *CCS Merger Guidelines*, CCS is generally of the view that competition concerns are unlikely to arise in a merger situation unless the merged entity will have a market share of 40% or more or the merged entity will have a market share of more than 20% with the post-transaction CR3 at 70% or more.⁹⁵

Samwoh's submission

Market for the production of asphalt premix

77. Samwoh submitted market shares figures based on its own estimates of the value and volume of the production of asphalt premix in Singapore. Samwoh explained that there are no published industry statistics or known reliable third-party sources for the demand and supply of asphalt premix in Singapore. 96

Market shares by value, volume and capacity

78. Samwoh provided in **Table 2** below the market share estimates by value of the production of asphalt premix in Singapore.

⁹⁵ Paragraphs 5.14 and 5.15 of the *CCS Merger Guidelines*. CR3 refers to the combined market shares of the three largest firms.

⁹⁶ Paragraph 21.1 of Form M1.

Table 2: Market shares for the production of asphalt premix in Singapore (by value)⁹⁷

	201	3	201	4	2015	
Manufacturer Name	Sales Value (S\$)	Shares by Value	Sales Value (S\$)	Shares by Value	Sales Value (S\$)	Shares by Value
Samwoh Group	[%]	[60- 70]%	[%]	[60-70] %	[%]	[60- 70]%
Disposal Assets	[%]	[0-10]%	[※]	[0-10]%	[%]	[0-10]%
Combined	[%]	[60- 70]%	[%]	[60- 70]%	[%]	[60- 70]%
Ley Choon – attributable to the LC Second Plant	[%]	[0-10]%	[%]	[10- 20]%	[%]	[10- 20]%
Yun Onn	[×]	[20- 30]%	[×]	[10- 20]%	[%]	[20- 30]%
UE&P	[%]	[%]	[%]	[%]	[%]	[0-10]%
Total	[%]	100%	[×]	100%	[%]	100%

79. Samwoh provided the market share estimates by volume of the production of asphalt premix in Singapore, as shown in **Table 3** below.

⁹⁷ Annex A, Table 1 of Form M1.

Table 3: Market shares for the production of asphalt premix in Singapore (by volume)⁹⁸

	201	13	20:	14	2015		
Manufacturer Name	Sales Volume (MT)	Shares by Volume	Sales Volume (MT)	Shares by Volume	Sales Volume (MT)	Shares by Volume	
Samwoh Group	[%]	[60- 70]%	[%]	[50- 60]%	[%]	[60- 70]%	
Disposal Assets	[%]	[0-10]%	[%]	[0-10]%	[%]	[0-10]%	
Combined	[%]	[60- 70]%	[%]	[50- 60]%	[%]	[60- 70]%	
Ley Choon – attributable to the LC Second Plant	[%]	[10- 20]%	[%]	[20- 30]%	[%]	[10- 20]%	
Yun Onn	Yun Onn [X]		[%] [20- 30]%		[%]	[20- 30]%	
UE&P	[%]	[%]	[%]	[%]	[%]	[0-10]%	
Total	[%]	100%	[%]	100%	[%]	100%	

- 80. Based on the information submitted by Samwoh, the size of the market is [X], with an estimated sales volume of [X] metric tonnes ("MT") in 2015. However, Samwoh explained that the measurement of shares in the production of asphalt premix by sales value or volume in MT is not a realistic representation of the competitive constraints faced by competitors in the production of asphalt premix in Singapore. A more accurate and realistic measurement of estimated shares in the production of asphalt premix in Singapore would be the production capacity of the existing competitors in Singapore. Samwoh indicated that this is in view of the fact that the production of asphalt premix is a low-margin, price-sensitive, volume business.
- 81. Samwoh submitted in **Table 4** below the estimated market share figures based on its estimated annual capacity in the market for the production of

⁹⁸ Annex A, Table 2 of Form M1

asphalt premix in Singapore. The total production capacity of the market was [X] MT in 2015. Post-transaction, Samwoh indicated that it would proceed to dismantle [X] and replace it with the [X]. 99 Samwoh also indicated that [X] is currently in the process of increasing its production capacity through building [X]. 100

- 82. On that basis, Samwoh provided the estimated market share figures post-transaction based on two scenarios:
 - (a) Scenario 1: Samwoh dismantles the [≯] ("Scenario 1"); and
 - (b) Scenario 2: Samwoh dismantles the [≯] while [≯] builds [≯] new asphalt premix manufacturing plant. [CONFIDENTIAL INFORMATION] ("Scenario 2")

⁹⁹ Paragraph 6.1 of Allen & Gledhill's "Responses to CCS' Information Request Dated 25 July 2016" dated 29 July 2016.

¹⁰⁰ Paragraph 21.4 of Form M1.

Table 4: Market shares for the production of asphalt premix in Singapore (by capacity)¹⁰¹

	201	15	Scenario Prope Transaction (with the di	osed n Capacity smantling	Scenario Prope Transaction [(with [%] the dismant	osed n Capacity]Plant and tling of the		
Manufacturer Name	Production Capacity (MT)	Shares by Capacity	Production Capacity (MT)	Shares by Capacity	Production Capacity (MT)	Shares by Capacity		
Samwoh Group	[%]	[40-50]%	[%]	[30- 40]%	[%]	[30- 40]%		
Disposal Assets	[%]	[0-10]%	[*]	[10- 20]%	[×]	[0-10]%		
Combined	[%]	[50-60]%	[%]	[40- 50]%	[%]	[40- 50]%		
Ley Choon – attributable to the LC Second Plant	[%]	[10-20]%	[%]	[10- 20]%	[%]	[10- 20]%		
Yun Onn	[×]	[0-10]%	[×]	[10- 20]%	[%]	[0-10]%		
UE&P	[%]	[10-20]%	[%]	[10- 20]%	[%]	[30- 40]%		
Total	[%]	100%	[%]	100%	[%]	100%		

CCS's assessment

83. CCS notes that, even though Samwoh has submitted market share figures in terms of (i) sales value in dollars ("Value"); (ii) volume sold in MT ("Volume"); and (iii) capacity, there would be no change in market share by Volume or Value as a result of the Transaction, which only involves a transfer of capacity. In particular, the Volume and Value of asphalt premix produced by the Disposed Assets pre-transaction would be retained by Ley Choon and shifted to its LC Second Plant, and therefore would not be transferred to Samwoh post-transaction. As such, the only change as a result of the Proposed Transaction would be market share by capacity.

¹⁰¹ Annex A, Table 3 of Form M1.

- 84. In this regard, the combined market share of Samwoh and the Disposal Assets in the production of asphalt premix in Singapore by capacity crosses the indicative thresholds set out in the *CCS Merger Guidelines* in both Scenario 1 and Scenario 2, i.e. the merged entity will have a market share of 40% or more and that the merged entity will have a market share of more than 20% with the post-Transaction CR3 at 70% or more.
- 85. Accordingly, for the purpose of assessing the Proposed Transaction, CCS will take a conservative approach by focusing on the market share by asphalt premix production capacity, as set out in Scenario 1 i.e. [X] given that the amount of excess capacity would be less under this scenario (and therefore a higher possibility of price increases) as compared to Scenario 2. Where there is additional capacity, such as under Scenario 2, competition concerns would be less likely to arise. Similarly, if Samwoh Group decide to dismantle the [X], and retain the [X] following the Proposed Transaction, 102, the amount of excess capacity would still be more than Scenario 1 (and therefore the possibility of price increases would be lower), since the [X].

Excess Asphalt Premix Production Capacity in the Relevant Market

86. Table 5 details (i) the Volume; (ii) production capacity; (iii) capacity utilisation; and (iv) the excess capacity of asphalt premix manufacturers in Singapore. CCS notes that the excess production capacity of Samwoh's competitors under Scenario 1 is about [X] MT while the Volume of Samwoh in 2015 is only [X] MT. This would imply that Samwoh's competitors would have more than sufficient capacity to meet the demand of all of Samwoh's customers if Samwoh raised its prices and all of Samwoh's customers decided to switch to the other manufacturers of asphalt premix. In addition, Samwoh itself would have an excess asphalt premix production capacity of [X] should its capacity utilisation of [50-60%] remains the same post-Proposed Transaction. It will therefore be unlikely for Samwoh to have a strong incentive to raise prices in the Relevant Market.

¹⁰² Paragraph 3 of Annex A of Allen & Gledhill's letter titled "Application for decision under Section 57 of the Competition Act, Chapter 50B of Singapore - Responses to CCS' letter dated 25 July 2016 - Update" dated 19 August 2016.

Table 5: Excess capacity of asphalt premix manufacturers in Singapore¹⁰³

		20	015		Post-Proposed Transaction Capacity (with the dismantling the [X])			
Manufacturer Name	Volum e (MT)	Production Capacity (MT)	Capacit y Utilizat ion (%)	Estima ted annual excess capacit y (MT)	Volum e (MT)	Product ion Capacit y (MT)	Capacit y Utilizat ion (%)	Estima ted annual excess capacit y (MT)
Samwoh	[%]	[%]	[50- 60]%	[%]	[×]	[%]	[70- 80]%	[%]
Disposal Assets	N.A. 104	[%]	0%	[%]	N.A.	[%]	0%	[%]
Samwoh Post- Transaction	[%]	[%]	[40- 50]%	[%]	[%]	[%]	[50- 60]%	[%]
Ley Choon	[%]	[%]	[30- 40]%	[%]	[%]	[%]	[30- 40]%	[%]
Yun Onn	[%]	[%]	[80- 90]%	[%]	[%]	[%]	[80- 90]%	[%]
UE&P	[%]	[%]	[10- 20]%	[%]	[%]	[%]	[10- 20]%	[%]
Competitors of Samwoh combined	[%]	[%]	[30- 40]%	[%]	[%]	[%]	[30- 40]%	[%]
Total	[%]	[%]	[40- 50]%	[%]	[%]	[%]	[40- 50]%	[%]

Barriers to entry and expansion

87. In assessing barriers to entry and expansion, CCS considered whether entry by new competitors or expansion by existing competitors may be sufficient in likelihood, scope and time to deter or defeat any attempt by the merger parties or their competitors to exploit the reduction in rivalry flowing from the Proposed Transaction (whether through coordinated or non-coordinated strategies). 105

¹⁰³ Annex A, Table 2 and 3 of Form M1.

¹⁰⁴ The Volume under the Disposal Assets is zero because such Volume would be produced under the LC Second Plant and therefore continue to accrue to Ley Choon post-transaction. However, the production capacity of the Disposal Assets would be transferred to Samwoh and thus accrue to the merged entity post-transaction.

¹⁰⁵ Paragraph 7.2 of the CCS Guidelines on Substantive Assessment of Mergers.

Samwoh's submission

- 88. Based on Samwoh's observations and experience, for a potential new entrant that has an existing site or piece of land where an asphalt premix manufacturing plant could be built, the cost and time required to commission and complete the building of a new asphalt premix manufacturing plant is approximately [X] (depending on the specifications and features of the plant), and approximately [X]. If a piece of land is also required by the potential new entrant, the total cost and time required to establish an asphalt premix manufacturing facility, inclusive of the cost of leasing the land and other set-up costs, is approximately [X] (depending on variables such as location, lease duration, and other general prevailing land costs in the market, etc.), and approximately [X] to complete the facility and commence production of asphalt premix after acquiring a piece of land. 106
- 89. Samwoh submitted that the costs and time required are not prohibitive to new entry, which is evidenced by the recent entry of UE&P in the production of asphalt premix in Singapore, with its operations commencing in around early 2015. UE&P had been able to [X], and further, Samwoh understands that [X]. According to Samwoh, this evidences that the costs and time required to enter the production of asphalt premix in Singapore are not prohibitive, and that a new entrant is able to quickly and credibly contest in the market for the production of asphalt premix in Singapore. 107

CCS's assessment

90. CCS notes Professor Stephen Davies' remarks in his evaluation of the Samwoh/Highway merger¹⁰⁸ in 2013 that the "prevailing opinion among market players is that entry barriers into the asphalt supply market are high as the process to obtain regulatory approval for new asphalt manufacturing plants is lengthy and stringent. In addition, there is a perception among a number of market participants that any entry by existing market players in the asphalt laying business may provoke retaliation by incumbent suppliers. Incumbent suppliers could withhold supplies to the laying activities of the new entrant whilst its new asphalt plant is being constructed. Such perception may have the effect of deterring companies from entering the asphalt supply market". ¹⁰⁹

¹⁰⁶ Paragraph 26.1 of Form M1.

¹⁰⁷ Paragraph 26.3 of Form M1.

¹⁰⁸ CCS Case No. 400/004/10, decision in relation to the completed acquisition by Samwoh Corporation Pte. Ltd. of Highway International Pte Ltd, dated 27 January 2011.

¹⁰⁹ CCS Occasional Paper, 26 August 2013, Post-Enforcement Evaluation Methodologies and Indicative findings, Summary Report by Professor Stephen Davies at paragraph 14.

- 91. However, CCS also notes Samwoh's submission that a new entrant, UE&P, has entered the Relevant Market, and [X], 110 and an approximate [X] since. 111
- 92. In the course of CCS's market inquiries, CCS received the following feedback from Third Parties that,
 - (a) it should be fairly easy for a customer to switch between suppliers of asphalt premix in Singapore because there are a few suppliers that are able to supply and/or lay asphalt premix. It would be unlikely that Samwoh will raise prices and/or decrease the quality of product post-Proposed Transaction, as there are still other competitors in the market; 112
 - (b) The market is not a closed to new entrants citing UE&P as an example when UE&P entered the market in 2013 by purchasing a 1.2 ha site and constructed a new asphalt premix plant and secured about [X] market share. The impact on prices of asphalt premix is unlikely to be significant if there continues to be a sufficient number of asphalt premix suppliers in Singapore; 113 and
 - (c) It would not be difficult for a manufacturer to increase its production and supply of asphalt premixes in Singapore in response to an increase in demand. However, the time required and the extent of the increase in production would depend ultimately on the method taken to expand production capacity. For example:¹¹⁴
 - (i) To hire more staff and extend the production shifts of its asphalt premix production plants, in order to quickly increase its production of asphalt premix. There would be fewer constraints in respect of this option;
 - (ii) Increase its production of asphalt premix by upgrading the capacity or facilities at existing asphalt premix production plants. Regulatory approvals would be required for this, and this may take a longer time to implement; and/or
 - (iii) Install additional asphalt premix production plant(s) (whether static or portable) on existing premises or on a new location. This may take a longer time to implement as regulatory approvals will be required.

¹¹⁰ Paragraph 26.3 of Form M1.

¹¹¹⁵th paragraph of [≫].

¹¹² Paragraphs 6 and 20 of [≫].

¹¹³5th paragraph of [≫]; Paragraph 17.2 of [≫].

¹¹⁴ Paragraphs 17.2 and 17.3 of [≫].

93. Whilst there is some evidence available to gauge the barriers to entry and expansion in the Relevant Market, CCS is of the view that barriers to entry and expansion is not critical to CCS's assessment of the Proposed Transaction in light of the current levels of excess asphalt premix production capacity in the Relevant Market.

Countervailing buyer power

Samwoh's submission

Large end-customers of asphalt premix

- 94. Samwoh submitted that there are strong buyers in the market, including large end-customers of asphalt premix such as the LTA, the Civil Aviation Authority of Singapore ("CAAS"), CAG, the Housing Development Board ("HDB"), JTC, the Public Utilities Board ("PUB"), PSA Corporation Ltd (formerly known as the Port of Singapore Authority) and SP PowerGrid Ltd., as well as large real estate developers, who are able to exert tremendous downward pressure on prices in all tiers of the supply chain for the wider provision of civil engineering works in Singapore.¹¹⁵
- 95. Such large end-customers of asphalt premix are accordingly able to exercise significant buyer power by awarding contracts to civil engineering contractors through highly competitive tenders, and to discipline supplier pricing through switching, or credibly threatening to switch, their demand or a part thereof to another supplier, or to intensify competition among suppliers by purchasing through competitive tenders.¹¹⁶
- 96. Such tenders for civil engineering contracts are highly competitive, and such tenders can be, and have in fact been, awarded by end-customers to contractors without an internal supply of asphalt premix. Large end-customers of asphalt premix are also able to exercise significant buyer power to dictate the award of tenders to civil engineering contractors on the basis of a spectrum of criteria other than the lowest bids submitted.¹¹⁷
- 97. The CCS Samwoh/Highway Decision¹¹⁸ had confirmed the existence of such strong countervailing power held by the large end-customers of asphalt premix:
 - "61(i). ... CCS is of the view that there is strong countervailing buyer power exercised by these buyers due to the competitive tendering process and their ability to switch between various competing [large

¹¹⁵ Paragraph 32.1 of Form M1.

¹¹⁶ Paragraph 32.2 of Form M1.

¹¹⁷ Paragraph 32.3 of Form M1.

¹¹⁸ Paragraph 61(i).

civil engineering contractors]. Feedback received from buyers at this tier of the market has indicated that contracts are usually awarded by competitive tender."

- 98. Samwoh submitted that the significant countervailing buyer power that large end-customers possess is sufficient not only to prevent the potential exercise of market power by any manufacturer of asphalt premix, but also to disrupt any potential coordination that may occur among the manufacturers of asphalt premix in Singapore.¹¹⁹
- 99. Further, the term contracts awarded by large end-customers such as LTA, HDB, CAAS, CAG and JTC, generally impose price limits for a duration of [≫]. Such price limits restrict the ability of any manufacturer of asphalt premix in Singapore to exercise any market power. Contractors (and in turn their subcontractors and suppliers for asphalt premix and asphalt laying services) are not able to initiate changes to the prices committed to during the tender or quotation exercise and would have to honour the contract despite any spike in raw material prices over the agreed term. Contractors are also not able to terminate contracts without incurring penalties and facing the possibility of sanctions against future tendering activities. 120

<u>Large intermediate customers of asphalt premix (i.e. first tier civil engineering contractors)</u>

- 100. Large civil engineering contractors, who are among the intermediate customers of asphalt premix manufacturers, are further able to credibly threaten to enter the market as a means of exercising buyer power over manufacturers of asphalt premix, including Samwoh. This is clearly evidenced by the recent entry of UE&P in the production of asphalt premix in Singapore. UE&P is an associated company of Lian Beng which holds 40 per cent. of the total and issued paid-up capital of UE&P. 121
- 101. Such large civil engineering contractors are competitors for civil engineering projects and at the same time, large intermediate customers for asphalt premix, who are able to exert strong buyer power. They would have the capability to significantly alter the structure of the market by internalising their asphalt requirements and withdrawing demand from the existing manufacturers of asphalt premix, such as in the case of Lian Beng and its vertical integration with UE&P. For example, [%]. The threat of entry by large civil engineering contractors and other large customers has been, and will continue to be, a strong bargaining tool used to drive down Samwoh's prices of asphalt premix. Such large civil engineering

¹¹⁹ Paragraph 32.6 of Form M1.

¹²⁰ Paragraph 32.8 of Form M1.

¹²¹ Paragraph 32.9 of Form M1.

contractors would also have the financial resources, industry knowledge, and broad customer base to easily and quickly enter the market for the production of asphalt premix in Singapore. 122

- 102. Further, as these large civil engineering contractors compete aggressively in pricing to win contracts in the first tier of competition in the supply chain for the wider provision of civil engineering works in Singapore, this in turn translates to price pressures faced by the asphalt premix manufacturers who supply input product and services such as the asphalt premix and the asphalt laying services to civil engineering contractors.¹²³
- 103. The ability of such large civil engineering contractors to exercise countervailing buyer power, including to credibly threaten to enter the market or sponsor new entry, is in line with the CCS' findings in the Samwoh/Highway Decision¹²⁴, where the CCS had found that:
 - "61(ii). In respect of Tier 2 of the market where the purchasing customers are [large civil engineering contractors], feedback received has indicated that there would not be significant difficulty in switching subcontractors for provision of asphalt premix and laying services. In particular, a respondent had indicated that they are prepared to sponsor a new entrant for the supply of asphalt premix and laying services if the prices of these product and services increase by greater than 5%. CCS is of the view that customers at this tier of the market are able to exert significant countervailing power."

No or marginal switching costs

104. There is little marginal switching costs, if at all, for customers to switch between suppliers of asphalt premix, whether on an ex-plant or "supply and lay" basis. Customers do not incur any logistic costs specific to any supplier, and are not required to make manufacturer-specific investments. Customers of asphalt premix are able to, and do, easily switch suppliers of asphalt premix on the basis of the lowest price offered to them, even where subcontracts or short-term quotations may be entered into for the supply of asphalt premix. Accordingly, customers are able to switch, or leverage on the threat to switch, between competing suppliers of asphalt premix to further drive down prices for asphalt premix (whether on an ex-plant or "supply and lay" basis). 125

Asphalt as a commodity product

105. Asphalt is also a commodity product that has little differentiation or brand loyalty. Asphalt premixes may be customised by any supplier based on a

¹²² Paragraph 32.10 of Form M1.

¹²³ Paragraph 32.11 of Form M1.

¹²⁴ Paragraph 61(ii).

¹²⁵ Paragraph 32.20 of Form M1.

customer specifications and needs. There is further marginal difference in the quality of the basic asphalt premix supplied by competing suppliers in Singapore and customers are not restricted by perceptions of differences in quality when deciding to switch between competing suppliers. ¹²⁶

- 106. The homogeneity of asphalt premix, and ability of buyers to negotiate the prices of asphalt premix, was also recognised by CCS the CCS Samwoh/Highway Decision¹²⁷:
 - "65. ... Feedback received also indicated that as asphalt premix is a homogenous product, there is price transparency due to the customers' knowledge of the cost of inputs. Buyers are able to negotiate prices if suppliers charge excessively high prices. ..."
- 107. From Samwoh's observations of the market, [★]. 128

Feedback from third-parties

108. One of the Third Parties indicated that it would be fairly easy for customers to switch between suppliers of asphalt premix in Singapore since there are a few suppliers that are able to supply asphalt premix for their projects. Depending on the scale of the project, end-user customers may have some bargaining power in terms of the prices of asphalt premix. 130

CCS's assessment

109. CCS notes that Samwoh's submission that their customers are large institutions with strong countervailing buyer power and this is corroborated by the comments from one of the Third Parties as set out in the preceding paragraph above. CCS also notes that asphalt is a commodity and the buyer's switching costs are marginal. However, CCS is of the view that the degree of countervailing buyer power is not critical to CCS's assessment of the Proposed Transaction in light of the current levels of excess asphalt premix production capacity in the Relevant Market.

¹²⁶ Paragraph 32.22 of Form M1.

¹²⁷ Paragraph 65 of the CCS Samwoh/Highway Decision and paragraph 32.23 of Form M1.

¹²⁸ Paragraph 32.24 of Form M1.

¹²⁹ Paragraph 20 of [≫].

¹³⁰ Paragraph 22 of [≫].

VIII. Competition Assessment

(a) Non-coordinated effects

110. Non-coordinated effects may arise where, as a result of the Transaction, the merged entity finds it profitable to raise prices (or reduce output or quality) because of the loss of competition between the merged entities. 131 Other firms in the market may also find it profitable to raise their prices because the higher prices of the merged entity's product will cause some customers to switch to rival products, thereby increasing demand for the rivals' products. 132

Market for the production of asphalt premix in Singapore

- 111. The Parties submitted that the Proposed Transaction would not give rise to non-coordinated effects in any market in Singapore for the following reasons¹³³:
 - (a) Samwoh, whether before or after the Proposed Transaction, does not have significant market power in the production of asphalt premix in Singapore;
 - (b) The multitude of viable alternative suppliers in the production of asphalt premix;
 - (c) the ability of customers of asphalt premix to switch freely and easily to other suppliers of asphalt premix in the absence of any significant switching costs;
 - (d) The presence of large end and intermediate customers who are able to exercise strong countervailing buyer power and impose downward pressure on pricing terms;
 - (e) The presence of large customers who are able to, or can credibly threaten to, internalize demand by commencing their own asphalt premix manufacturing plant;
 - (f) The low barriers to entry for new entrants, or to expansion for existing competitors in respect of their capacity and customer base; and

¹³³ Paragraph 34.2 of Form M1.

¹³¹ Paragraph 6.3 of the CCS Merger Guidelines.

¹³² Paragraph 6.3 of the CCS Merger Guidelines.

The ability and capacity of competitors to quickly and readily (g) absorb the demand of any marginal customers switching away from Samwoh as a competitive constraint on pricing.

Feedback from third parties

- 112. Third Parties had provided feedback that the impact of the proposed acquisition on competition is minimal as such proposed acquisition does not result in any significant structural change to the relevant market for the production of asphalt premix in Singapore¹³⁴ and there continues to be a sufficient number of asphalt premix suppliers in the market. 135 There are adequate asphalt premix suppliers in Singapore and end-user customers had not experienced any shortage in the supply of asphalt for their projects in the last ten years. 136
- 113. One of the Third Parties had also fed back that the market is not a closed one to new entrants. In 2013, UE&P entered the market by purchasing a 1.2 ha site and constructed a new asphalt plant. 137
- 114. Third Parties had also suggested that it would be unlikely that Samwoh would raise prices and/or decrease the quality of product post-Proposed Transaction, as there are still other competitors in the market 138 and the impact on prices of asphalt is unlikely to be significant¹³⁹. It would be fairly easy for customers to switch between suppliers of asphalt premix in Singapore since there are a few suppliers that are able to supply asphalt premix for their projects. 140

CCS's assessment and conclusion on non-coordinated effects for the market for the production of asphalt premix in Singapore

115. CCS notes that the market share figures of the combined entity by capacity would cross the indicative thresholds set out in the CCS Merger Guidelines. However, CCS is of the view that the Transaction is unlikely to substantially lessen the level of competition in the production of asphalt premix, as there is no change in the number of competitors in the production of asphalt premix in Singapore and their respective market shares either by Volume or Value. In particular, Ley Choon will continue to be an independent competitor to Samwoh, and will retain all its current customers, purchases of customers, supply contracts and production commitments post-Proposed Transaction.

¹³⁴3rd paragraph of [≫].

¹³⁵ Paragraph 4 of [≫].

¹³⁶5th paragraph of [≫].

¹³⁷⁵th paragraph of [≫].

¹³⁸ Paragraph 6 of [≫]. ¹³⁹5th paragraph of [\gg].

¹⁴⁰ Paragraph 20 of [≫].

- 116. CCS also noted that the capacity utilisation of Samwoh would remain low at [50-60%] post-Proposed Transaction, and Samwoh is unlikely to have a strong incentive to raise its prices. Moreover, should Samwoh raises its prices, existing competitors would be able to quickly and readily absorb the demand of any marginal customers switching away from Samwoh. This is because there is currently sufficient excess capacity in the market to meet any switching by buyers of asphalt premix from Samwoh, as evidenced from **Table 5** above.
- 117. Further, feedback received from Third Parties indicate that it would be fairly easy for customers to switch between suppliers of asphalt premix in Singapore since asphalt premix is generally a homogeneous product and there are a few suppliers that are able to supply asphalt premix for their projects.¹⁴¹
- 118. Given the above, CCS is of the view that non-coordinated effects are unlikely to arise in the market for the production of asphalt premix.

(b) Coordinated effects

119. A merger may also lessen competition substantially by increasing the possibility that, post-Proposed Transaction, firms in the same market may coordinate their behavior to raise prices, or reduce quality or output. Given certain market conditions, and without any express agreement, tacit collusion may arise merely from an understanding that it will be in the firms' mutual interests to coordinate their decisions. Coordinated effects may also arise where a merger reduces competitive constraints in a market, thus increasing the probability that competitors will collude or strengthen a tendency to do so.¹⁴²

Samwoh's submissions

- 120. Samwoh submitted that the characteristics of the relevant market preclude the possibility of anti-competitive coordinated effects.
- 121. As a starting point, Samwoh has submitted that the Proposed Transaction does not result in any significant structural change to the relevant market for the production of asphalt premix in Singapore, if at all. In particular: 143
 - (a) there is no change to the number of competitors in the production of asphalt premix in Singapore;

¹⁴³ Paragraph 35.1 of Form M1.

¹⁴¹ Paragraph 20 of [≫].

¹⁴² Paragraph 6.7 of the CCS Guidelines on Substantive Assessment of Mergers.

- (b) the Ley Choon Group, as well as the other current manufacturers of asphalt premix in Singapore, will continue to competitively constrain Samwoh in the production of asphalt premix post-Proposed Transaction. Samwoh's observations and understanding is that the Ley Choon Group has been competing against the Samwoh Group in the production of asphalt premix primarily using only its existing LC Second Plant, and there will accordingly be no substantial change in the Ley Choon Group's continued ability to compete against the Samwoh Group after the Proposed Transaction;
- the Samwoh Group's overall production capacity of asphalt premix also will not increase as a result of the Proposed Transaction, and existing competitors in the production of asphalt premix have [X] capacity to exert competitive constraints on the Samwoh Group post-Proposed Transaction; and
- (d) the competitive structure of the production of asphalt premix in Singapore has clearly shifted, and is in fact more competitive, since the CCS' past reviews in the CCS Samwoh/Highway Decision in 2010 and the CCS Post-Enforcement Occasional Paper in 2013, with the entry of UE&P into the production of asphalt premix in Singapore and the ease of its strong growth within a short timeframe commencing in around early 2015.
- 122. Samwoh also submitted that the three conditions set out in the CCS Guidelines on the Substantive Assessment of Mergers are not met, namely:
 - (a) Samwoh and other competitors are not able to align their behaviour in the market;
 - (b) Samwoh and other competitors do not have the incentive to maintain coordinated behaviour, as there is no credible deterrent mechanism that can be activated if deviation is detected; and
 - (c) coordinated behaviour is not sustainable in the face of other competitive constraints in the market.
- 123. This is in view of the following: 145
 - (a) prices of asphalt premix are volatile and affected by movements of input costs and demand;

¹⁴⁴ Paragraph 35.3 of Form M1.

¹⁴⁵ Paragraph 35.4 of Form M1.

- (b) there are low barriers to entry and expansion in the production of asphalt premix in Singapore and any coordinated behaviour may be easily disrupted by an opportunistic new entrant to undercut prices;
- (c) there is [X] and the incentives of such competitors would be to expand output to utilise the capacity, instead of maintaining any coordinated behaviour; and
- (e) the presence of large end and intermediate customers and the significant countervailing buyer power which may be exercised by such customers in response to any observed coordinated behaviour.

CCS's assessment and conclusion on coordinated effects

- 124. CCS agrees with Samwoh's submission that the Proposed Transaction will not result in a change in number of players in the market. The Proposed Transaction results only in a transfer of asphalt premix production capacity. In this regard, CCS is of the view that any coordinated effect would ultimately have to manifest itself in terms of coordinating the volume or value of production. Since the Proposed Transaction only involves the transfer of production capacity, and does not involve a transfer of volume or value of production, the ability or incentives to coordinate between competitors pre- and post-Proposed Transaction will remain unchanged.
- 125. In addition, Samwoh and its competitors have excess capacity as described at paragraph 116 and **Table 5** above, with plans by [X] to build additional production capacity. 146 This would make it more difficult for competitors to engage in coordinated behavior in the market.
- 126. Based on information submitted by Samwoh, CCS also notes that prices for asphalt premix in Singapore has been [X] from the period between 2013 to 2016 in line with the trend of [X]input prices, especially bitumen, and pressure on prices imposed by customers' switching of, or threats to switch, suppliers of asphalt premix. 147 There is thus little evidence to indicate any history of coordination in the market concerned.
- 127. In light of the above, CCS concludes that the Proposed Transaction does not raise concerns in terms of coordinated effects on competition.

(c) Vertical effects

128. Samwoh submitted that the Proposed Transaction does not create or strengthen the extent of vertical integration in the supply chain for the wider provision of civil engineering works in Singapore, nor does the Proposed

¹⁴⁶ Paragraph 21.4 of Form M1.

¹⁴⁷ Paragraph 24.12.2 and Diagram 4 (Average Selling Price of Normal Mix) of Form M1.

Transaction strengthen the extent to which the Samwoh Group is currently vertically-integrated.

- 129. Samwoh further submitted that while a potential vertical relationship may arise between the Samwoh Group and the Disposal Assets, in that the asphalt premix produced by the Disposal Assets may be used as an input in respect of the Samwoh Group's activities in the downstream provision of civil engineering works, and the provision of asphalt laying services, the Proposed Transaction would not give rise to any concerns for the following reasons: 148
 - (a) Samwoh, whether before or after the Proposed Transaction, does not have any significant market power in the upstream production of asphalt premix which it can leverage on, due to the strong competitive constraints in the production of asphalt premix;
 - (b) The ability of customers of asphalt premix to switch freely and easily to other suppliers of asphalt premix in the absence of any significant switching costs;
 - (c) The presence of large end and intermediate customers who are able to exercise strong countervailing buyer power and impose downward pressure on pricing terms;
 - (d) The presence of large customers who are able to, or can credibly threaten to, internalize demand by commencing their own asphalt premix manufacturing plant; and
 - (e) The low barriers to entry for new entrants, or to expansion for existing competitors in respect of their capacity and customer base.

CCS's assessment and conclusion on vertical effects

- 130. CCS considered whether, post-transaction, Samwoh would be able to foreclose competition in the downstream provision of civil engineering works, and the provision of asphalt laying services.
- 131. CCS is of the view that the Proposed Transaction does not result in any significant incremental vertical effects. There is no change in the number of competitors in the production of asphalt premix in Singapore and their respective market shares by Volume and Value, as the Proposed Transaction is limited to the transfer of asphalt premix production capacity. Moreover, Ley Choon Group has sufficient production capacity to continue

¹⁴⁸ Paragraph 36.4 of Form M1.

supplying a sphalt premix from LC Second Plant, which does not form part of the Disposal Assets. 149

IX. Efficiencies

132. Samwoh envisages that [X]. 150

CCS's assessment

- 133. CCS notes that claimed efficiencies may be taken into account at two separate points in the analytical framework: first where they increase rivalry in the market so that no SLC will result from the Proposed Transaction and second, efficiencies can be taken into account where they do not avert a SLC but will nevertheless bring about lower costs, greater innovation, greater choice or higher quality and be sufficient to outweigh the detriments to competition caused by the Proposed Transaction in Singapore.¹⁵¹
- 134. Given that no SLC will arise from the Proposed Transaction, it is not necessary to make an assessment on the claimed efficiencies submitted by Samwoh.
- 135. In any event, CCS notes that the submissions by Samwoh on the benefits of [X], have not been substantiated with evidence that this would bring about lower costs, greater innovation, greater choice or higher quality. In this respect, CCS also notes Samwoh's submission that the replacement of the [X] with the [X] subsequent to the Proposed Transaction does not increase the Samwoh Group's overall production capacity of asphalt premix in Singapore, and in fact reduces the capacity to some extent. 152 CCS would thus have been unable to take these claimed efficiencies into account in its assessment of the Proposed Transaction.

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¹⁴⁹ Paragraph 2.2 of Rajah & Tann Singapore LLP, counsel for Ley Choon and LCCE, "Responses to CCS' Invitation For Comments On Application By Samwoh Corporation Pte Ltd For Decision Under Section 58 Of The Competition Act" dated 3 August 2016.
¹⁵⁰ Paragraph 42.1 of Form M1

 ¹⁵¹ Paragraphs 7.15 to 7.17 of the CCS Guidelines on the Substantive Assessment of Mergers.
 ¹⁵² Paragraph 12.2.4 of Form M1.

X. Conclusion

136. For the reasons above and based on the information available, CCS has assessed that the Proposed Transaction, if carried into effect, will not infringe section 54 of the Act. In accordance with section 57(7) of the Act, this decision shall be valid for a period of one year from the date of this decision.

Toh Han Li

Chief Executive

Competition Commission of Singapore