

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

Grounds of Decision issued by the Competition and Consumer Commission of Singapore

In relation to the notification for decision on the proposed acquisition by Alstom S.A. of 100% of the issued share capital and voting rights of Bombardier Transportation (Investment) UK Ltd.

Date: 14 August 2020

Case number: CCCS/400-140-2020-005

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

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I. Introduction

- 1. On 12 May 2020, the Competition and Consumer Commission of Singapore ("CCCS") accepted a notification, pursuant to section 57 of the Competition Act (Cap. 50B) (the "Act"), by Alstom S.A ("Alstom") for a decision as to whether the proposed acquisition by Alstom of 100% of the issued share capital and voting rights of Bombardier Transportation (Investment) UK Ltd. ("Bombardier Transportation") will infringe the section 54 prohibition, if carried into effect ("the Proposed Transaction").
- 2. In reviewing the Proposed Transaction, CCCS contacted seventeen (17) suppliers/potential suppliers of either metro rolling stock and/or urban signalling systems¹, two (2) operators of Mass Rapid Transit ("MRT") lines in Singapore² and one customer, the Land Transport Authority ("LTA") (collectively referred to as "third parties").
- 3. Of the third parties contacted, ten (10) replied³, eight (8) of whom provided substantive responses to CCCS's questions⁴. No feedback was received from seven (7) of the third parties. While three (3)⁵ of the third parties who responded did not express any competition concerns⁶, five (5)⁷ indicated that they had competition concerns about the Proposed Transaction. In particular, concerns of varying degrees were expressed regarding competition in the market for the supply of metro rolling stock (i.e. rolling stock for MRT lines) in Singapore. Such concerns have been addressed by CCCS's assessment.
- 4. At the end of the consultation process and after evaluating all the information including the Parties' submissions and the concerns raised by third parties, CCCS, on balance, concludes that the Proposed Transaction, if carried into effect, will not infringe section 54 of the Act.

II. The Parties

Alstom

¹ Suppliers: [**※**]

² SBS Transit Ltd. ("SBS") and SMRT Corporation Ltd. ("SMRT"). SBS and SMRT are the only operators of the various Mass Rapid Transit ("MRT") lines in Singapore.

³ Customers: LTA, Operators: SBS, Suppliers: [X]

⁴ Customers: LTA, Operators: SBS, Suppliers: [≫]

⁵ [**><**]

^{6[%]}

⁷ [**><**]

- 5. Alstom, a French corporation, is the ultimate parent of the Alstom group of companies⁸ ("**the "Alstom Group**").⁹ Alstom is a global player in the world rail transport industry, providing a full range of solutions (from high-speed trains to metros, trams and e-buses), related services (maintenance and modernisation) as well as offerings dedicated to passengers and infrastructure, digital mobility and signalling solutions.¹⁰
- 6. Alstom supplies the following in Singapore:
 - a. Metro rolling stock;
 - b. Urban signalling systems;
 - c. Turnkey solutions¹¹ for rail transport (i.e. for the Circle Line metro);
 - d. Metro system infrastructure including trackwork and third rails for rail electrification; and
 - e. Maintenance, repair services and spare parts. 12
- 7. The total (group) worldwide turnover for the Alstom Group in the financial year ended 31 March 2019 is approximately €8.072 billion (approximately \$\$12.564 billion). The total (group) Singapore turnover for Alstom Group in the financial year ended 31 March 2019 is approximately €[×] (approximately \$\$[×]).¹³

Bombardier Transportation

8. Bombardier Transportation, a private company incorporated in England and Wales, is part of the Bombardier Group of companies, which Bombardier Inc. is the ultimate parent company of.¹⁴ Bombardier Transportation is the global rail solutions division of the Bombardier Group. It offers a wide range of rail solutions, ranging from trains to subsystems and signalling to complete turnkey transport systems, e-mobility technology and data-driven maintenance services. Bombardier Transportation has production,

⁸ The Alstom Group comprise of a number of entities worldwide, including Alstom Qingdao Railway Equipment Co Ltd Limited, Alstom Transport Service Ltd, Alstom Transport Holdings B.V., etc. Within the Alstom Group, Alstom Transport (S) Pte. Ltd is registered in Singapore.

⁹ Paragraphs 7.1 and 7.5 of Form M1.

¹⁰ Paragraph 10.10 of Form M1.

¹¹ Turnkey solutions refer to projects that combine system integration and/or project management services, with at least two of rolling stock, signalling or rail electrification product packages. Turnkey projects are more common where customers want a completely new system, for example, where a city is developing an entirely new metro system or metro line. In Singapore, Alstom provided the Circle Line as a turnkey project. However, turnkey projects are an exception in Singapore.

¹² Paragraphs 10.12 and 14.1 of Form M1.

¹³ Paragraph 13.1 of Form M1.

¹⁴ Paragraph 7.4 of Form M1.

engineering and service centres around the world and its global headquarters is located in Berlin, Germany. 15

- 9. Bombardier Transportation supplies the following in Singapore:
 - a. Metro rolling stock;
 - b. People mover rolling stock (i.e. for the Bukit Panjang Light Rail Transit Line);
 - c. Turnkey solutions for rail transport (i.e. for the Bukit Panjang Light Rail Transit Line);
 - d. Urban signalling systems;
 - e. Services related to the supply of communication systems; and
 - f. Maintenance, repair services and spare parts. 16
- 10. The total (group) worldwide turnover for Bombardier Transportation in the financial year ended 31 December 2019 was approximately €7.396 billion (approximately S\$11.512 billion). The total Singapore turnover forBombardier Transportation and its subsidiaries in the financial year ended 31 December 2019 is approximately US\$[★] (approximately S\$[★]).¹⁷

III. The Proposed Transaction

Nature of the Proposed Transaction

11. The Proposed Transaction will see Alstom, directly or indirectly, hold all the share capital and voting rights in Bombardier Transportation.¹⁸ Alstom will thus acquire sole control over the entirety of Bombardier Transportation's business.¹⁹

Merger under Section 54 of the Act

12. CCCS considers that the Proposed Transaction constitutes a merger pursuant to section 54(2)(b) of the Act as Alstom will directly or indirectly acquire the entirety of the share capital and voting rights in Bombardier Transportation.

¹⁵ Paragraph 10.8 of Form M1.

¹⁶ Paragraphs 10.13 and 14.2 of Form M1.

¹⁷ Paragraph 13.2 of Form M1.

¹⁸ Paragraph 8.4 of Form M1.

¹⁹ Paragraph 11.5 of Form M1.

IV. Competition Issues

- 13. Alstom submitted that the Parties overlap in the supply of the following goods and services in Singapore:
 - a. Metro rolling stock; and
 - b. Urban signalling systems²⁰

(collectively, the "Overlapping Businesses").

- 14. Given that Alstom does not have a dedicated urban signalling solution for people mover systems i.e. Light Rail Transit ("**LRT**") systems in its portfolio²¹, CCCS considers that the Parties overlap in the supply of urban signalling systems used for MRT lines.
- 15. Accordingly, CCCS has focused its assessment on whether the Proposed Transaction will lead to non-coordinated, coordinated or vertical effects that would substantially lessen competition in relation to the supply of the following goods and services in Singapore:
 - a. Metro rolling stock (i.e. rolling stock for MRT lines); and
 - b. Urban signalling systems for MRT lines.

V. Counterfactual

- 16. Alstom submitted that in the absence of the Proposed Transaction, the Parties will continue to operate separately and independently.²²
- 17. In the absence of sufficient evidence to establish other alternative counterfactual scenarios, CCCS has determined that the appropriate counterfactual in applying the Substantial Lessening of Competition ("SLC") test should be the prevailing conditions of competition prior to the Proposed Transaction. In other words, in the absence of the Proposed Transaction, CCCS has considered that the Parties will continue to (i) operate their respective businesses separately and independently; and (ii) compete in the supply of metro rolling stock and urban signalling systems for MRT lines in Singapore.

VI. Relevant Markets

18. Based on Alstom's submission and third party feedback, CCCS has considered that the relevant markets for the competition assessment of the Proposed Transaction are the markets for the supply of:

²⁰ Paragraph 15.1 of Form M1.

²¹ Paragraph 15.9 of Form M1.

²² Paragraph 23.1 of Form M1.

- a. Metro rolling stock in Singapore; and
- b. Urban signalling systems for MRT lines in Singapore

(collectively, the "Relevant Markets")

- 19. In addition to the above, CCCS considered for its assessment the need to differentiate between contestable and non-contestable projects given that non-contestable projects are not open to competition. As the Proposed Transaction will not affect non-contestable projects as there is no overlap between the Parties for such projects, CCCS has focused its assessment of the Proposed Transaction on contestable projects within the Relevant Markets.
- 20. Further, given that [≫], in selecting a supplier for the entire system during a competitive tender process, will take into consideration [≫],²³ CCCS considers that the Relevant Markets, together with their respective maintenance services and spare parts, should be considered as a single system market, rather than as two separate markets.

VII. Market Structure

(a) Market Shares and market concentration

21. CCCS notes that market shares calculated on an annual basis may be of limited value given the "lumpiness" in the railway industry where the number of tenders across multiple years could have a large variance. Such market shares may therefore not be representative of the competitive constraints faced by market players during the bidding process.²⁴ In this regard, CCCS has based its assessment of market shares on order intake data aggregated over the period between 2010 and 1Q2020.

Metro rolling stock

22. CCCS notes that Bombardier Transportation and Alstom are respectively the largest and the fifth largest players for the supply of contestable metro rolling stock in Singapore respectively, with respective market shares of [30-40]% and [10-20]%. Post-Transaction, the Parties' combined market share would be [40-50]% while CR3 would be increased from [70-80]% to [80-90]%. While both measures exceed CCCS' indicative thresholds under the CCCS Guidelines for the Substantive Assessment of Mergers 2016, CCCS is of the view that the Transaction would not result in an SLC for reasons set out in the section on Competition Assessment below.

²³ Paragraphs 2c and 3c of [%]'s 4 June 2020 response to CCCS's 18 May 2020 RFI.

²⁴ Paragraph 21.3 of Form M1.

²⁵ Annex 1 to Alstom's 8 July 2020 response to CCCS's 23 June 2020 RFI.

Urban signalling systems for MRT lines

23. CCCS notes that Alstom is currently the second largest player in the market with a market share of [30-40]% for the supply of contestable urban signalling systems for MRT lines in Singapore, while Bombardier Transportation does not have any market share as it has not won any tenders thus far, even though it is an active participant in tenders. While the Parties combined market share of [30-40]% and post-Transaction CR3 of [90-100]% is within CCCS's indicative threshold of a market share of 20% to 40% with post-merger CR3 exceeding 70%, ²⁷ there is no incremental increase in the Parties' combined market shares arising from the Proposed Transaction given that Bombardier Transportation does not currently have any market share.

(b) Barriers to Entry and Expansion

- 24. CCCS is of the view that the barriers to entry in respect of both the markets for the supply of (i) metro rolling stock; and (ii) urban signalling for MRT systems are significant for suppliers which have never participated in tenders in Singapore before ("New Potential Supplier") given [≫]²⁸
- 25. However, barriers to expansion are (i) less significant for suppliers which have participated in tenders in Singapore before, but have never won ("Existing Potential Suppliers") given that they have local presence and have participated in tenders in Singapore before; and (ii) even less significant for existing suppliers given that they have the proven track record to supply metro rolling stock and urban signalling systems for MRT lines in Singapore. CCCS also notes that there have been examples of Existing Potential Suppliers entering both the metro rolling stock and urban signalling markets.²⁹

(c) Countervailing Buyer Power

26. While the small size of the Singapore market may result in global entrants being less willing to enter the market³⁰, CCCS notes that there are still suppliers which are keen to enter the Singapore market as winning a tender here would provide some level of accreditation for the supplier.³¹ For example, Hyundai Rotem continued to participate in tenders called by LTA over the past decade despite losing, and finally successfully tendered in February 2020.³²

²⁶ Annex 1 to Alstom's 8 July 2020 response to CCCS's 23 June 2020 RFI.

²⁷ Annex 1 to Alstom's 8 July 2020 response to CCCS's 23 June 2020 RFI.

²⁸ Paragraph 2d and 2g of [\times]'s 4 June 2020 response to CCCS' 18 May 2020 RFI, Paragraph 1 of the 8 June 2020 Notes of Meeting between CCCS and [\times].

²⁹ Paragraph 25.1 of Form M1.

³⁰ Paragraph 8 of the 8 June 2020 Notes of Meeting between CCCS and [×].

³¹ Paragraph 9 of the 8 June 2020 Notes of Meeting between CCCS and [%].

 $^{^{32}}$ Paragraph 9 of the 8 June 2020 Notes of Meeting between CCCS and [>].

27. Given the above, especially LTA's ability to impose non-negotiable high standards on its tender eligibility requirements, coupled with LTA's position as the sole customer of metro rolling stock and urban signalling systems for MRT lines in Singapore, CCCS is of the view that LTA is generally able to exercise bargaining power against suppliers of both metro rolling stock and urban signalling systems

VIII. Competition Assessment

(a) Non-coordinated effects

Metro rolling stock

- 28. While CCCS notes that the Parties combined market shares of [40-50]% and post-merger CR3 of [80-90]% exceed both of CCCS' indicative thresholds under the *CCCS Guidelines for the Substantive Assessment of Mergers 2016*, CCCS is of the view that market shares based on aggregated order intake data over a ten year period may not provide a very accurate representation of the market position of various market players and the extent of competition given that:
 - a. Demand in the railway transportation industry in Singapore is relatively small and is exceptionally "lumpy", where the number of tenders across multiple years could have a large variance (with some years having no tenders at all); and
 - b. Market shares based on aggregated order intake data are calculated based on awarded contract values and do not take into account competition from suppliers which are active participants in tenders, but which have not won.
- 29. CCCS's view above is supported by the fact that despite having 0% market share based on aggregated order intake data over a ten year period (as it had previously never won a tender before), Hyundai Rotem had managed to secure a contract (valued at S\$416.5 million) in February 2020 for the supply of 62 metro trains for the Jurong Region Line.³³
- 30. In view of the above, CCCS has supplemented its assessment on market shares with analysis based on tenders for contestable projects over the past ten years. The bidding analysis is based only on contestable projects given that non-contestable projects are not open to competition. Isolating contestable projects from the non-contestable ones is informative because it allows the analysis to be focused on tenders where there was effective competition between suppliers.
- 31. CCCS performed its analysis on (i) win rates, defined as the share of tenders won by each supplier; and (ii) participation rates, defined as the frequency with which each supplier participated in tenders. Given the significant commitment required at the bidding stage

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³³ Paragraph 29.2 of Form M1.

in terms of time and resources, CCCS is of the view that suppliers only participate in tenders when they believe they have a reasonable chance of winning. In this regard, CCCS considers participation in tenders to be somewhat informative on the strength of each supplier.

- 32. Based on seven (7) tenders for the contestable supply of metro rolling stock in Singapore, CCCS found that there exist a number of suppliers which have participated in tenders over the past ten years. Notably, Kawasaki and CRRC Qingdao, together as a consortium have higher win rates than both Alstom and Bombardier Transportation, while the Kawasaki CRRC Qingdao consortium, CRRC Zhuzhou, CAF and Hyundai Rotem have participation rates higher than or equal to Alstom and Bombardier Transportation.
- 33. Furthermore, the Kawasaki and CRRC Qingdao consortium and Hyundai Rotem had participated in all five (5) tenders that Alstom participated in, while CAF had a higher participation rate than Bombardier Transportation. In respect of such tenders, the Kawasaki and CRRC Qingdao consortium, and Hyundai Rotem had the same win rates as Bombardier Transportation.
- 34. Similarly, the Kawasaki and CRRC Qingdao consortium had participated in all four (4) tenders that Bombardier Transportation had participated in, while CAF and Hyundai Rotem had the same participation rates as Alstom. In respect of such tenders, the Kawasaki and CRRC Qingdao consortium and Hyundai Rotem had a higher win rate than Alstom. Alstom did not win any of these tenders.
- 35. Based on the above, the Parties do not appear to be each other's closest competitor in the market for the supply of metro rolling stock in Singapore.
- 36. While third parties have raised concerns that the Proposed Transaction will enable the merged entity to raise prices and/or decrease the quality for products and/or services post-Transaction given that it will reduce the number of competitors, ³⁴ CCCS is of the view that (i) existing suppliers; (ii) Existing Potential Suppliers; and (iii) New Potential Suppliers over the longer term, are likely to constrain the merged entity's ability to raise prices. The presence of countervailing buyer power by LTA as the sole customer of metro rolling stock in Singapore would further constrain the merged entity's ability to raise prices. In addition, while barriers to entry may be significant for New Potential Suppliers, they are less so for existing suppliers and Existing Potential Suppliers, as evident from Hyundai Rotem winning its first tender in February 2020. ³⁵

 $^{^{34}}$ Paragraph 60 of [≫]'s 4 June 2020 response to CCCS's 18 May 2020 RFI, annex A.1 of [≫]'s 29 May 2020 response to CCCS's 22 May 2020 RFI, paragraph 2 of [≫]'s 29 May 2020 response to CCCS's 22 May 2020 RFI. and paragraph 3 of [≫]'s 9 June 2020 response to CCCS's 23 May 2020 RFI.

³⁵ Paragraph 29.2 of Form M1.

37. Based on the above, CCCS is of the view that non-coordinated effects are unlikely to arise from the Proposed Transaction in the market for the supply of metro rolling stock in Singapore.

Urban signalling systems for MRT lines

- 38. First and foremost, CCCS recognises that based on market shares, Alstom is currently the largest player in the market for the supply of urban signalling systems in Singapore with a market share of [30-40]% while Bombardier Transportation does not have any market share as it has not won any tenders thus far, even though it is an active participant in tenders. In this regard, there is no incremental increase in the Parties' combined market share arising from the Proposed Transaction.
- 39. Nevertheless, for reasons set out in the preceding sub-section on *Metro rolling stock*, CCCS has similarly supplemented its assessment on market shares with analysis based on tenders for contestable projects over the past ten years.
- 40. Based on five (5) tenders for the contestable supply of urban signalling systems for MRT lines in Singapore, CCCS found that there exist a number of suppliers which have participated in tenders over the past ten years. Siemens, Thales, Engie Services and Hollysys have win rates higher or equal to Alstom while Siemens and Thales have participation rates higher than or equal to Alstom and Bombardier Transportation.
- 41. Furthermore, Siemens had participated in all three of the tenders that Alstom had participated in, while Hitachi / Ansaldo and Thales had the same participation rates as Bombardier Transportation. Bombardier Transportation did not win any of these tenders.
- 42. Similarly, Siemens had participated in all three of the tenders that Bombardier Transportation had participated in while Hitachi / Ansaldo and Thales had the same participation rates as Alstom. In respect of such tenders, Thales, Siemens and Engie Services had the same win rates as Alstom.
- 43. Based on the above, the Parties do not appear to be each other's closest competitor in the market for the supply of urban signalling systems for MRT lines in Singapore.
- 44. While barriers to entry may be significant for New Potential Suppliers, they are less so for existing suppliers and Existing Potential Suppliers. Furthermore, the presence of countervailing buyer power by the LTA as the sole customer of urban signalling systems for MRT lines in Singapore could serve to constrain the merged entity's ability to raise prices.
- 45. In view of the above, CCCS is of the view that non-coordinated effects are unlikely to arise from the Proposed Transaction in the market for the supply of urban signalling systems in Singapore.

(b) Coordinated effects

- 46. CCCS considers that the characteristics of the relevant markets are not conducive to facilitate coordination between suppliers for the following reasons:
 - a. It may be difficult for participating firms to align their behaviour in the market. While the Proposed Transaction would increase the level of concentration in the market, in particular for metro rolling stock, there is a low degree of price transparency which would make it difficult for suppliers to monitor one another. In this regard, details of bids submitted [×]. Furthermore, the high degree of complexity of products in the rail transportation industry, coupled with lumpy and infrequent contracts make it more difficult for suppliers to coordinate their bids.
 - b. There may be little incentive to maintain the coordinated behaviour. Existing suppliers may stand to benefit from (i) the supply of future non-contestable projects; and (ii) significant advantages in being an incumbent supplier when competing for future tenders for contestable projects, which strongly incentivises suppliers to aggressively compete for tenders. Furthermore, the ability of other competitors to meet a sudden increase in demand in Singapore may decrease incentives to maintain coordinated behaviour.
 - c. The coordinated behaviour may not be sustainable in the face of other competitive constraints in the markets. While barriers to entry for a New Potential Supplier are significant given LTA's stringent eligibility criteria, barriers to expansion are (i) less significant for Existing Potential Suppliers given that they have local presence and had participated in tenders in Singapore before; and (ii) even less significant for existing suppliers given that they have the proven track record to supply metro rolling stock and urban signalling systems for MRT lines in Singapore. The presence and entry of new suppliers would also help to mitigate against the risk of suppliers coordinating their behaviour in the market.
- 47. Based on the above, CCCS considers that the Proposed Transaction is unlikely to give rise to coordinated effects.

(c) Vertical effects

48. CCCS notes from third party feedback that the potential for input foreclosure is low, given that the competitors to the merging entities generally do not purchase input from them or sell inputs to them. In this regard, CCCS is of the view that the Proposed Transaction does not give rise to vertical effects that would raise competition concerns in the downstream markets for metro rolling stock or urban signalling systems.

(d) Conclusion on Competition Assessment

49. With CCCS's assessment that the Proposed Transaction is unlikely to give rise to coordinated and non-coordinated effects and would not give rise to vertical effects that would raise competition concerns, CCCS concludes that the Proposed Transaction will not result in an SLC.

IX. Efficiencies

50. Given that the Proposed Transaction is unlikely to lead to an SLC, it is not necessary for CCCS to make an assessment on the claimed efficiencies by Alstom.

X. Ancillary Restrictions

- 51. CCCS considers that $[\%]^{36}$ constitutes a restriction that potentially infringes the section 34 prohibition.
- 52. CCCS accepts that [%] is necessary for Alstom to obtain the full benefit of the Proposed Transaction and that it is connected with the merger but subordinate to its main object. Further, the limitation of the scope of the restriction makes its duration and geographical scope proportionate.
- 53. CCCS notes that metro rolling stock and urban signalling systems have a design lifespan of around 15 years, and that tenders for these products are infrequent, lumpy and do not occur every year.³⁷ Given this context and the fact that the [×] is limited in scope, CCCS finds that the duration of the [×] are proportionate to the overall requirements of the merger.
- 54. CCCS therefore concludes that [★] benefits from the Ancillary Restriction Exclusion at Paragraph 10 of the Third Schedule to the Act.

XI. Conclusion

55. For the reasons above and based on the information available, CCCS has assessed that the Proposed Transaction, if carried out into effect, will not lead to an SLC and consequently, will not infringe the section 54 prohibition.

³⁶ Paragraph 43.1 and Annex 6 to Form M1.

³⁷ As set out above, between 2010 and 1Q2020, there were tenders for 7 contestable projects for metro rolling stock and 5 for urban signalling systems for MRT lines.

56. In accordance with section 57(7) of the Act, this decision shall be valid for a period of one (1) year from the date of this decision.

Sia Aik Kor Chief Executive Competition and Consumer Commission of Singapore