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

Grounds of Decision issued by the Competition and Consumer Commission of Singapore in relation to the proposed acquisition by BRC Asia Limited of Lee Metal Group Limited

26 April 2018

Case number: CCCS 400/001/18

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 [X].
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I. Introduction

The notification

1. On 22 February 2018, BRC Asia Limited (“**BRC**”) made a sole application pursuant to section 57 of the Competition Act (Cap. 50B) (“**the Act**”) for a decision by the Competition and Consumer Commission of Singapore (“**CCCS**”)¹ on whether the proposed acquisition of all the issued share capital of Lee Metal Group Limited (“**Lee Metal**”) (hereinafter “**the Proposed Transaction**”) will infringe the prohibition in section 54 of the Act.
2. The Proposed Transaction would see BRC acquire sole control of Lee Metal (collectively the “**Parties**”).
3. In reviewing the Proposed Transaction, CCCS contacted eleven (11) other processors and distributors of reinforcing steel products² (“**the Competitors**”), thirteen (13) end-customers³ (“**the Customers**”) and eight (8) upstream suppliers of reinforcing steel products of the Parties⁴ (“**the Suppliers**”) (each a “**Third Party**”, collectively, “**the Third Parties**”). In addition, CCCS engaged three (3) government agencies⁵ as part of its review of the Proposed Transaction. One (1) trade association⁶ and one (1) member of public voluntarily submitted feedback in response to the public consultation.
4. Of the eighteen (18) responses,⁷ fifteen (15) of them provided substantive responses.⁸ Nine (9) of those Third Parties indicated that they had competition concerns about the Proposed Transaction. The competition concerns included that (i) the Parties are two of the three major one-stop suppliers of the Parties’ Overlapping Products⁹, in particular for Mesh; (ii) barriers to entry into the supply of the Overlapping Products, in particular Mesh, appear to be high; and (iii) it is not easy or feasible for end-customers to self-supply or import the Overlapping Products. Hence, there were

¹ Prior to 1 April 2018, CCCS was known as the Competition Commission of Singapore (“**CCS**”). All references to “**CCCS**” in this paper refers to both “**CCS**” and “**CCCS**”.

² Suppliers: [X].

³ End-customers: [X].

⁴ Suppliers: [X].

⁵ Building and Construction Authority of Singapore (“**BCA**”), Housing Development Board (“**HDB**”), Jurong Town Corporation (“**JTC**”).

⁶ [X].

⁷ [X].

⁸ [X].

⁹ “Overlapping Products” is defined below at paragraph 24 of this Grounds of Decision.

concerns that the Proposed Transaction may result in increased prices of the Overlapping Products, especially for Mesh. On the other hand, six (6) of the Third Parties indicated they had no competition concerns with the Proposed Transaction and did not raise any concern that the Proposed Transaction was likely to have an adverse impact on them.

5. At the end of the consultation process and after evaluating all the information, CCCS concludes, in this extended Phase 1 review, that the Proposed Transaction will not lead to a substantial lessening of competition that infringes section 54 of the Act.
6. The Applicant has not notified the Proposed Transaction in any other jurisdiction.

II. The Parties to the Transaction

BRC

7. BRC is a publicly-listed company on the SGX-Mainboard.¹⁰ BRC's subsidiaries and associated entities incorporated in Singapore are:
 - a. BRC Asia Limited;
 - b. Nuform System Asia Pte. Ltd., in which BRC has a 10% shareholding;
 - c. Pristine Islands Investment Pte. Ltd., in which BRC has a 17% shareholding; and
 - d. Eva Investments Pte. Ltd., a dormant entity which BRC wholly-owns.¹¹
8. BRC's principal activities worldwide are the same as in Singapore.¹² In Singapore, BRC is involved in the prefabrication of steel reinforcement for use in concrete, trading of Rebars, and manufacturing and sale of wire mesh fences.¹³ BRC provides products and services in Singapore primarily under the following trade, business and brand names:
 - a. BRC Asia Limited;
 - b. BRC;
 - c. Weldmesh; and
 - d. Weldfence.¹⁴

¹⁰ Paragraph 7.1 of Form M1.

¹¹ Paragraph 10.1 of Form M1.

¹² Paragraph 10.9 of Form M1.

¹³ Paragraph 10.6 of Form M1.

¹⁴ Paragraph 10.3 of Form M1.

9. BRC sells the following types of products in Singapore¹⁵:
 - a. reinforcing steel bars (“**Rebars**”);
 - b. reinforcing steel wires;
 - c. cut and bend Rebars (“**Cut & Bend**”);
 - d. Steel welded wire meshes (“**Mesh**”);
 - e. Prefabricated reinforcing steel components (“**Prefab**”); and
 - f. BRC Weldfence¹⁶.
10. The total (group) worldwide revenue for BRC in the financial year that ended on 30 September 2017 was S\$311.626 million.¹⁷ The total (group) revenue for BRC in Singapore in the financial year that ended on 30 September 2017 was S\$277.387 million.¹⁸

Lee Metal

11. Lee Metal is a publicly-listed company on the SGX-Mainboard.¹⁹ Lee Metal’s subsidiaries and associated entities incorporated in Singapore are:
 - a. Lee Metal Group Ltd.;
 - b. Lee Metal Investment Pte. Ltd.;
 - c. Lee Welded Mesh Singapore Pte. Ltd.;
 - d. LMG Realty Pte. Ltd.;
 - e. Maxlee Development Pte. Ltd., which LMG Realty Pte. Ltd. owns 35% of; and
 - f. Steel Park International Pte. Ltd.²⁰
12. Lee Metal’s primary activities worldwide are [X].²¹ In Singapore, Lee Metal’s primary business activities are steel merchandising and fabrication of reinforcement steel products for the construction and building industry.²² [3<].²³

¹⁵ Paragraph 14.1 of Form M1.

¹⁶ BRC Weldfence is BRC’s proprietary fencing system. It is a type of fence, used by property owners to provide boundary demarcation and/or act as a physical barrier for their properties. The customers are mainly building contractors and fence installers, who would use the product in army camps, airports, condominiums, and landed residential houses, etc. It is not a steel product to reinforce concrete, nor used in building construction, and is not an Overlapping Product.

¹⁷ Paragraph 13.1 of Form M1.

¹⁸ Paragraph 13.3 of Form M1.

¹⁹ Paragraph 7.3 of Form M1.

²⁰ Paragraph 10.2 of Form M1.

²¹ Paragraph 10.10 of Form M1.

²² Paragraph 10.7 of Form M1.

²³ Paragraph 10.8 of Form M1.

13. Lee Metal is also involved in [X].²⁴ [X].²⁵
14. Lee Metal provides products and services in Singapore primarily under the following trade names:
- a. Lee Metal Group Ltd.;
 - b. Lee Welded Mesh Singapore Pte. Ltd.; and
 - c. LMG Realty Pte. Ltd.²⁶
15. Lee Metal sells the following types of products in Singapore:
- a. 12-metre stock length reinforcing steel bars;
 - b. cut and bend reinforcing steel bars;
 - c. welded mesh; and
 - d. prefabricated reinforcement cages.²⁷
16. The total (group) worldwide revenue for Lee Metal in the financial year that ended on 31 December 2017 was S\$339 million.²⁸ The total (group) revenue for Lee Metal in Singapore in the financial year that ended on 31 December 2017 was S\$339 million.²⁹

III. The Proposed Transaction

17. The Proposed Transaction is structured as a pre-conditional general offer by BRC to acquire all of the issued share capital³⁰, and accordingly all of the business, of Lee Metal.³¹ The offer price is at S\$0.42 in cash for each offered share.³²
18. A favourable decision by CCCS that the Proposed Transaction will not infringe section 54 of the Act is listed as one of the pre-conditions for the voluntary conditional cash offer above.³³

²⁴ Paragraph 10.8 of Form M1.

²⁵ Paragraph 10.11 of Form M1.

²⁶ Paragraph 10.5 of Form M1.

²⁷ Paragraph 14.2 of Form M1.

²⁸ Paragraph 13.2 of Form M1.

²⁹ Paragraph 13.4 of form M1.

³⁰ According to Lee Metal's ACRA records, it has a total of 474,551,093 shares. Based on this number, the value of the transaction is \$199,311,459.06.

³¹ Paragraph 11.4 of Form M1.

³² Paragraph 11.5 of Form M1.

³³ Paragraph 2.1 of Annex 9 of Form M1. The other pre-conditions are the approval of the Singapore Exchange Securities Trading Limited and that the voluntary cash offer is not declared illegal by any governmental authority or court of competent jurisdiction.

19. Overall, BRC aims to promote its “Total Prefabricated Reinforcing Steel Solutions”³⁴ programme which has a proven track record to help contractors build better, faster, and cheaper. At a time when the building and construction sector is looking to become more technologically advanced by transforming to become less labour-intensive, it is imperative to invest in new technologies such as robotics, digitisation, artificial intelligence to bring this industry forward into the future.³⁵
20. To this end, BRC submitted that the Proposed Transaction would [X].³⁶
21. BRC also submitted that the Proposed Transaction will give BRC a [X].³⁷ [X].³⁸
22. In summary, it is submitted that the Proposed Transaction will help BRC achieve substantial economies of scale, which will enable it to:
 - a. lower unit costs, improve productivity and efficiency, and increase its market competitiveness;
 - b. improve wage levels through higher productivity and efficiency;
 - c. enhance BRC’s ability to invest in research and development to improve its solutions for customers, operations and processes; and
 - d. improve BRC’s ability to weather shocks and volatility, especially from overseas operations, through an enlarged scale.³⁹

CCCS’s Conclusion on whether the Transaction constitutes a Merger under the Act

23. Given that BRC is proposing to acquire all the issued share capital, and accordingly all of the business, of Lee Metal, CCCS is of the view that the Proposed Transaction constitutes a merger under section 54(2)(b) of the Competition Act.

IV. Competition Issues

24. BRC submitted that BRC and Lee Metal overlap only in the sales of
 - a. Rebars: 12-metre long reinforcing steel bars in standard bundles⁴⁰;

³⁴ CCCS notes that this term was not defined by BRC in its submissions or on its website.

³⁵ Paragraph 12.1 of Form M1.

³⁶ Paragraph 1.1 of BRC’s response to CCCS’s RFI dated 2 March 2018.

³⁷ Paragraph 19 of BRC’s further submissions to CCCS dated 11 April 2018.

³⁸ Paragraph 20 of BRC’s further submissions to CCCS dated 11 April 2018.

³⁹ Paragraph 12.2 of Form M1.

⁴⁰ BRC submitted that Rebars in Singapore and Malaysia are sold by [X]. [X].

- b. Cut & Bend: reinforcing steel bars cut and/or bent to requirement at factories;
 - c. Mesh: steel wire mesh; and
 - d. Prefab: factory prefabricated reinforcing steel components for use in the construction of reinforced concrete structures⁴¹, (collectively, the “**Overlapping Products**”)
25. BRC sells Rebars, Cut & Bend, Mesh and Prefab under the brand name “BRC”. Mesh is also sold by BRC under the brand name “WELDMESH”.⁴² Lee Metal does not have any brand names for its products.⁴³
26. BRC also submitted that there are no vertical relationships between the Parties.⁴⁴ In evaluating the potential impact of the Proposed Transaction, CCCS considered whether the Proposed Transaction will lead to coordinated and/or non-coordinated effects that would substantially lessen competition or raise competition concerns in the relevant markets relating to the Overlapping Products.

V. Counterfactual

27. As stated at paragraph 4.14 of the *CCCS Guidelines on the Substantive Assessment of Mergers 2016*, CCCS 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.
28. The *CCCS Guidelines on the Substantive Assessment of Mergers 2016* 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, CCCS 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.⁴⁵

BRC’s submissions

⁴¹ Paragraph 15.1 of Form M1.

⁴² Paragraph 4.1 of BRC’s response to CCCS’s Request For Information (“RFI”) dated 2 March 2018.

⁴³ Paragraph 15.3 of Form M1.

⁴⁴ Paragraph 36.1 of Form M1.

⁴⁵ Paragraph 4.16 of *CCCS Guidelines on the Substantive Assessment of Mergers 2016*.

29. BRC submitted that in the absence of the Proposed Transaction, BRC will continue to compete in the processing and distribution of reinforcing steel products in Singapore⁴⁶ and Lee Metal will continue operations as usual⁴⁷.
30. However, if the Proposed Transaction does not take place, there will be a loss in opportunity for the Parties to take a long-term view to invest in people and technology, and to reap the efficiencies and synergies that are expected to arise from the Proposed Transaction. Such efficiencies may benefit the industry and economy at large.⁴⁸
31. BRC further submitted that the Proposed Transaction will not result in an SLC in the processing and distribution of reinforcing steel products in Singapore, or result in any adverse competitive effect in the processing and distribution of reinforcing steel products in Singapore relative to the counterfactual scenario.⁴⁹

CCCS's conclusion on the relevant counterfactual

32. CCCS considered BRC's submissions and is of the view that the relevant counterfactual is that, absent the Proposed Transaction, the Parties will continue their business operations and compete in the processing and distribution of reinforcing steel products in Singapore.

VI. Relevant Markets

Overview of Industry

33. The processing and distribution of reinforcing steel products is part of the supply chain for building construction in Singapore. The steel reinforcing business can be divided into (i) the production level; and (ii) the processing/distribution level. Fabricators for reinforcing steel products, such as BRC and Lee Metal, import reinforcing steel products from overseas suppliers for processing and then distribute locally to the construction and building industry.⁵⁰

⁴⁶ Paragraph 23.4 of Form M1.

⁴⁷ Paragraph 18.2 of BRC's response to CCCS's RFI dated 2 March 2018. This information was provided by Lee Metal to Allen & Gledhill LLP ("A&G"), counsel to BRC.

⁴⁸ Paragraph 23.2 of Form M1.

⁴⁹ Paragraph 23.3 of Form M1.

⁵⁰ Paragraph 18.1 of Form M1.

34. The demand for processing and distribution of reinforcing steel products in Singapore is derived from the wider provision of building construction projects in Singapore (the demand for which is, in turn, ultimately driven by the large developers (e.g. Housing Development Board (“HDB”), Land Transport Authority (“LTA”) or real estate developers) that award such contracts). BRC submitted that the processing and distribution of reinforcing steel products in Singapore is characterized by intense competition, competitive constraints imposed by competitors, and strong countervailing buyer power.⁵¹
35. BRC further submitted that a gradual recovery in demand is anticipated over the medium-term⁵², supported by a strong pipeline of major infrastructure projects and spill-over benefits from improved economic performance and outlook. While total construction output is likely to stay muted in 2018, it is likely to increase steadily over medium-term.⁵³
36. It was also submitted by BRC that, in Singapore, fabricators usually deal directly with the end-users of reinforcing steel products without going through any intermediaries i.e. fabricators perform the distribution functions themselves.⁵⁴ The end customers are usually contractors or sub-contractors of, or precast manufacturers for, building construction projects.⁵⁵
37. Diagram 1 below further details how end-user customers may procure reinforcing steel products, and the corresponding tiers in which competition takes place at each level.

⁵¹ Paragraph 24.2 of Form M1.

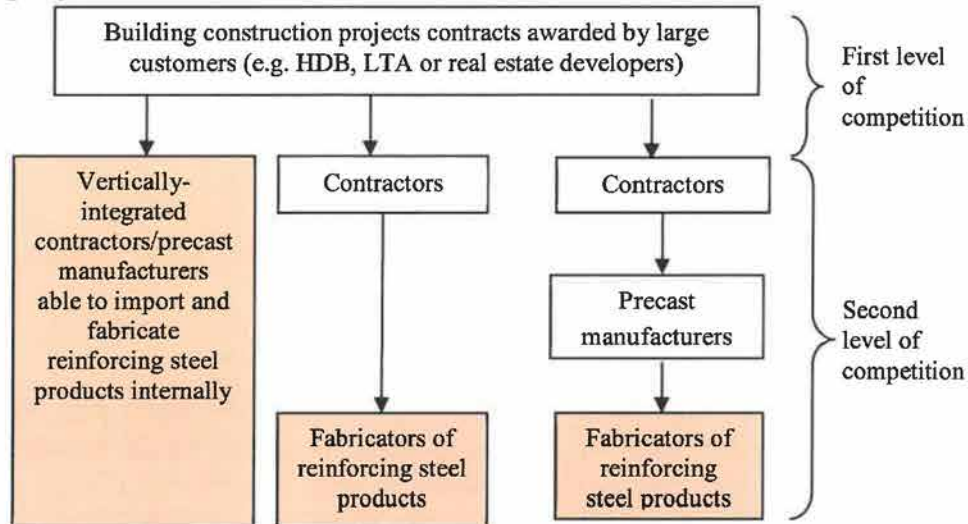
⁵² “Medium term” refers to a period of 4 years from 2019 to 2022 as set out in Slide 18 of Annex 3A and paragraph 12 of Annex 3B referred to in BRC’s further submissions to CCCS dated 11 April 2018.

⁵³ Paragraph 17 of BRC’s further submissions to CCCS dated 11 April 2018.

⁵⁴ Paragraph 18.3 of Form M1.

⁵⁵ Paragraph 18.4 of Form M1.

Diagram 1: Illustration of tiers of competition for building construction projects



38. With reference to Diagram 1 above, BRC submitted that the first tier of competition in the building construction projects supply chain is intense, arising from the tender processes by which the majority of large end-customers award building construction projects. These strong buyers are accordingly able to exert tremendous downward pressure on the prices of such contracts to the main contractors, which in turn places tremendous downward pressure on the prices of reinforcing steel products in the lower levels of competition in the supply chain.⁵⁶
39. It was further submitted by BRC that suppliers of reinforcing steel products in Singapore compete intensely with each other on price. This is in particular given that the processing and distribution of reinforcing steel products are characterized by general excess capacity, where the capacity for the production of reinforcing steel products outstrips demand.⁵⁷
40. BRC also submitted that the intensity of competition among the suppliers of reinforcing steel products, and the impact of the strong bargaining power of customers is evidenced by the fact that companies have been supplying reinforcing steel products at prices significantly below the monthly price index for steel reinforcements tracked by the Building and Construction Authority (“BCA”) in order to better utilize capacity.⁵⁸ Even if a company

⁵⁶ Paragraph 24.3 of Form M1.

⁵⁷ Paragraph 24.8 of Form M1.

⁵⁸ Paragraph 24.13 of Form M1.

is perceived to have superior services and reliability, it is unlikely to obtain a better price. Instead, it will get a right to match the lowest price offered to the customer.⁵⁹

41. BRC submitted that the merged entity will not enjoy high market power or act independently of customers and competitors.⁶⁰ To support this argument, BRC provided data to illustrate its Rebar sales on a monthly basis from 2016 to 2018, as shown in Figure 1 below:

Figure 1: BRC's monthly 12-metre Rebar Sales from August 2016 to February 2018
[§<]

42. According to BRC, while the fluctuations may, in some part, be due to different award dates of contracts and customer requirements, BRC's observations are that customer demand does not fluctuate on a month-to-month basis to the same extent as its Rebar sales. BRC argues that this demonstrates that the volatility in BRC's Rebar sales is due to the strong competition from the multiple suppliers from whom customers can source Rebars from; and that the merged entity will need to continue competing aggressively in order to move volume.⁶¹
43. In addition, the fluctuations, in part, reflect the short-term nature of fixed-price contracts, i.e. such contracts are generally less than 12 months in duration. This applies even for large-scale construction projects which may take a few years to complete and means that even for the same project that BRC has won, the fixed-price contract is only won for a fixed duration (i.e. one year at the maximum in most instances), and BRC will have to compete with other suppliers for the same project again.⁶²
44. BRC submitted that another key feature of this market is that contracts, which are not fixed-price contracts, are on a floating price basis in view of fluctuations in steel prices.⁶³ BRC submitted the prices for Rebars in 2017 as tracked by BCA in Figure 2 below.

⁵⁹ Paragraph 24.14 of Form M1.

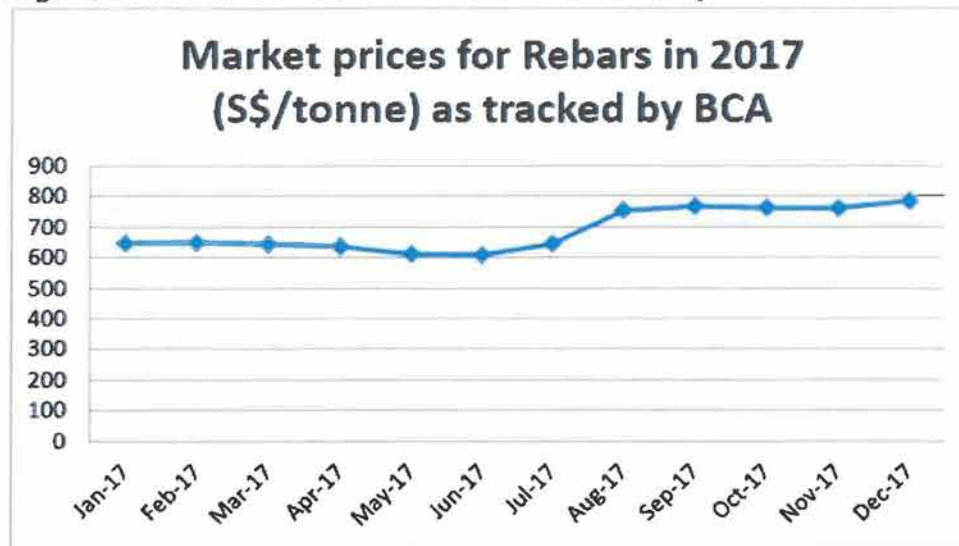
⁶⁰ Paragraph 3 of BRC's further submissions to CCCS dated 25 March 2018.

⁶¹ Paragraph 5 of BRC's further submissions to CCCS dated 25 March 2018.

⁶² Paragraph 6 of BRC's further submissions to CCCS dated 25 March 2018.

⁶³ Paragraph 7 of BRC's further submissions to CCCS dated 25 March 2018.

Figure 2: Prices for Rebars in 2017 as tracked by BCA



45. The BCA Index is compiled on the basis of net selling prices required to be disclosed to BCA and forms the data which BCA relies on for the BCA Index. It provides transparency to customers to lower overall construction costs in Singapore, as customers, as well as suppliers of reinforcing steel products in Singapore have access to the BCA Index and are able to immediately ascertain if quotations are overpriced, relative to market prices, and if so, to negotiate to drive down prices or seek quotations from other competitors.⁶⁴
46. BRC submitted that these market features (relating to short-termed fixed price contracts and floating price contracts tied to the BCA Index), would continue to apply to the merged entity even after the Proposed Transaction, as the fundamental nature of how the relevant market operates would not change as a result of the Proposed Transaction.⁶⁵
47. BRC also provided information on the fluctuations for Lee Metal's Rebar sales⁶⁶, as shown in Figure 3 below:

Figure 3: Lee Metal's monthly 12-metre Rebar Sales from January 2017 to February 2018
[X]

48. Lee Metal's Rebar sales volume [X].⁶⁷

⁶⁴ Paragraph 8 of BRC's further submissions to CCCS dated 25 March 2018.

⁶⁵ Paragraph 9 of BRC's further submissions to CCCS dated 25 March 2018.

⁶⁶ This information was provided by Lee Metal to A&G, counsel to BRC.

⁶⁷ Paragraph 10 of BRC's further submissions to CCCS dated 25 March 2018.

Regulatory environment

49. BRC submitted that there are no import restrictions or import tariffs applicable to the reinforcing steel products.⁶⁸
50. The main role of regulation is to ensure that the products delivered by the industry comply with the local building and construction standards and codes through sample testing, which come under the purview of BCA. Furthermore, when supplying to the public projects, such as projects under HDB, LTA, Mass Rapid Transit, National Environment Agency, Public Utilities Board, etc., the supplier must be a BCA registered supplier under SY01C⁶⁹. In addition, for supply specifically in relation to HDB projects, the supplier must be a HDB's approved supplier under HDB's Materials List.⁷⁰

(a) Product Market

51. BRC submitted the Overlapping Products can be generally considered in two broad categories:

- (i) Rebars/ Cut & Bend/ Prefab; and
- (ii) Mesh.⁷¹

(i) Rebars

52. Rebar is a type of reinforcing steel which are produced by steel mills using either scrap metal or iron ore as main input material.⁷² Globally, steel is produced via two main routes: the blast furnace-basic oxygen furnace route and electric arc furnace ("EAF") route. There exists variations and combinations of production routes.⁷³ All these production methods can use recycled steel scrap as an input.⁷⁴ BRC further submitted that there is only one steel mill in Singapore, NatSteel, which produces Rebars from scrap metal via the EAF route as mentioned above.⁷⁵

⁶⁸ Paragraph 18.6 of Form M1.

⁶⁹ SY01C is a supply head, which refers to "Other Basic Construction Materials", under the BCA's contractors registration system (the "CRS") to serve the procurement needs of government departments, statutory bodies and other public sector organizations, including first level sub-contractors involved in government projects.

⁷⁰ Paragraph 18.8 of Form M1.

⁷¹ Paragraph 19.1 of Form M1.

⁷² Paragraph 19.1.1 of Form M1.

⁷³ Paragraph 8.1 of BRC's response to CCCS's RFI dated 2 March 2018.

⁷⁴ Paragraph 8.3 of BRC's response to CCCS's RFI dated 2 March 2018.

⁷⁵ Paragraph 8.4 of BRC's response to CCCS's RFI dated 2 March 2018.

53. Rebars are used to complement the strength of concrete, which is strong in compression but weak in tension. Together, they form what is known as reinforced concrete, one of the world's most common building materials.⁷⁶
54. BRC, in itself, does not produce Rebars, and accordingly do not import materials to produce Rebars. Instead, BRC imports Rebars and processes the Rebars into Cut & Bend and Prefab.⁷⁷

a. Cut & Bend

55. Rebars are cut and/or bent to required sizes and shapes by construction project using automated shear lines and benders in an off-site factory environment and delivered to the respective project sites (or precast manufacturing yards) for steel fixing there.⁷⁸

b. Prefab

56. Rebars, Cut & Bend and/or Mesh are combined to form Prefab.⁷⁹ These are fixed together by welding using machines as well as manually in an off-site factory environment to form structural elements such as columns, beams and walls. Each set of elements is customized for a particular construction project. These fully formed structural elements are then transported to their respective project sites (or precast manufacturing yards) for installation there prior to concrete casting.⁸⁰

(ii) Mesh

57. Mesh, or welded wire fabric, or “weldmesh”, is another type of reinforcing steel product which is made from steel wire rods produced by steel mills using either scrap metal or iron ore as main input material. The wire rods are converted into hard drawn wires by a cold rolling process.⁸¹
58. The production of Mesh involves an electric fusion of welded prefabricated joined grid consisting of a series of parallel longitudinal wires with accurate spacing welded to cross wires at the required spacing.⁸² Automatic Mesh

⁷⁶ Paragraph 19.1.1 of Form M1.

⁷⁷ Paragraph 8.1 of BRC's response to CCCS's RFI dated 2 March 2018.

⁷⁸ Paragraph 19.1.1 of Form M1.

⁷⁹ Paragraph 8.7 of BRC's response to CCCS's RFI dated 2 March 2018.

⁸⁰ Paragraph 19.1.1 of Form M1.

⁸¹ Paragraph 19.1.2 of Form M1.

⁸² Paragraph 19.1.2 of Form M1.

welders are used for such welding and, as and when required, these meshes are further bent to various shapes using Mesh benders.

59. Conventionally, to construct reinforced concrete structures, Rebars are placed (either in standard length form or in Cut & Bend form) at the construction site and secured by tying them together using wire strands, before concrete is poured over the structure to form reinforced concrete elements or structures.⁸³ In this regard, Mesh eliminates the required tying process and allows for the said placement to be done one grid at a time, instead of one Rebar at a time.⁸⁴
60. In addition, BRC submitted that it considers the construction demand trend in Singapore, as noted at paragraph 35 above, is a good proxy indicator for the demand trend for Mesh in Singapore. In this regard, BRC submitted that the Mesh market is likely to expect an increase in demand over the medium-term, which provides incentives for new entrants and existing players to start or expand their Mesh production.⁸⁵
61. BRC further submitted that all of the Overlapping Products can be entirely substituted by contractors or sub-contractors, or precast manufacturers, by processing Rebars at the location of use instead of procuring the Overlapping Products from fabricators such as the Parties. Customers can also use alternative materials, such as structural steel and mass engineered timber, as substitutes for the Overlapping Products.⁸⁶

CCCS's assessment of the relevant product markets

62. CCCS considered the possibility of broader product market definitions in relation to the processing and distribution of the Overlapping Products.
63. Feedback from the majority of Third Parties indicated that, from the demand-side perspective, there are no viable substitutes for the products and most of the Overlapping Products are basic construction materials.⁸⁷ Third Parties also

⁸³ Paragraph 8.5 of BRC's response to CCCS's RFI dated 2 March 2018.

⁸⁴ Paragraph 8.6 of BRC's response to CCCS's RFI dated 2 March 2018.

⁸⁵ Paragraph 17 of BRC's further submissions to CCCS dated 11 April 2018.

⁸⁶ Paragraph 19.6 of Form M1.

⁸⁷ Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 9 of [X] response to CCCS's Invitation to Comment dated 8 March 2018; Answer to Question 9 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

indicated that they would look for alternative suppliers instead of alternative products.⁸⁸ Only one Third Party indicated that structural steel and engineered timber can be used as substitutes to the Overlapping Products.⁸⁹

64. CCCS notes from the market feedback that some customers tend to contract for a combination of the Overlapping Products in a single contract.⁹⁰ However, CCCS notes that the proportions of each of the Overlapping Products required differs according to the project design and needs.⁹¹ Other factors that affect the proportions of each of the Overlapping Products required include, space and manpower constraints on-site and compliance to minimum buildability score requirements.⁹² Nevertheless, CCCS also notes that there is evidence indicating that customer inquiries usually include at least Rebars and Cut & Bend in their orders.⁹³ Given that the Overlapping Products are considered basic construction materials, and the fact that customers require different amounts of each of the Overlapping Products in their projects suggest that each of the Overlapping Products are not substitutable with one another.
65. With regard to supply-side substitution, there was feedback indicating that it was not feasible for suppliers who currently only supply Rebars and Cut & Bend in Singapore to start their own processing and distribution of Mesh and Prefab. This was due to the lack of available land space; the huge capital outlay needed for purchasing the necessary machinery; and the requirement for staff with high degree of technical expertise to operate the machinery.⁹⁴ In addition, feedback also indicated that steel traders who mainly supply Rebars to intermediaries such as fabricators will not engage in value-added processing, nor will they individually begin supplying Cut & Bend, Mesh and Prefab into

⁸⁸ Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

⁸⁹ Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

⁹⁰ Answer to Questions 2 and 5 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 9 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

⁹¹ Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

⁹² Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

⁹³ Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

⁹⁴ Notes of call with [X] dated 6 April 2018; Answer to Question 2 of [X] response to CCCS's Invitation to Comment dated 5 April 2018; Notes of meeting between CCCS and [X] dated 20 April 2018.

Singapore due to the huge capital outlay required, large land area requirements, and so as not to jeopardise its existing customer relationships with the Parties.⁹⁵

66. In view of the above, CCCS is of the view that the relevant product markets for the competition assessment of the Proposed Transaction are the markets for the processing and distribution of:

- (i) Rebars and Cut & Bend;
- (ii) Mesh; and
- (iii) Prefab.

(b) Geographical Market

67. BRC submitted that the relevant geographic market for the Overlapping Products is regional, specifically Singapore and Malaysia, at the narrowest.⁹⁶
68. For Rebars in standard bundles, BRC submitted that customers are able to source globally, as these can be easily transported over large distances using trucks or containers.⁹⁷ Similarly, suppliers globally are willing and able to supply to Singapore, as these can be easily transported over large distances using trucks or containers.⁹⁸
69. For Mesh and Cut & Bend, as these may be more voluminous, customers may be willing to source from as far away as Malaysia. These two products can potentially be sourced from countries further away in cases where transportation in bulk using containers is economically justifiable. To illustrate, BRC submitted that it had supplied Cut & Bend to Maldives.⁹⁹ From a supply side perspective, BRC submitted that suppliers from as far away as Malaysia may be willing to supply to Singapore.¹⁰⁰
70. For Prefab, customers are able to, and tend to, source from Singapore, but may be able to source from as far away as only Johor Bahru in Malaysia. However, BRC submitted that suppliers from all across Singapore are willing to, and do, supply to all areas in Singapore.¹⁰¹

⁹⁵ Answer to Question 6 of [3<] response to CCCS's Invitation to Comment dated 9 March 2018; Answer to Question 6 of [3<] response to CCCS's Invitation to Comment dated 9 March 2018.

⁹⁶ Paragraph 20.3 of Form M1.

⁹⁷ Paragraph 19.10 of Form M1.

⁹⁸ Paragraph 19.13 of Form M1.

⁹⁹ Paragraph 19.11 of Form M1.

¹⁰⁰ Paragraph 19.14 of Form M1.

¹⁰¹ Paragraph 19.15 of Form M1.

CCCS's assessment of the relevant geographical markets

71. In respect of where companies would source for Overlapping Products, majority of the customers who provided feedback stated that they would source locally from Singapore producers.¹⁰² A reason for sourcing locally is that Rebars require physical stocking space, while the remaining Overlapping Products need to be produced locally.¹⁰³ Another key consideration for sourcing locally is the availability of after sales support. In particular, Third Parties provided feedback that it would be difficult for customers to send the imported products back to the Malaysian manufacturers in the event that the imported products do not fulfil their requirements.¹⁰⁴ Some of the Third Parties have also highlighted that customers prefer “just-in-time” delivery of the Overlapping Products due to the lack of land space at the construction sites to hold the Overlapping Products.¹⁰⁵ Furthermore, majority of Third Parties also raised that the uncertainty of traffic conditions,¹⁰⁶ the longer lead time required for orders to be placed and length of time required for delivery are some of the main reasons why customers do not find it feasible to source for the Overlapping Products beyond the local market. Only two of the Third Parties indicated that there could be a possibility of obtaining the Overlapping Products from Johor due to its proximity to Singapore.¹⁰⁷
72. On the supply-side, feedback indicated that there are some local producers of the Overlapping Products that have set up processing plants in Johor for the

¹⁰² Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁰³ Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 10 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁰⁴ Notes of call with [X] dated 17 April 2018.

¹⁰⁵ Answer to Question 4b of [X] response to CCCS's further Invitation to Comment dated 18 April 2018. Notes of meeting between CCCS and [X] dated 20 April 2018.

¹⁰⁶ Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4b of [X] response to CCCS's further Invitation to Comment dated 18 April 2018.

¹⁰⁷ Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Notes of meeting between CCCS and [X] dated 20 April 2018.

processing of Mesh and Prefab for distribution into Singapore.¹⁰⁸ However, the feedback also indicated that the Mesh and Prefab produced by processing plants in Malaysia are not supplied to end-customers in Singapore but instead [X]¹⁰⁹

73. Based on the submissions and research conducted by CCCS, the competitive constraints on the Parties in relation to their Singapore customers are from other producers of the Overlapping Products in Singapore. Therefore, CCCS is of the view that the narrowest relevant geographical market for each of the Overlapping Products is Singapore.

(c) Conclusion on relevant markets

74. Based on the above, CCCS is of the view that the relevant markets for the purpose of assessing the Proposed Transaction are those for the processing and distribution of:

- (i) Rebars and Cut & Bend;
- (ii) Mesh; and
- (iii) Prefab,

in Singapore.

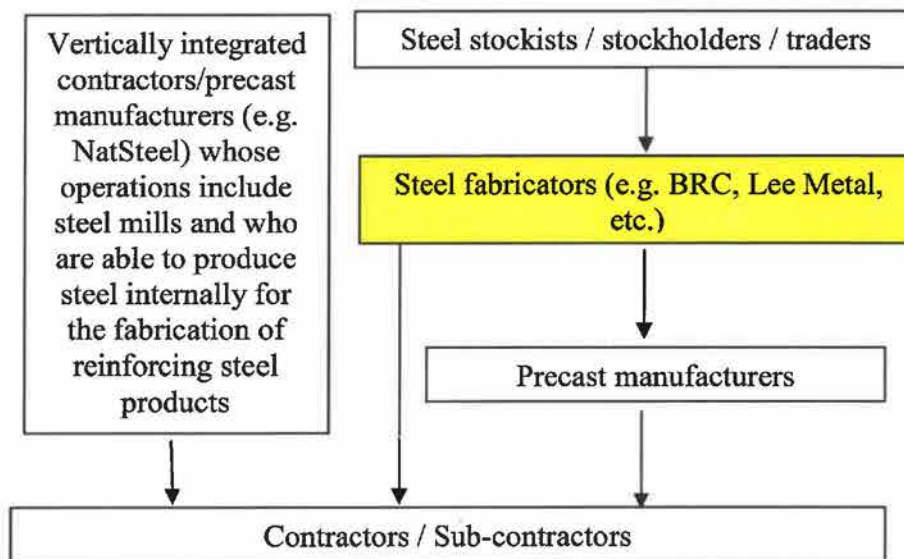
¹⁰⁸ Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

¹⁰⁹ [X]; [X].

VII. Market Structure

75. Diagram 2 below shows the structure of the market in relation to steel fabricators such as the Parties.

Diagram 2: Reinforcing steel supply chain



(a) Market Shares and Market Concentration

BRC's submission

76. BRC submitted that measurement of shares in the processing and distribution of reinforcing steel products by sales value or volume is not a realistic representation of the competitive constraints faced by competitors in the processing and distribution of reinforcing steel products in Singapore.¹¹⁰ This is in view of the fact that the processing of reinforcing steel products is a low margin, and price-sensitive, volume business.¹¹¹ BRC stated that they were not able to provide volume share estimates as there are no third party sources on such data, and BRC would not have the sales data of the other market players in order to arrive at a reasonable estimate of volume shares.¹¹²
77. In this regard, BRC recommended that a more accurate and realistic measurement of estimated shares in the processing and distribution of reinforcing steel products in Singapore should be the processing capacity of

¹¹⁰ Paragraph 21.2 of Form M1.

¹¹¹ Paragraph 21.3 of Form M1.

¹¹² Paragraph 13 of BRC's further submissions to CCCS dated 25 March 2018.

the existing competitors in Singapore.¹¹³ Further, BRC argued that the processing capacity of competitors is a significant competitive constraint as any increases in prices will result in competitors increasing their processing volumes to absorb the demand of customers.¹¹⁴

Estimated capacity shares within the market of processing and distribution of reinforcing steel products in Singapore

78. BRC submitted that the estimated total market size (by capacity) in the processing and distribution of reinforcing steel products in Singapore in 2017¹¹⁵ is [X] Metric Ton (“MT”).
79. Market share estimates¹¹⁶ provided by BRC in the processing and distribution of reinforcing steel products in Singapore in 2017, by capacity, are reproduced in Table 1 below.

¹¹³ Paragraph 21.2 of Form M1.

¹¹⁴ Paragraph 21.3 of Form M1.

¹¹⁵ BRC considers that total market size by capacity in 2015 and 2016 to be [X]. This is on the basis that [X].

¹¹⁶ BRC submitted that the market share estimates do not include the capacity of Rebars and wires as BRC does not have best internal estimates for these products. BRC submitted that the standard Rebars can be easily imported by the end customers directly. Therefore, the capacity can be perceived to be unlimited and may be irrelevant in the CCCS’ assessment of competitive constraints. Further, BRC submitted that third party wire sales are not significant in the Singapore construction market. Fabricators mainly consume wires to feed their production of reinforcing steel products in both Singapore and Malaysia. BRC further submitted that the market share estimates include Mesh processing capacity as well.

Table 1: Estimated shares (by capacity) in the processing and distribution of reinforcing steel products in Singapore in 2017

Company	Estimated Market Shares by capacity (%)
BRC¹¹⁷	[20-30]
Lee Metal¹¹⁸	[10-20]
Merged entity est. market share (%)	[40-50]
NatSteel¹¹⁹	[20-30]
Angkasa	[10-20]
Ribar	[0-10]
Super Bend	[0-10]
Lian Bee Metal	[0-10]

80. BRC submitted that the combined estimated capacity share of the merged entity only negligibly exceeds 40%. (i.e. by [0-10]%), and the concentration ratio of the three largest players after the Proposed Transaction marginally exceeds 70% (i.e. at [70-80]%).¹²⁰

Estimated capacity shares for Singapore and Malaysia

81. BRC submitted that the relevant market is more appropriately defined as the regional processing and distribution of reinforcing steel products in Singapore and Malaysia.¹²¹ BRC estimated that the Mesh manufacturing capacity in Malaysia to be at least [X] MT annually.¹²² BRC provided the following estimates on the Mesh production capacity of the largest Mesh manufacturers in Malaysia¹²³ in Table 2 below:

¹¹⁷ BRC submitted that its own capacity in 2015 and 2016 were [X].

¹¹⁸ BRC considers that Lee Metal's capacity in 2015 and 2016 to be [X]. This is on the basis that [X].

¹¹⁹ BRC considers that competitors' capacity in 2015 and 2016 to be [X]. This is on the basis that [X].

¹²⁰ Paragraph 21 of BRC's further submissions to CCCS dated 25 March 2018.

¹²¹ Paragraph 21.8 of Form M1.

¹²² Paragraph 21.9 of Form M1.

¹²³ Paragraph 24 of BRC's further submissions to CCCS dated 25 March 2018.

Table 2: Mesh production capacity of manufacturers in Malaysia

Malaysian Mesh manufacturer	Estimated Mesh production capacity (MT per annum)
Southern Steel	[X]
Engtex	[X]
AWSM	[X]
Chuan Huat	[X]
Kamen	[X]
Metex	[X]
Total	[X]

82. Out of the six manufacturers above, Engtex, Kamen and Southern Steel have factories in Johor, Malaysia, which is in close proximity to Singapore.¹²⁴ Thus, BRC submitted that the supply of Mesh from these manufacturers to Singapore is feasible and poses a real and credible competitive constraint to the merged entity in Singapore.¹²⁵ BRC further submitted that these estimates only represent a small segment of the total Mesh production capacity in Malaysia, and the total competitive constraint from Mesh production capacity in Malaysia is substantially higher than the figures above would represent.¹²⁶
83. Accordingly, BRC estimated that the total capacity for the processing and distribution of reinforcing steel products in Singapore and Malaysia is likely to be substantially higher than [X] MT annually.¹²⁷ Given the above, the estimated shares of BRC and Lee Metal (by capacity) for the processing and distribution of reinforcing steel products in Singapore and Malaysia is likely to be significantly lower than [10-20]%¹²⁸, and [10-20]% respectively.¹²⁹ The concentration ratio of the three largest players (based on competitors in Singapore) after the Proposed Transaction would be, at best, [60-70]%.¹³⁰

¹²⁴ Paragraph 25 of BRC's further submissions to CCCS dated 25 March 2018.

¹²⁵ Paragraph 25.1 of BRC's further submissions to CCCS dated 25 March 2018.

¹²⁶ Paragraph 25.2 of BRC's further submissions to CCCS dated 25 March 2018.

¹²⁷ This is derived as the sum of the total estimated capacity of processing and distribution of reinforcing steel products in Singapore and Mesh manufacturing capacity in Malaysia.

¹²⁸ This is derived as the estimated total capacity of BRC and Lee Metal respectively for processing and distribution of reinforcing steel products in Singapore, over the aforementioned estimated capacity of 2.89 million MT for processing and distribution of reinforcing steel products in Singapore and Mesh manufacturing capacity in Malaysia.

¹²⁹ Paragraph 21.9 of Form M1.

¹³⁰ Paragraph 27.2 of BRC's further submissions to CCCS dated 25 March 2018.

Estimated shares by capacity for Rebars

84. BRC estimates the total capacity in Singapore for the supply of Rebars to be potentially infinite¹³¹ for the following reasons:
- a. Rebars do not require processing, and are supplied in the manner imported to end customers;¹³²
 - b. Rebars can also be easily imported by end customers directly;¹³³ and
 - c. there are no substantial or prohibitive costs of investment required to supply Rebars in Singapore. First, there is no machinery needed to process Rebars before they are supplied to end customers. Secondly, there are also no prohibitive challenges for storage, as Rebars can be stored in warehouses, or on open, uncovered, plots of land.¹³⁴
85. BRC submitted that there is no special requirement on the space required to store Rebars in Singapore. In fact, BRC currently stores its Rebars at [X].¹³⁵ Any existing or potential competitors, or end customers, can tender for industrial land (as published on the JTC's website) under a Temporary Occupation Licence ("TOL")¹³⁶. The tenures may be as short as one year (which would facilitate a quick entry and exit), or as long as three years. Tenderers are assessed based on bid rent and do not need to fulfil any investment criteria.¹³⁷
86. As of 23 March 2018, there are 96,544 square metres of land available for tender on the JTC website under a TOL, which is almost [X].¹³⁸ [X].¹³⁹ This means that a new entrant, or an existing player, can easily lease a plot of land to import and store up to 110,000 MT of Rebars to compete for sale (or processing into other Overlapping Products).¹⁴⁰

Estimated shares by capacity for Mesh

87. BRC submitted that the ability to produce Mesh can be seen to be derived from the ability to import steel wire rods into Singapore, which is the base material to produce Mesh. According to BRC, the capacity to import steel

¹³¹ Paragraph 14 of BRC's further submissions to CCCS dated 25 March 2018.

¹³² Paragraph 14.1 of BRC's further submissions to CCCS dated 25 March 2018.

¹³³ Paragraph 14.2 of BRC's further submissions to CCCS dated 25 March 2018.

¹³⁴ Paragraph 14.3 of BRC's further submissions to CCCS dated 25 March 2018.

¹³⁵ Paragraph 15.1 of BRC's further submissions to CCCS dated 25 March 2018.

¹³⁶ See <http://www.jtc.gov.sg/industrial-land-and-space/Pages/temporary-occupation-licence-launch.aspx>

¹³⁷ Paragraph 15.2 of BRC's further submissions to CCCS dated 25 March 2018.

¹³⁸ Paragraph 16 of BRC's further submissions to CCCS dated 25 March 2018.

¹³⁹ Paragraph 16.1 of BRC's further submissions to CCCS dated 25 March 2018.

¹⁴⁰ Paragraph 16.2 of BRC's further submissions to CCCS dated 25 March 2018.

wire rods into Singapore is infinite. Similarly, the ability to bring in the equipment to manufacture Mesh is infinite as the equipment generally cost less than S\$[X]. BRC estimated the amount of capital expenditure required to gain a 5% market share in the market for the processing and distribution of reinforcing steel products including procuring factory space of 250,000 square feet to be no more than S\$[X].¹⁴¹

88. Based on BRC's estimates of current Mesh production capacity in Singapore, summarised in Table 3 below, BRC submitted that the combined production capacity of the merged entity is around [X]% of the total market production capacity for Mesh in Singapore.¹⁴²

Table 3: Production capacity for Mesh in Singapore

Company	Machines for Mesh Production	Production capacity by machine (MT per month)	Total production by company (MT per month)
BRC	[X]	[X]	[X]
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
NatSteel	[X]	[X]	[X]
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	
Lee Metal	[X]	[X]	[X]
	[X]	[X]	
	[X]	[X]	
	[X]	[X]	

¹⁴¹ Paragraph 18 of BRC's further submissions to CCCS dated 25 March 2018.

¹⁴² Paragraph 19 of BRC's further submissions to CCCS dated 25 March 2018.

	[X]	[X]	
	[X]	[X]	
Angkasa	[X]	[X]	[X]
	[X]	[X]	

CCCS's assessment

89. As set out in the *CCCS Guidelines on the Substantive Assessment of Mergers 2016*, CCCS 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 between 20% to 40% and with a post-merger CR3 at 70% or more.¹⁴³
90. As BRC was unable to provide estimated market shares of its competitors in each of the Overlapping Product markets, CCCS sought the views of Third Parties. [X] provided the following estimations in terms of volume of supply:

Monthly Output	Total (MT)	Market Share
BRC	[X]	[20-30]%
Lee Welded	[X]	[30-40]%
NatSteel	[X]	[10-20]%
Angkasa	[X]	[0-10]%
Ribar Indus.	[X]	[0-10]%
SuperBend	[X]	[0-10]%
HG Metal	[X]	[0-10]%
Others	[X]	[0-10]%

[X]'s estimate of market shares by value and volume are as follows:

	Rebar (%)	Mesh (%)
NatSteel	[20-30]	[30-40]
Lee Metal	[20-30]	[20-30]
BRC	[20-30]	[30-40]
Angkasa	[0-10]	[0-10]
Super Bend	[0-10]	[0-10]
Ribar Industries	[0-10]	[0-10]
HG Metal	[0-10]	[0-10]
Lian Bee Metal	[0-10]	[0-10]
Others	[0-10]	[0-10]

¹⁴³ Paragraph 5.15 of *CCCS Guidelines on the Substantive Assessment of Mergers 2016*.

91. Based on BRC's submissions, CCCS notes that the combined market shares of the Parties post-Transaction for the processing and distribution of reinforcing steel products in Singapore is at [40-50]%, which is marginally above the indicative threshold of 40%. The incremental increase in market share of [10-20]% post-merger is also not insignificant. Such levels may indicate potential competitive concerns in the market for the processing and distribution of reinforcing steel products.
92. CCCS further notes that the indicative market shares of the Parties post-Transaction, as estimated by Third Party feedback above, is [40-50]% for Rebars, [60-70]% for Mesh, and about [50-60]% for the total supply of the Overlapping Products.¹⁴⁴ These market share figures are [X] above the 40% indicative threshold at which competition concerns could arise.
93. However, market shares alone do not give rise to a presumption that the Proposed Transaction will substantially lessen competition.¹⁴⁵ CCCS thus proceeded to consider other relevant factors to make an assessment, covered in the sections below.

(b) Barriers to Entry and Expansion

94. In assessing barriers to entry and expansion, CCCS 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 Parties or their competitors to exploit the reduction in rivalry flowing from the Proposed Transaction (whether through coordinated or non-coordinated strategies).

BRC's submission

Barriers to entry

95. BRC submitted that the market for the processing and distribution of reinforcing steel products in Singapore is not characterized by significant entry barriers. In particular, it was submitted by BRC that there are no import restrictions or import tariffs applicable to the reinforcing steel products.¹⁴⁶ Therefore, fabricators are also free to source for raw materials from any non-

¹⁴⁴ No information was submitted nor was CCCS able to obtain, to allow for a market share-specific finding to be made in respect of Prefab and Cut & Bend.

¹⁴⁵ Paragraph 5.16 of the *CCCS Guidelines on the Substantive Assessment of Mergers 2016*.

¹⁴⁶ Paragraph 18.6 of Form M1.

UN-sanctioned countries. Such countries which have been active in exporting reinforcing steel to Singapore include China, India, Turkey, and Ukraine.¹⁴⁷

96. BRC further submitted that there are no barriers to entry in the form of intellectual property rights given that the intellectual property rights do not feature significantly in respect of the processing and distribution of reinforcing steel products. Intellectual property rights are limited to branding of the products, which in and of their own, do not pose substantial barriers to entry for competitors.¹⁴⁸
97. From BRC's perspective, there are also no planning restraints, technology, R&D requirements, regulatory barriers, availability of raw materials, length of contracts that would affect entry.¹⁴⁹
98. In relation to the capital expenditure required to enter the market for processing and distribution of reinforcing steel products in Singapore, BRC submitted that a new entrant would have to invest in factories¹⁵⁰ and machinery¹⁵¹. BRC estimated that the total expenditure may range between S\$[X] to S\$[X]¹⁵², depending on the types and makes of reinforcing steel processing machinery and equipment that the new entrant chooses to use, and also whether the new entrant chooses to use second hand machinery. A new entrant could alternatively rent instead of purchase a factory, and accordingly, the capital expenditure necessary would be limited to equipment and machinery, at approximately S\$[X] to S\$[X].¹⁵³
99. In this regard, BRC submitted that used equipment is readily available with minimal delivery time required. Therefore, if a new entrant (an existing player) decides to start Mesh production (expand its Mesh production capacity) in a timely manner with low costs incurred, it can choose to purchase such used equipment.¹⁵⁴ BRC had sourced for quotes from a supplier of such equipment and noted that the cost of a standard Mesh processing plant was approximately S\$[X]. The cost of used equipment is

¹⁴⁷ Paragraph 18.12 of Form M1.

¹⁴⁸ Paragraph 18.5 of Form M1.

¹⁴⁹ Paragraph 28.1 of Form M1.

¹⁵⁰ BRC submitted that a JTC factory with a square footage of [X] to [X] square feet could cost approximately S\$[X] to S\$[X].

¹⁵¹ BRC submitted that the necessary equipment and machinery could cost approximately S\$[X] to S\$[X].

¹⁵² BRC submitted that a new entrant could alternatively rent instead of purchase a factory, and accordingly, the capital expenditure necessary would be limited to equipment and machinery, at approximately S\$[X] to S\$[X].

¹⁵³ Paragraph 26.1 of Form M1.

¹⁵⁴ Paragraph 4 of BRC's further submissions to CCCS dated 10 April 2018.

lower, at approximately S\$[3<] each for a welding machine and for drawing lines, and approximately S\$[3<] for straightening cutting machines.¹⁵⁵

100. In addition, BRC submitted that there are neither specific nor special restrictions for land that is to be used for the processing of reinforcing steel including Mesh. BRC further submits that there is an abundance of available land for potential entrants with transparent transacted prices managed by JTC.¹⁵⁶ BRC submitted that this is evident by the fact that the steel stockist Super Steel had acquired the factory located at 20 Benoi Crescent to commence the large scale processing of reinforcing steel by its subsidiary, Super Bend, suggesting that land is easily available in Singapore.¹⁵⁷
101. Apart from the capital expenditure required, BRC estimated that it would require around [3<] to [3<] months for a new entrant to establish itself and to gain a 5% market share. This is on the basis that new reinforcing steel processing equipment and machinery usually only take a few months to arrive after being ordered, and a few weeks thereafter to commission. Thereafter, a new entrant has to also factor in the additional few months to build its order book.¹⁵⁸
102. Finally, BRC submitted that reinforcing steel products are also commodity products that have little differentiation or brand loyalty. Reinforcing steel products may be customised by any supplier based on customers' specifications and needs.¹⁵⁹ There is no brand stickiness in the market for processing and distribution of reinforcing steel products. In this regard, BRC submitted that there are marginal differences in the quality of the reinforcing steel products supplied by competing suppliers in Singapore, and customers are not restricted by perceptions of differences in quality when deciding to switch between competing suppliers. Accordingly, incumbent companies will not have advantages over new entrants because of their established position, and a new entrant would be able to compete in the market in Singapore based largely on price.¹⁶⁰
103. In relation to new entries in Singapore in the past five years, BRC submitted that it has observed the following examples of new entry in Singapore in the years from 2010 to 2014¹⁶¹:

¹⁵⁵ Paragraph 6.1.3 of BRC's further submissions to CCCS dated 16 April 2018.

¹⁵⁶ Paragraph 8 of BRC's further submissions to CCCS dated 11 April 2018;

¹⁵⁷ Paragraph 7 of BRC's further submissions to CCCS dated 11 April 2018.

¹⁵⁸ Paragraph 19.1 of BRC's response to CCCS's RFI dated 2 March 2018.

¹⁵⁹ Paragraph 24.5 of Form M1.

¹⁶⁰ Paragraph 34.12 of Form M1.

¹⁶¹ Paragraph 29.1 of Form M1 and paragraph 20.1 of BRC's response to CCCS's RFI dated 2 March 2018.

- a. [REDACTED];
- b. [REDACTED];
- c. [REDACTED];
- d. [REDACTED]; and
- e. [REDACTED]

Barriers to expansion and excess capacity

104. BRC further submitted that there is excess production capacity in the processing and distribution of reinforcing steel in Singapore. In this regard, BRC estimates that there is excess processing capacity for Rebars of about [REDACTED] MTs (i.e. [REDACTED]%) per year in Singapore.¹⁶² Competitors can easily utilise existing production capacity in response to growing demand.¹⁶³
105. Further, BRC submitted that its key competitors in Singapore, as well as the reinforcing Rebar fabricators/Mesh manufacturers in Malaysia, have the potential to expand, or utilise, existing production capacity.¹⁶⁴ In this regard, BRC submitted that the land area of NatSteel's facilities in Singapore is at least [REDACTED] square metres, more than [REDACTED]. BRC submitted that NatSteel accordingly has land space readily available for it to expand its Mesh production capacity by purchasing additional equipment, which is of low cost and can be delivered quickly.¹⁶⁵
106. BRC also estimated that NatSteel has around [REDACTED]%, or [REDACTED] MT per annum¹⁶⁶ of excess Mesh manufacturing capacity.¹⁶⁷ In this regard, BRC noted that the excess capacity of NatSteel is [REDACTED], which points towards the ability of NatSteel to absorb the demand of customers seeking to switch away from the merged entity in response to higher prices.¹⁶⁸
107. BRC further submitted that Angkasa, being part of the Lion Group, has the resources to quickly ramp up its Mesh production capacity in a timely manner. In this regard, BRC understands that [REDACTED]:
- a. [REDACTED];
 - b. [REDACTED];

¹⁶² Paragraph 21.7 of Form M1.

¹⁶³ Paragraph 24.17 of Form M1.

¹⁶⁴ Paragraph 24.18 of Form M1.

¹⁶⁵ Paragraphs 6 to 8 of BRC's further submissions to CCCS dated 9 April 2018; Paragraphs 4 to 7 of BRC's further submissions to CCCS dated 10 April 2018; and Paragraph 6 of BRC's further submissions to CCCS dated 11 April 2018.

¹⁶⁶ Based on BRC's estimate of NatSteel's total estimated Mesh production capacity of [REDACTED] MT per month.

¹⁶⁷ Paragraph 9 of BRC's further submissions to CCCS dated 11 April 2018.

¹⁶⁸ Paragraph 10 of BRC's further submissions to CCCS dated 11 April 2018.

- c. [REDACTED]; and
- d. [REDACTED].¹⁶⁹

- 108. In view of the aforementioned, BRC submitted that Angkasa has the resources to ramp up its Mesh production capacity.
- 109. BRC also submitted that it understands that [REDACTED].¹⁷⁰
- 110. In addition, BRC also submitted that [REDACTED].¹⁷¹
- 111. Assuming there is a ready order book of Mesh demand that a new entrant or existing competitor would meet, BRC estimates that the timeframe it would take for production of a new entrant, or expansion of capacity of an existing player, to start meeting demand can be as short as three¹⁷² to seven months¹⁷³.¹⁷⁴
- 112. BRC also submitted that the ease and ability of an existing player or a new player ramping up its mesh production capacity was in fact demonstrated by Lee Metal's own experience in ramping up its Mesh production capacity around 2011.¹⁷⁵
- 113. In 2011, Lee Metal's Mesh annual production output was [REDACTED] MT per annum. Lee Metal had ramped up its production capacity gradually from FY 2012 through investing in new Mesh machinery. BRC further submitted that Lee Metal was able to immediately ramp up its production capacity and Mesh sales tonnage within a year, from ordering of the machinery from the manufacturer, installation and commissioning of the machinery to

¹⁶⁹ Paragraph 31 of BRC's further submissions to CCCS dated 25 March 2018.

¹⁷⁰ Paragraph 12 of BRC's further submissions to CCCS dated 11 April 2018.

¹⁷¹ Paragraph 14 of BRC's further submissions to CCCS dated 11 April 2018.

¹⁷² BRC submits that this is the case for Angkasa. The timeframe would be even shorter as it is already accredited and an approved supplier on HDB's Materials List. It is also already manufacturing Mesh, and has the experience, expertise and customer contacts for Mesh and storage facilities, so the time required for Angkasa to ramp up is only for it to procure the additional machinery (i.e. three months).

¹⁷³ BRC submits that this is particularly the case for Ribar and HG Metal which are already accredited and approved suppliers on HDB's Materials List for Cut & Bend, which has similar requirements and expertise required for Mesh supply. As such, they only need to acquire the additional Mesh manufacturing equipment and obtain third party accreditation before being able to supply Mesh into the Singapore market. BRC estimates that these parties would be able to begin their supply of Mesh into the market in Singapore for non-HDB projects within six months and for HDB projects within 7 months, with the additional month used to obtain the approval to be listed on HDB's Material List.

¹⁷⁴ Paragraphs 12, 13, 15, 16 and 17 of Annex 1 of BRC's further submissions to the CCCS dated 16 April 2018.

¹⁷⁵ Paragraph 32 of BRC's further submissions to CCCS dated 25 March 2018.

commence production.¹⁷⁶ Moreover, it was submitted that the machinery is not prohibitively costly to procure, and the costs were swiftly recovered as quickly as [X] years.¹⁷⁷

114. BRC further submitted that there is an estimated capacity of about [X] MT in excess capacity per month from the 10 Integrated Construction Prefabrication Hubs (“ICPHs”) that BCA plans to commission.¹⁷⁸ This represents [X] MT of excess Mesh capacity on an annual basis, which is [X]% of Lee Metal’s total sales tonnage of Mesh in 2017.¹⁷⁹
115. Given that the production of reinforcing steel products is a price-sensitive volume business, in the event of any price increase by any supplier in Singapore, the other suppliers accordingly have strong incentives, and are able, to increase their production to absorb the demand of customers.¹⁸⁰ Therefore, BRC submitted that the production capacity (and in particular, excess capacity) of competitors is accordingly a significant competitive constraint on the merged entity post-Transaction.¹⁸¹

Feedback from Third Parties

116. A majority of the customers were of the view that it would be difficult for a new supplier to enter the market for processing and distributing the Overlapping Products.¹⁸² There was no feedback that the barriers to entry were low. In particular, two parties specifically stated that it would be difficult for a new supplier to enter the market from “scratch”; entry would only be easy if it was by way of an acquisition.¹⁸³

¹⁷⁶ This information was provided by Lee Metal to A&G, counsel to BRC.

¹⁷⁷ Paragraph 35 of BRC’s further submissions to CCCS dated 25 March 2018.

¹⁷⁸ ICPHs are multi-storey advanced manufacturing facilities for producing prefabricated construction elements. [X]. For more information, please refer to https://www.bca.gov.sg/BuildableDesign/tender_prest_hub.html

¹⁷⁹ Paragraph 6.3.1 of BRC’s further submissions to CCCS dated 16 April 2018.

¹⁸⁰ Paragraph 24.8 of Form M1; paragraphs 30 to 36 of BRC’s further submissions to CCCS dated 25 March 2018.

¹⁸¹ Paragraph 24.8 of Form M1.

¹⁸² Answer to Question 17 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 17 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 17 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; and Answer to Question 17 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

¹⁸³ Answer to Question 17 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; and Answer to Question 17 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

117. Competitors provided feedback that it is not easy for a new supplier to enter the market.¹⁸⁴ In addition, even though a supplier could currently supply a few types of the Overlapping Products (i.e. Rebars and Cut & Bend), the capital outlay to begin producing and distributing another type of Overlapping Product (i.e. Mesh or Prefab) appears to be prohibitively expensive such that it is unviable for the supplier to do so.¹⁸⁵ However, all competitor feedback received indicated that they do not face capacity constraints and are able to react to increases in demand via various means.¹⁸⁶
118. The key barrier to entry identified by both competitors¹⁸⁷ and customers¹⁸⁸ is the high capital expenditure required. In particular, a competitor estimated the investment required for machinery to produce Mesh to cost around \$17 million.¹⁸⁹ Another competitor estimated that the cost of setting up a factory to produce Mesh would cost around €5 million (approximately \$8,103,500).¹⁹⁰ Other barriers to entry identified include the need for heavy technical set up, the need for heavy machinery set up¹⁹¹ and regulatory requirements¹⁹². For completeness, it was also highlighted by another competitor that such estimates might vary as it depends on whether one were to purchase a low or high-end machine for the production of Mesh.¹⁹³
119. While it was submitted by BRC that NatSteel has significant land space which could be utilized to expand its Mesh production capacity, market feedback received indicated that the estimated land space is likely to be an

¹⁸⁴ Answer to Question 20 of [X] response to CCCS's Invitation to Comment dated 8 March 2018; Answer to Question 20 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 20 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁸⁵ Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

¹⁸⁶ Answer to Question 24 of [X] response to CCCS's Invitation to Comment dated 8 March 2018; Answer to Question 24 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 24 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁸⁷ Answer to Question 21 of [X] response to CCCS's Invitation to Comment dated 8 March 2018; Answer to Question 21 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 21 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁸⁸ Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁸⁹ Answer to Question 2 of [X] reply CCCS's Invitation to Comment dated 5 April 2018.

¹⁹⁰ Notes of meeting between CCCS and [X] dated 20 April 2018.

¹⁹¹ Answer to Question 21 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁹² Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018 and Answer to Question 18 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

¹⁹³ Notes of meeting between CCCS and [X] dated 20 April 2018.

overestimation. NatSteel is a steel mill with integrated upstream and downstream operations, and less than [X] of its land is devoted to downstream operations related to the Overlapping Products.¹⁹⁴ The remaining land area is used for upstream operations, including recycling of scrap metal.¹⁹⁵

120. In relation to BRC's submission that Angkasa had potential support from [X], [X].¹⁹⁶
121. In addition, a supplier noted that while Rebars are theoretically readily available and can be imported with ease, the current market practice is for fabricators to bundle and sell the Overlapping Products together in a packaged form to end-customers.¹⁹⁷

CCCS's assessment

122. Reviewing the information provided by BRC and third parties, CCCS's considered view is that it is difficult for a new firm with no presence or expertise in a related industry to enter the market for the production and processing of reinforcing steel products. The barriers to entry for a firm that is currently already producing Rebars and/or Cut & Bend to begin producing Mesh and/or Prefab are high as well. In particular, CCCS notes the high capital expenditure that is required for a new firm to enter the market.
123. However, the barriers to entry for firms with a presence or expertise in a related industry, e.g., firms that are involved in upstream Rebar trading or are already dealing in steel products used in construction, such as steel stockists, appear to be lower, as evident from the examples cited by BRC set out at paragraph 103 above. CCCS notes that all five new entrants identified by BRC have, in one way or another, links to a company with the necessary expertise and present in a related market (i.e. steel stockists).
124. In addition, feedback from Third Parties indicates that customers usually require each of the Overlapping Products in differing proportions depending on their project needs.¹⁹⁸ Third Party-feedback also indicate that there are

¹⁹⁴ [X].

¹⁹⁵ Ibid.

¹⁹⁶ [X].

¹⁹⁷ Answer to Question 2 of [X] response to CCCS's Invitation to Comment dated 9 March 2018.

¹⁹⁸ Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

only three suppliers that are currently able to provide a “one stop” service for customers, with BRC and Lee Metal being two of them.¹⁹⁹ In this regard, CCCS notes that the ability of BRC and Lee Metal to provide “one stop” services is linked to their ability to produce and process Mesh in Singapore.²⁰⁰ Amongst the Parties’ competitors, only [X] is capable of providing “one stop” services on the same scale as the Parties. The remaining competitors in the market supply Mesh in Singapore [X]²⁰¹, or by [X]²⁰².

125. In this regard, BRC provided further submissions stating that customers will continue to have the option of purchasing products from the merged entity either as a bundle or individually, and if they choose to purchase in bundled contracts, they will continue to have options on how they would like to bundle different products together. In addition, BRC noted that even suppliers that do not manufacture or process the full range of products can offer the products to customers, namely by sourcing for the products that they do not manufacture from elsewhere. BRC submitted that such suppliers include HG Metal, Ribar, and Super Bend, who have advertised that they are capable of providing welded wire mesh as part of their one-stop solution for customers.²⁰³
126. BRC also submitted that the fact of a one-stop shop also means that a price increase for a product could jeopardise the entire portfolio of products that BRC could supply to the sub-contractor or main contractor. This puts pressure on BRC to quote competitively for all of the products, rather than create a converse scenario where the sub-contractor or main contractor is held hostage by BRC as it is a one-stop shop for the entire range of products.²⁰⁴
127. Having considered BRC’s submissions and the feedback from Third Parties holistically, CCCS is of the view that BRC and Lee Metal currently, and subsequently as a merged entity would, enjoy a certain degree of portfolio power that increases the barriers to entry for a new supplier wishing to enter

CCCS’s Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS’s Invitation to Comment dated 28 March 2018; Answer to Question 1 of [X] response to CCCS’s Invitation to Comment dated 28 March 2018.

¹⁹⁹ Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

²⁰⁰ Answer to Question 13 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 13 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

²⁰¹ Answer to Question 1 of [X] response to CCCS’s Invitation to Comment dated 28 March 2018; and [X].
²⁰² [X].

²⁰³ Paragraph 9.2.1 of BRC’s further submissions to CCCS dated 16 April 2018.

²⁰⁴ Paragraph 9.2.3 of BRC’s further submissions to CCCS dated 16 April 2018.

the market for the processing and distribution of the Overlapping Products in Singapore.

128. However, CCCS accepts that it is possible for existing companies in Singapore to expand their production volumes in a timely fashion, either by expanding their capacity or by using existing excess capacity to meet increases in demand. CCCS notes that [X] the ability and capacity to produce the Overlapping Products on the same scale as the Parties post-Transaction.²⁰⁵ Other firms can increase the utilisation of their Mesh production capacity to meet increases in demand, albeit only to a limited extent.²⁰⁶
129. CCCS notes that Third Party feedback does not lend support to BRC's submission that ICPHs pose as a strong and credible alternative for end customers. While these ICPHs have their own Mesh manufacturing facility, CCCS understands [X].²⁰⁷ Further, while CCCS recognises that there is a move to shift precast production to ICPHs²⁰⁸, CCCS also notes from Third Party feedback that ICPHs still purchase Mesh from conventional suppliers to supplement their own in-house production of Mesh.²⁰⁹
130. All things considered, CCCS is of the view that the barriers to entry are significant due to high capital investment costs, making it difficult for new firms to enter the market. While firms with presence and expertise in related markets (e.g., steel stockists) can enter the market, the cost of the machinery required for the production of Mesh make it difficult for them to expand production to supply all four Overlapping Products. However, CCCS is of the view that the barriers to expansion, in particular to increase production of Mesh within the capacity of the existing firms, are low. The excess production capacity of existing firms and their ability to increase capacity would be a competitive constraint on the merging Parties, [X].²¹⁰ On balance, CCCS is of the view that the ability of the other players to expand production of Mesh would reduce the merged entity's ability to exercise market power.

²⁰⁵ [X].

²⁰⁶ Notes of call with [X] dated 17 April 2018.

²⁰⁷ Notes of meeting between CCCS and [X] dated 12 April 2018; and feedback provided by [X] dated 8 April 2018 in relation to Proposed Acquisition of Lee Metal Group Ltd. by BRC Asia Limited.

²⁰⁸ BRC's further submissions to CCCS dated 20 April 2018.

²⁰⁹ Notes of meeting between CCCS and [X] dated 20 April 2018.

²¹⁰ [X].

(c) Countervailing Buyer Power

BRC's submission

131. BRC submitted that there is strong countervailing buyer power. Buyers are able to freely import and process their own reinforcing steel at their construction sites using steel sub-contractors and/or their own steel workers.²¹¹ BRC submitted that while most of the processing of reinforcing steel is done at off-site factories nowadays, many steel sub-contractors in Singapore still maintain a minimal on-site capacity for processing reinforcing steel to rectify errors made by off-site factories, which happen from time to time. There is accordingly no additional machinery or training required for such buyers to conduct their own processing of reinforcing steel at their construction sites.²¹² In this regard, BRC submitted that the necessary machineries required is not prohibitive in relation to the large scale of the building construction projects.²¹³ In addition, BRC also submitted that many of the bidders that won the land tender for JTC TOL are building contractors, which suggest that they have the space outside of their project sites for storage of Rebars for further processing.²¹⁴
132. Alternatively, BRC also submitted that customers can purchase Rebars or Cut & Bend and tie them up either manually or using tie-guns on-site.²¹⁵ In this regard, BRC submitted that it takes [X] workers about [X] minutes to place the Rebars and Cut & Bend, and tie them manually on-site, in place of a piece of Mesh covering an area, at the designated location on site. The time required is expected to be shorter if the workers are using tie-guns.²¹⁶ In comparison, the conventional method i.e. for Mesh fabricators to deliver the Mesh products will take [X] workers approximately [X] minutes to place a piece of mesh at its designated location on-site.²¹⁷
133. Subject to contractual commitments, buyers may also easily change suppliers, by switching to one of the other existing reinforcing steel players in Singapore or Malaysia.²¹⁸ This can be done so with little cost. The extent of coordination, such as transfer of shop drawings and change of customer servicing personnel associated with such transitions varies from project to

²¹¹ Paragraph 32.1 of Form M1.

²¹² Paragraph 21.1 of BRC's response to CCCS's RFI dated 2 March 2018.

²¹³ Paragraph 19.9 of Form M1.

²¹⁴ Paragraph 9.1.3 of BRC's further submissions to CCCS dated 16 April 2018.

²¹⁵ Paragraph 56.2 of BRC's further submissions to CCCS dated 25 March 2018.

²¹⁶ Paragraph 7.2 of BRC's responses to questions 1 to 7 of CCCS's RFI dated 28 March 2018.

²¹⁷ Paragraph 7.1 of BRC's responses to questions 1 to 7 of CCCS's RFI dated 28 March 2018.

²¹⁸ Paragraph 32.2 of Form M1.

project, and are not prohibitive.²¹⁹ BRC also noted that customers could also sponsor a new entrant by committing a large volume of purchases to the new entrant in order to incentivise the new entrant to make the necessary investments to enter the market, or by importing the requirements, e.g. Mesh, from outside of Singapore.²²⁰

134. In addition, BRC submitted that customers of Mesh are involved in a wide range of major and smaller projects. There are few customers who are truly small customers that are only involved in small projects, and would not be involved in large-scale projects. It would therefore not be rational for BRC to discriminate against customers for smaller projects by charging uncompetitive prices and such customers would retaliate when deciding which supplier to award the larger projects to.²²¹
135. BRC also argued that suppliers in Malaysia are willing to supply to Singapore. They submitted that the selling price for Mesh in Singapore is generally higher than in Malaysia.²²² Based on a quotation BRC received for the transport of Mesh from Singapore to Johor in Malaysia, BRC submitted that the price of Mesh in Singapore is higher than the price of Mesh in Malaysia, even with transport costs included. BRC speculates that the cost of transport from Malaysia to Singapore is expected to be similar, if not identical, to the cost of transport from Singapore to Malaysia.²²³
136. BRC itself, in 2012, had procured Mesh from Malaysian suppliers to meet a demand surplus in Singapore. The average price of the Mesh purchased by BRC, inclusive of transport, was S\$[X] to S\$[X] per MT while BRC's selling price in Singapore in the same year was S\$[X] per MT. BRC submitted that this illustrates the commercial incentives for imports from Malaysia to Singapore for Mesh in response to customer demand.²²⁴ BRC also supplies Mesh from Senai in Malaysia to a precast yard in the Johor area for projects in Singapore.²²⁵
137. BRC stated that their competitors already import Mesh from Malaysia.²²⁶ BRC also submitted the figures on Mesh imports published by IE Singapore from 2013 to 2017 in the table below²²⁷:

²¹⁹ Paragraph 24.15 of Form M1.

²²⁰ Paragraph 6.4.7 of BRC's further submissions to CCCS dated 16 April 2018.

²²¹ Paragraph 6.4.5 of BRC's further submissions to CCCS dated 16 April 2018.

²²² Paragraph 37.1 of BRC's further submissions to CCCS dated 25 March 2018.

²²³ Paragraph 37.2 of BRC's further submissions to CCCS dated 25 March 2018.

²²⁴ Paragraph 38 of BRC's further submissions to CCCS dated 25 March 2018.

²²⁵ Paragraph 39 of BRC's further submissions to CCCS dated 25 March 2018.

²²⁶ Paragraph 40 of BRC's further submissions to CCCS dated 25 March 2018.

²²⁷ Paragraph 6.1 of Annex 1 of BRC's further submissions to CCCS dated 16 April 2018.

Table 4: Mesh Imports into Singapore

Year	Mesh Imports (MT)
2013	18,036
2014	15,538
2015	15,206
2016	8,739
2017	9,439

138. BRC submitted that there were substantial imports of Mesh into Singapore during periods of high demand because of rapid construction (i.e. 2013 to 2015).²²⁸ BRC submitted that the low level of imports of Mesh into Singapore in recent years is a function of market conditions, rather than any barriers to entry.²²⁹ BRC also noted that at its peak, i.e. 2013, the Mesh import was equivalent to around [X]%²³⁰ of Lee Metal's total sales tonnage of Mesh in 2017.²³¹ In this regard, BRC submitted that the figures substantiate that Mesh import into Singapore can take place in a likely, timely and sufficient manner to constrain the merged entity following the Proposed Transaction.²³²
139. Finally, BRC submitted that long-term fixed price contracts are rare, and most such contracts are for less than twelve months' duration. There are only limited instances in which such contracts may be for more than one year. This is because most customers do not wish to enter into long-term floating-price contracts (based on movement in prices of steel), whereas most suppliers do not wish to enter into fixed price contracts for the same reason.²³³

Feedback from Third Parties

140. Save for one response, feedback from Third Parties stated that it is not easy/feasible to import the Overlapping Products.²³⁴ Explanations for the

²²⁸ Paragraph 6.2 of Annex 1 of BRC's further submissions to CCCS dated 16 April 2018.

²²⁹ Paragraph 6.2.4 of BRC's further submissions to CCCS dated 16 April 2018.

²³⁰ Paragraph 6.3 of Annex 1 of BRC's further submissions to CCCS dated 16 April 2018. This information was provided by Lee Metal to A&G, counsel to BRC.

²³¹ Paragraph 6.3 of Annex 1 of BRC's further submissions to CCCS dated 16 April 2018.

²³² Paragraph 6.4 of Annex 1 of BRC's further submissions to CCCS dated 16 April 2018.

²³³ Paragraph 24.15 of Form M1.

²³⁴ Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 16 of

infeasibility of importing the Overlapping Products centred around the lack of personnel expertise to import and lack of warehouse storage space.

141. While it is submitted by BRC that it is possible to tender for industrial land (as published on JTC's website) under a TOL to obtain storage space²³⁵, Third Parties raised further concerns in relation to the feasibility of such an option.²³⁶ In particular, one customer highlighted that such an option is not feasible as it will raise the costs of production as a result of the additional costs arising from the land tender. Furthermore, the lack of economies of scale to reap the cost advantages from importing the Overlapping Products might also prohibit customers from adopting this alternative option.²³⁷
142. Only one of the six customers who provided feedback had the capacity to carry out self-processing.²³⁸ In relation to the feasibility of self-processing by cutting, bending and tying of Rebars using manual labour, all of the customers submitted that such a method is an outdated practice. Furthermore, most of them highlighted while this alternative option is possible, it is counter-productive and requires significant manpower and time.²³⁹ Customers estimated that it will take two (2) workers approximately 30 minutes to produce an identical standard-sized mesh using the alternative option as compared to ordering directly from the fabricators which will take five (5) minutes to place the standard-sized of Mesh into formwork. Moreover, one of the Third Parties also highlighted that such an outdated practice could run afoul with the minimum buildability requirements as mandated by BCA since December 2015.²⁴⁰ However, one company opined

[X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²³⁵ Paragraph 15.2 of BRC's further submissions to CCCS dated 25 March 2018.

²³⁶ Answer to Question 26 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; and Answer to Question 26 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

²³⁷ Answer to Question 26 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; and Notes of call with [X] dated 17 April 2018.

²³⁸ Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²³⁹ Answer to Question 27 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 27 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 27 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; and Answer to Question 27 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; and Answer to Question 27 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

²⁴⁰ In December 2015, BCA raised the minimum buildability standards and introduced the mandatory adoption of productive technologies such as welded mesh for cast in-situ concrete floor and prefabricated and pre-insulated duct for air-conditioning systems for all developments. In particular, it is noted in the Code of Practice on Buildability (2017 edition), as published by the BCA, that the minimum usage of welded mesh must be **at least 65%** of all cast in-situ slab area.

that there is no need for importation or self-processing of the Overlapping Products as there are sufficient suppliers and ample capacity in the market.²⁴¹

143. In addition, five of the seven customers gave feedback that they are not able to switch between suppliers with relative ease when a contract is already in force. The key limitation against this appears to be the terms of existing contracts.²⁴² One customer cited the additional reason for the difficulty in changing suppliers to be the length of time taken by the company's own administrative processes (e.g., to obtain management approval) when switching suppliers, weighed against the need for just-in-time delivery of the products.²⁴³ Other feedback indicated that there may be some difficulty in switching to new suppliers for the Mesh and Prefab products²⁴⁴, or if the Parties sells Rebars and Mesh together as a bundle post-Transaction²⁴⁵. CCCS also notes that procurement for the Overlapping Products are project-based or on an ad-hoc basis without long term contracts.²⁴⁶ Therefore, customers are not tied down to long-term contracts. Further, market feedback also highlighted a recent trend where customers might procure portions of the Overlapping Products from multiple suppliers concurrently, especially for large scale projects, in order to mitigate the risk of disruptions in the volume of the Overlapping Products necessary for the building construction projects.²⁴⁷
144. Finally, majority of the feedback also raised that the uncertainty of traffic conditions²⁴⁸, the longer lead time required for orders to be placed and length of time required for delivery are the main reasons why customers do not find

²⁴¹ Answer to Question 16 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²⁴² Answer to Question 8 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 8 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 8 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 8 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 8 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²⁴³ Answer to Question 8 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²⁴⁴ Answer to Question 9 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²⁴⁵ Answer to Question 25 of [X] response to CCCS's Invitation to Comment dated 8 March 2018

²⁴⁶ Answer to Question 14 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 14 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 14 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Notes of meeting between CCCS and [X] dated 20 April 2018.

²⁴⁷ Notes of meeting between CCCS and [X] dated 20 April 2018; and Notes of call with [X] dated 17 April 2018.

²⁴⁸ Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018; Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

it feasible to source for the Overlapping Products beyond the local market. Only one of the Third Parties indicated that there could be a possibility of obtaining the Overlapping Products from Johor due to its proximity to Singapore.²⁴⁹

CCCS's assessment

145. CCCS is of the view that there exists a limited degree of countervailing buyer power, unlike what BRC has submitted. While customers are able to switch suppliers from contract to contract with relative ease, it is not easy/feasible to import the Overlapping Products for further self-processing of the Overlapping Products.
146. CCCS notes that it is unlikely that customers will procure the Overlapping Products from outside Singapore. Rather, it appears that it is [X], as noted at paragraph 72 above.
147. Finally, while it is possible for customers to switch suppliers in between contracts, they may still find it difficult to do so for certain of the Overlapping Products (i.e. Mesh and/or Prefab). Customers who require large quantities of the Overlapping Products may also find it difficult to switch suppliers, especially if they are inclined to procure via a “one stop” shop. However, CCCS notes that customers are still able to choose between the merged entity and other credible choices (some who produce all four products [X]), or opt to negotiate to purchase each of the Overlapping Products from different suppliers.

VIII. Competition Assessment

(a) Non-coordinated effects

148. Non-coordinated effects may arise where, as a result of the Proposed 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.²⁵⁰

BRC's submission

149. BRC submitted that reinforcing steel products are commodity products that have little differentiation or brand loyalty. Customers perceive the

²⁴⁹ Answer to Question 4 of [X] response to CCCS's Invitation to Comment dated 28 March 2018.

²⁵⁰ Paragraph 5.21 of the *CCCS Guidelines on the Substantive Assessment of Mergers 2016*.

Overlapping Products of the Parties to be as substitutable with each other, as with any other fabricator in Singapore or Malaysia. There is no distinctive combination of features that only BRC and Lee Metal offer, which would make them the next best alternative to each other.²⁵¹

150. BRC submitted that customers also perceive that the Overlapping Products can be entirely substituted by contractors or sub-contractors, or precast manufacturers, through processing Rebars at the location of use, instead of procuring the Overlapping Products from fabricators such as the Parties.²⁵² Moreover, BRC submitted that customers can also use alternative materials, such as structural steel and mass engineered timber, as substitutes for the Overlapping Products.²⁵³
151. Accordingly, BRC submitted that the Parties are not able to exercise any potential market power to dictate the prices of reinforcing steel products.²⁵⁴
152. BRC further submitted that it will continue to be incentivized, following the Proposed Transaction, to compete on pricing, in view of a highly competitive market, in which:
 - a. the ability of competitors to expand production capacity is a real and credible competitive constraint;
 - b. the costs of importing the Overlapping Products from Malaysia to Singapore are not prohibitive;
 - c. prices remain transparent to customers and competitors, as tracked by the BCA Index;
 - d. customers are well-informed of market prices, have strong countervailing buyer power, and remain able to require that their suppliers match competitors' pricing as part of commercial negotiations;
 - e. [~~X~~]; and
 - f. self-supply by customers and usage of alternative materials remain available.²⁵⁵

Market shares

153. BRC submitted that while the estimated market share of the merged entity (by capacity) marginally exceeds 40% for the processing and distribution of

²⁵¹ Paragraph 33.1 of Form M1.

²⁵² Paragraph 33.2 of Form M1.

²⁵³ Paragraph 33.2 of Form M1.

²⁵⁴ Paragraph 33.3 of Form M1.

²⁵⁵ Paragraphs 1.2 of BRC's responses to questions 1 to 7 of CCCS's RFI dated 28 March 2018.

reinforcing steel products in Singapore, such figures do not take into account the capacity of competitors from Malaysia, who can easily expand their sales of reinforcing steel products into Singapore. If the capacity of such competitors from Malaysia is taken into account, the estimated market share (by capacity) of the merged entity is expected to be significantly lower.²⁵⁶

Multitude of existing and potential competitors

154. BRC submitted that there exists a multitude of competing reinforcing steel fabricators in Singapore, and in particular large competitors such as NatSteel, which will be able to provide substitutable products to customers and maintain strong competition for processing and distribution of reinforcing steel products following the Proposed Transaction. BRC submitted that NatSteel is vertically integrated as a steel mill and would benefit from natural synergies in lower input prices and the capability to quickly expand production volumes of reinforcing steel products, should there be a demand from customers switching away from the merged entity.²⁵⁷
155. Further, BRC submitted that there are a multitude of potential competitors from Malaysia which can provide substitutable reinforcing steel products to customers in Singapore. Some of these competitors, e.g., Southern Steel, Ann Joo and Antara, are vertically integrated with steel mills and expected to enjoy the same natural synergies as described for NatSteel above.²⁵⁸
156. BRC also submitted that there is increasing competition from precast yards as a strong and credible alternative for customers. BRC noted that the recently set up ICPHs have their own Mesh manufacturing facility, which reduces the demand for Mesh supply from traditional Mesh suppliers.²⁵⁹ Accordingly, the ICPHs represent a pool of credible entrants ready and able to quickly enter into Mesh supply in Singapore.²⁶⁰

Ease of switching

157. BRC submitted that the competitive strength of the multitude of existing and potential competitors is further enhanced by the absence of customer loyalty,

²⁵⁶ Paragraph 34.3 of Form M1.

²⁵⁷ Paragraph 34.4 of Form M1.

²⁵⁸ Paragraph 34.5 of Form M1.

²⁵⁹ Paragraph 36 of BRC's further submissions to CCCS dated 25 March 2018.

²⁶⁰ Paragraph 4 of BRC's further submissions to CCCS dated 11 April 2018.

and no, or minimal, switching costs involved when a customer decides to switch between suppliers.²⁶¹

158. Customers can freely import and process their own reinforcing steel at their construction sites using steel sub-contractors and/or their own steel workers. Subject to contractual commitments, customers can also easily change suppliers by switching to one of the other existing reinforcing steel players in Singapore or Malaysia.²⁶² Further, BRC submitted that customers have a credible choice and will continue to have a credible choice as to where they procure their Mesh from following the Proposed Transaction. Should Mesh prices increase following the Proposed Transaction, customers would be expected to procure more Mesh from overseas and overseas suppliers of Mesh will be more willing to export Mesh to Singapore.²⁶³
159. Reinforcing steel products may be customised by any supplier based on customers' specifications and needs. There is further marginal difference in the quality of the reinforcing steel products supplied by competing suppliers in Singapore, and customers are not restricted by perceptions of differences in quality when deciding to switch between competing suppliers.²⁶⁴
160. Long-term fixed price contracts are rare, and most such contracts are for less than twelve months' duration. There are only limited instances in which fixed price contracts may be for more than one year.²⁶⁵

Barriers to entry are not restrictive

161. BRC also submitted that the market for the processing and distribution of reinforcing steel products in Singapore is not characterised by significant entry barriers. From BRC's perspective, there are no planning restraints, technology, R&D requirements, regulatory barriers, import restrictions (tariffs, licensing, quarantine), IP rights, availability of raw materials, length of contracts that would affect entry.²⁶⁶
162. Further, as discussed above, there is no brand-stickiness. Accordingly, incumbent companies will not have advantages over new entrants because of

²⁶¹ Paragraph 34.7 of Form M1.

²⁶² Paragraph 34.8 of Form M1.

²⁶³ Paragraph 6.2.5 of BRC's further submissions to CCCS dated 16 April 2018.

²⁶⁴ Paragraph 34.9 of Form M1.

²⁶⁵ Paragraph 34.10 of Form M1.

²⁶⁶ Paragraph 34.11 of Form M1.

their established position, and a new entrant would be able to compete in the market in Singapore based on price only.²⁶⁷

163. BRC also noted that the cost of purchasing equipment and machinery for entering the market for the supply of Mesh is not high. The equipment and machines are also readily available with minimal delivery time.²⁶⁸ In addition, there are neither specific nor special restrictions for land that is to be used for the processing of reinforcing steel including Mesh, and that there is an abundance of available land for potential entrants with transparent transacted prices managed by JTC.²⁶⁹
164. Globally, BRC expects that overseas suppliers, such as [X] are able to enter the market in Singapore, even without a track record in Singapore.²⁷⁰

Excess capacity in the industry

165. BRC submitted that there is excess production capacity in the processing and distribution of reinforcing steel in Singapore. BRC estimates that there is an estimated excess processing capacity for Rebars of about [X] MTs (i.e. [X]%) per year in Singapore. Competitors are accordingly able to increase their production in a short time in response to market changes. Accordingly, any attempts by the Parties to raise prices, reduce output or decrease quality will be constrained by existing competitors.²⁷¹
166. BRC also submitted that NatSteel and the ICPHs are incentivized to utilise their excess capacity in response to any price increase by the merged entity post-Transaction. In this regard, BRC noted that [X].²⁷²

Price transparency from BCA Index

167. BRC submitted that the BCA Index promotes pricing transparency in order to lower overall construction costs in Singapore. Customers, as well as suppliers of reinforcing steel products in Singapore have access to the BCA Index and are able to immediately ascertain if quotations are overpriced, relative to market prices, and if so, to negotiate to drive down prices or seek quotations from other competitors. [X].²⁷³

²⁶⁷ Paragraph 34.12 of Form M1.

²⁶⁸ Paragraph 4 of BRC's further submissions to CCCS dated 10 April 2018.

²⁶⁹ Paragraph 8 of BRC's further submissions to CCCS dated 11 April 2018;

²⁷⁰ Paragraph 34.13 of Form M1.

²⁷¹ Paragraph 34.14 of Form M1.

²⁷² Paragraph 6.5.1 of BRC's further submissions to CCCS dated 16 April 2018.

²⁷³ Paragraph 42 of BRC's further submissions to CCCS dated 25 March 2018.

168. BRC further submitted that price negotiations are therefore not an opaque process as is the case in other industries, such that the merged entity can exercise any market power to raise prices for customers who are uninformed about market prices, or competitors who do not have sufficient market information to quote competitively.²⁷⁴

Win-Loss data for BRC and Lee Metal

169. BRC submitted that there have been a total of [X] projects lost by BRC since 21 July 2016.²⁷⁵ Out of the [X] projects lost, there were [X] instances in which the winner was identified. Out of these [X] contracts, BRC submitted that [X] contracts (or [30-40]%) were won by [X] while [X] contracts (or [30-40]%) were won by [X], demonstrating that [X] is the closest competitor to BRC and not [X].²⁷⁶ [X]'s position as BRC's closest competitor in terms of production scale, as compared to [X], is also reinforced by the fact that [X] wins more contracts than [X] when measured by tonnage:

Figure 4: Summary of contracts won by BRC and competitors as recorded by BRC²⁷⁷
[X]

170. On the other hand, for Lee Metal, win-loss data seems to suggest that [X] is its closest competitor. In BRC's submissions dated 6 April 2018, BRC provided information on [X] contracts lost by Lee Metal. [50-60]% of the contracts were lost to BRC, while [10-20]% were lost to [X]. Figure 5 below shows the breakdown of Lee Metal's projects which are lost to identified competitors in 2017.

Figure 5: Summary of Lee Metal's project loss to identified competitors
[X]

²⁷⁴ Paragraph 43 of BRC's further submissions to CCCS dated 25 March 2018.

²⁷⁵ Paragraph of BRC's further submissions to CCCS dated 6 April 2018; Paragraph 7.1.1 of BRC's further submissions to CCCS dated 16 April 2018.

²⁷⁶ Paragraph 7.1.1 of BRC's further submissions to CCCS dated 16 April 2018, Annex of BRC's further submissions to CCCS dated 18 April 2018.

²⁷⁷ Paragraph 3.5 of BRC's further submissions to CCCS dated 6 April 2018.

Feedback from Third Parties

171. Market feedback from the demand side perspective was mixed. Some customers suggests that with the merger, the number of suppliers of the Overlapping Products would be reduced to the point of lessening competition in the market.²⁷⁸ In particular, one of the Third Parties highlighted that there are few suppliers capable of providing “one stop services” with similar capacity. Moreover, market feedback also revealed a recent trend of end customers procuring the Overlapping Products in bundles²⁷⁹ which are loosely known as “3-in-1” or “4-in-1” in the industry.²⁸⁰ The companies capable of providing comprehensive services at a competitive price are [X], [X] and [X].²⁸¹ Another Third Party also noted that given the market practice for suppliers to sell the Overlapping Products as a bundle, the merged entity will control a very sizeable manufacturing capacity and market share of the Overlapping Products. This will enable the merged entity to have a better pricing position vis-à-vis the remaining smaller participants due to the combined capacity, especially for big infrastructure and large scale private development projects. There is hence no viable choice to fulfil the customers’ requirements other than from the merged entity.²⁸²
172. Three other parties provided feedback that they do not expect the Proposed Transaction to have much impact on the market.²⁸³ One Third Party’s explanation for this is that there are other suppliers for each of the Overlapping Product.²⁸⁴ In this regard, Third Party feedback suggested that an existing supplier who did not offer the full range of the Overlapping Products was still able to obtain business based on its long working relationship with customers.²⁸⁵ Further, for Cut & Bend and Prefab, sub-contractors can be employed to process the products on site.²⁸⁶ Lastly, another explanation cited by a Third Party is the situation of significant

²⁷⁸ Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; and Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

²⁷⁹ According to market feedback, the bundles usually come in the form of “3-in-1” which refers to Rebars, Cut & Bend, Mesh (or Prefab) or “4-in-1” which refers to Rebars, Cut & Bend, Mesh and Prefab.

²⁸⁰ Notes of call with [X] dated 6 April 2018.

²⁸¹ Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

²⁸² Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 9 March 2018.

²⁸³ Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018; and Notes of meeting between CCCS and [X] dated 20 April 2018.

²⁸⁴ Answer to Question 2 of [X] response to CCCS’s Invitation to Comment dated 7 March 2018.

²⁸⁵ Notes of call with [X] dated 24 April 2018.

²⁸⁶ Ibid.

excess capacity in the market for the Overlapping Products. In particular, the Third Party noted that most, if not all, market players are operating with excess capacity.²⁸⁷ The low capacity utilization suggests that competitors may be able to ramp up their production of the Overlapping Products in response to market changes.

173. As discussed at paragraphs 116 to 118 above, market feedback shows that the initial capital expenditure is a key barrier to entry. The general sentiment is also that it would be difficult for a new supplier to enter the market.

174. Customers have mixed views as to whether they are able to influence the prices and terms of sales during negotiations with suppliers. Five of the seven customers stated that they are able to influence the negotiations²⁸⁸, while the remaining two said that they had limited influence on the negotiations.²⁸⁹ However, market feedback highlighted that the BCA price index serves to increase market transparency on the prevailing prices of Rebars which in turn, enhances the ability of customers to negotiate for more competitive prices for the Overlapping Products in relation to the BCA price index at the point of negotiation.²⁹⁰

CCCS's assessment and conclusion on non-coordinated effects for the processing and distribution of reinforcing steel products in Singapore

175. Based on the submission of win-loss data by the merging parties, CCCS notes that BRC and Lee Metal are close competitors. With reference to Figure 4 above, CCCS notes that BRC won a high number of projects when competing against Lee Metal. Such win-loss data is evidence of the significant extent to which BRC and Lee Metal have, in pre-merger tenders, competed closely alongside each other. Furthermore, CCCS notes that the closeness of competition between BRC and Lee Metal is robust across other indices such as the tonnage lost to competitors.

²⁸⁷ Notes of meeting between CCCS and [X] dated 20 April 2018.

²⁸⁸ Answer to Question 15 of [X] response to CCCS' Invitation to Comment dated 7 March 2018; Answer to Question 15 of [X] response to CCCS' Invitation to Comment dated 7 March 2018; Answer to Question 15 of [X] response to CCCS' Invitation to Comment dated 7 March 2018; Answer to Question 15 of [X] response to CCCS' Invitation to Comment dated 7 March 2018; and Answer to Question 15 of [X] response to CCCS' Invitation to Comment dated 7 March 2018.

²⁸⁹ Answer to Question 15 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 15 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

²⁹⁰ Notes of meeting between CCCS and [X] dated 20 April 2018.

176. However, CCCS notes that [X]. In terms of sales volume, [X]²⁹¹ Lee Metal's sales volume of [X] MT per year²⁹². [X], as noted above at paragraph 169, [X] has won more projects lost by BRC than [X], and also won more contracts than [X] in general.
177. As noted at paragraph 147 above, while CCCS is of the view that it is possible for customers to switch between suppliers in between contracts, there may be difficulties in switching between suppliers for certain Overlapping Products (i.e. Mesh and/or Prefab) or if customers require a huge amount of the Overlapping Products. This is corroborated by market feedback which indicated that customers would have a limited choice of suppliers [X] to switch to in the event that BRC and Lee Metal raise prices of the Overlapping Products by 10%.²⁹³ Further, customers face a certain degree of difficulty in importing the Overlapping Products, namely due to storage space constraints and the timeliness of delivery.
178. In respect of barriers to entry, CCCS notes that while there are significant barriers for a new firm with no presence or expertise in a related market to enter the reinforcing steel products market, it may not be as difficult for firms with existing presence and expertise in related markets to enter the market. Nevertheless, market feedback suggests that the barriers to entry may still be significantly high, especially in relation to the processing of Mesh.
179. On the issue of price transparency due to the existence of the BCA index, as the index is reflective of prices set by the firms in the market, it can be affected by key players increasing their prices. As such, CCCS is of the view that little weight should be placed on this argument that the existence of the index increases the competitiveness in the market. In addition, CCCS understands that the price index only reflects the monthly transacted price of Rebars, and not the other Overlapping Products.²⁹⁴ In this regard, CCCS is of the view that the usefulness of the BCA Index to provide transparency of prices to customers may be limited.
180. Nevertheless, CCCS notes that the barriers to expansion for the production of the Overlapping Products are relatively low given that there is currently excess capacity in the market for the processing and distribution of the Overlapping Products. Some competitors, namely [X] and [X] (to a lesser

²⁹¹ Paragraph 19 of BRC's submissions dated 25 March 2018; and [X].

²⁹² Paragraph 10 of BRC's submissions dated 11 April 2018.

²⁹³ Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 7 of [X] response to CCCS's Invitation to Comment dated 7 March 2018

²⁹⁴ Response by [X] to CCCS's Invitation to Comment dated 12 March 2018.

extent), have the capacity to supply substantial tonnage and compete effectively for customers' demand for the Overlapping Products, including Mesh, with BRC and Lee Metal. Accordingly, these competitors are able to ramp up production of the Overlapping Products, including Mesh, fairly quickly in response to an increase in demand.

181. Further, CCCS also notes that [X], which has the ability to provide a one stop supply of the Overlapping Products, is BRC's closest competitor ahead of Lee Metal. Accordingly, CCCS is of the view that [X] will be able to exert a strong competitive constraint the Parties post-Transaction.
182. All things considered, CCCS is of the view that non-coordinated effects are unlikely to arise in the relevant markets due to the strong competitive constraint exerted by [X] as BRC's closest competitor, the excess capacity of existing competitors, [X], and the ability of these competitors to increase the production of the Overlapping Products (including Mesh) fairly quickly. In this regard, [X].²⁹⁵

(b) Coordinated effects

183. A merger may also lessen competition substantially by increasing the possibility that, post-Transaction, firms in the same market may coordinate their behaviour 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 arise where a merger reduces competitive constraints from actual or potential competition in a market, thus increasing the probability that competitors will collude or strengthening a tendency to do so.²⁹⁶

BRC's submission

184. BRC submitted that the Proposed Transaction will not result in any increase in the risk of coordinated effects, given that the three conditions set out in the *CCCS Guidelines on the Substantive Assessment of Mergers 2016* are not met, namely:
 - a. Participating firms should be able to align their behaviour in the market;

²⁹⁵ Notes of meeting between CCCS and [X] dated 20 April 2018.

²⁹⁶ Paragraph 5.35 of the *CCCS Guidelines on the Substantive Assessment of Mergers 2016*.

- b. Participating firms should have the incentive to maintain the coordinated behaviour; and
 - c. The coordinated behaviour should be sustainable in the face of other competitive constraints in the market.²⁹⁷
185. Accordingly, BRC submitted that coordinated effects will not arise as a result of the Proposed Transaction. This is in view of the following:
- a. There are numerous competitors of varying sizes such that participating firms are unlikely to be able to align themselves on terms of coordination, and face difficulty in monitoring compliance;
 - b. The high level of excess capacity and incentives by market players to ramp up production or output to absorb demand from switching customers; and
 - c. Potential for new entry which creates disruptive effects and reduces sustainability of any coordinated behaviour.²⁹⁸
186. Overall, BRC submitted that there are many competitors in the relevant market in Singapore for processing and distribution of reinforcing steel products, and customers are able to choose and switch between competing suppliers for different projects.²⁹⁹
187. In relation to possible coordination with the next largest firm, NatSteel, post-transaction, BRC submitted that this is unlikely. From BRC's perspective, NatSteel is similarly incentivised to utilise its excess Mesh capacity, which is around [X]%, as estimated by BRC, to meet any excess demand.³⁰⁰ This, coupled with BRC's submission that the cost to competitors to enter the market or expand capacity is not prohibitive, implies that any coordinated behaviour by existing competitors cannot be sustained due to the potential disruptive effects from new entry.
188. Further, NatSteel is part of Tata Steel, which is part of the Tata group of companies (the "Tata Group"). BRC submitted that the Tata Group is renowned for its high standards for ethics; its code of conduct (the "Code") outlines its commitment to each of its stakeholders, including the communities in which it operates, and is its guiding light when it is sometimes faced with business dilemmas that leave it at ethical crossroads. The Code is also dynamic in that it has been periodically refreshed in order

²⁹⁷ Paragraph 35.1 of Form M1.

²⁹⁸ Paragraph 35.2 of Form M1.

²⁹⁹ Paragraph 35.3 of Form M1.

³⁰⁰ Paragraph 19 of BRC's further submissions to CCCS dated 25 March 2018; and Paragraph 6.1 of BRC's responses to questions 1 to 7 of CCCS's RFI dated 28 March 2018.

to remain contemporary and contextual to the changes in law and regulations. However, the Code remains unaltered at its core. BRC submitted it is therefore highly unlikely for NatSteel to engage in any form of anti-competitive behaviour or not be competitive.

Feedback from Third Parties

189. Market feedback is mixed as to whether the Proposed Transaction will have an impact on the ability of the suppliers to follow each other's prices. Five customers were of the view that it would be easier for suppliers to coordinate their actions and one explained that this was due to the market only having two major suppliers of the Overlapping Products after the merger.³⁰¹
190. From the supply side perspective, market feedback suggests that suppliers have excess capacity and would be able to take on any additional demand of the Overlapping Products, including Mesh, that comes their way.³⁰²

CCCS's assessment and conclusion on coordinated effects

191. CCCS is of the view that while the merged entity and [X] may be the only two large "one stop shops" that provide the Overlapping Products, there is currently excess capacity in the markets for the processing and distribution of the Overlapping Products, including Mesh. Market feedback also indicates that pricing is not the only factor in customers' procurement decisions. Factors such as long-term business relationship, quality, and delivery time are also important in customers' decision-making.³⁰³ In addition, CCCS also notes that some customers do procure the Overlapping Products from multiple suppliers concurrently, especially for large scale projects, in order to mitigate the risk of disruptions in the volume of the Overlapping Products necessary for the building construction projects.³⁰⁴ Hence, competitors who are unable to supply the Overlapping Products on a scale similar to the merged entity may still have the opportunity to utilise their excess capacity

³⁰¹ Answer to Question 22 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 22 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 22 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 22 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Answer to Question 22 of [X] response to CCCS's Invitation to Comment dated 7 March 2018.

³⁰² Notes of meeting between CCCS and [X] dated 20 April 2018.

³⁰³ Answer to Question 6 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 6 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 6 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 6 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; Answer to Question 6 of [X] response to CCCS's Invitation to Comment dated 7 March 2018; and Notes of call with [X] dated 24 April 2018.

³⁰⁴ Notes of meeting between CCCS and [X] dated 20 April 2018; and Notes of call with [X] dated 17 April 2018.

and increase their production of the Overlapping Products, including Mesh, post-Transaction. Given the above, CCCS is of the view that coordinated effects are unlikely to arise in the relevant markets due to the Proposed Transaction.

IX. Efficiencies

BRC's submission

192. BRC submitted that the following efficiency gains would be generated by the Proposed Transaction:
- a. Improved unit costs at various stages in the supply chain, including raw materials, logistics, sub-contractors, spare parts and scrap metal;
 - b. Lower wastage (i.e. scrap metal) generated; and
 - c. Lower man hour per MT of steel processed.³⁰⁵
193. The Proposed Transaction will also help BRC achieve substantial economies of scale, which will enable it to:
- a. Lower unit costs, improve productivity and efficiency, and increase its market competitiveness;
 - b. Improve wage levels through higher productivity and efficiency;
 - c. Enhance BRC's ability to invest in research and development to improve its solutions for customers, operations and processes; and
 - d. Improve BRC's ability to weather shocks and volatility, especially from overseas operations, through an enlarged scale.³⁰⁶
194. BRC submitted that it expects to pass through the cost savings achieved through efficiencies arising from the merger in order to compete effectively on pricing, in particular, [X].³⁰⁷

CCCS's assessment

195. CCCS notes that in the assessment of net economic efficiencies, merger parties are required to show that these efficiencies will be sufficient to outweigh the adverse effects resulting from an SLC caused by the merger.³⁰⁸

³⁰⁵ Paragraph 42.1 of Form M1.

³⁰⁶ Paragraph 12.2 of Form M1.

³⁰⁷ Paragraph 1.3 of BRC's responses to questions 1 to 7 of CCCS's RFI dated 28 March 2018.

³⁰⁸ Paragraphs 7.3 of the *CCCS Guidelines on the Substantive Assessment of Mergers 2016*.

196. However, CCCS is of the view that there is no need to consider the efficiencies in this case, as the information, submissions, Third Party feedback and evidence suggest that the Proposed Transaction is unlikely to lead to an SLC in the relevant markets.

X. Conclusion

197. Based on a holistic consideration of the information, submissions, Third Party feedback and evidence available, CCCS is of the view that in the current market conditions, [X], as BRC's closest competitor, is able to impose a strong competitive constraint on the Parties post-Transaction. The excess capacity of the competitors supplying the Overlapping Products also increases the competitive constraints on the merged entity. Therefore, CCCS 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 decision.



Toh Han Li
Chief Executive
Competition and Consumer Commission of Singapore