Pact/Flight: Response to the Commerce Commission's Statement of Issues

A report for Russell McVeagh

20 November 2020

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Contents

1.   Introduction and summary

1. Pact Group Holdings Limited ("**Pact**") is seeking clearance from the New Zealand Commerce Commission ("**the NZCC**") to acquire the assets of Flight Plastics Limited and Flight Extruded Plastics LP (together, "**Flight**"). The NZCC has released a Statement of Issues ("**SoI**"), dated 30 October 2020, in respect of the proposed acquisition. We have been asked by Russell McVeagh, counsel to Pact, to comment on various aspects raised by the NZCC in its SoI.

2. Confidential information in this report is identified in square brackets and shading as follows:

    a. [ ];

    b. [ ]; and

    c. [ ].

3. A summary of our comments is as follows:

    a. [ ]

    b. The value of nestable plastic container imports (including PET) has been increasing by 15% per annum (on average, in nominal terms) over the 2010-2020 period. This implies that the NZCC's concerns about possible impediments to importing (ordering in bulk, the potential for supply interruptions and exchange rate risk) are not material (section 3).

    c. The NZCC has not made out a rigorous theory of harm arising from the vertical integration of Flight (under the counterfactual) and the merged entity (under the factual). In particular, the [ ].

    d. Similarly, the NZCC has not made out a rigorous theory of monopsony harm in respect of the market for PET bales (section 5). [ ]:

        i.   It is unlikely that the addition of Pact as a buyer would materially affect the price of PET bales under the counterfactual; and

        ii. The factual price for PET bales would be underwritten by the export price.

    e. At current PET packaging prices, a material proportion of customers already use non-PET packaging for products perhaps more traditionally packaged in PET. If seemingly homogeneous customers [ ] split their packaging decisions (at least in a material way), then it would be difficult for a PET packaging supplier to predict whether a customer currently using PET might shift in response to a price increase. Critical loss analysis implies that of those customers using PET, only approximately [ ] (and probably less) would need to switch to non-PET packaging to undermine a SSNIP (section 6.1).

    f. PET and recycled PET packaging products are in the same market from the supply-side, because the thermoforming processes are the same for PET and RPET (including NZ RPET) packaging - the only difference is the feedstock that is put into those processes. We are not aware of any evidence that NZ RPET packaging is in a separate market from other RPET packaging on the demand-side, even if there is a growing demand for NZ RPET. Indeed, the available evidence is inconsistent with such a proposition (section 6.2).

2.   [ ]

4. [ ]

5. [ ].

6. [.]

7. [.]

2.1.   [ ]

8.   [ ][1]

9.   [ ]

10. [ ]

11. [ ]

12. [ ]

  a.   [ ] and

  b.   [ ]

2.2.   [ ]

13. [ ]

Table 1: [ ]

[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]
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14. [ ]

15. [ ]

16. [ ]

  a.   [ ];[2]

  b.   [ ]; and

  c.   [ ]

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[1] [ ]

[2] [ ]

2.3.   [ ]

17. [ ]

2.3.1.   [ ]

18. [ ]

19. [ ]

    a.   [ ].[3]

    b.   [ ]

20. [ ]

21. [ ].

22. [ ]

23. [ ] [ ] [ ] [ ].

24. [ ]

25. [ ]

2.3.2.   [ ]

26. [ ] [ ] [ ] [ ] [ ] [ ] [ ]

2.3.3.   [ ]

27. [ ].

2.3.4.   [ ]

28. [ ]

    a.   [ ]; and

    b.   [ ][ ][ ].

2.3.5.   [ ]

29. [ ]

30. [ ] [ ]

31. [ ]

3.   Ability of importers to compete effectively

32. The NZCC notes (at [59] of the SoI) feedback it has received that imports can be cheaper per unit than locally-produced PET packaging. This is consistent with our understanding from Pact that importers have advantages over domestic manufacturers in respect of:[4]

    a.   Significant economies of scale in PET container manufacturing, such that overseas manufacturers that supply larger markets are able to spread their fixed costs over larger volumes, lowering their average costs; and

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[3] [ ]

[4] Clearance Application, at [7.9(b)].

b. Lower labour costs from predominately Asian-based manufacturers, particularly given that labour costs are material in PET container manufacturing.

33. The NZCC does, however, argue that there are downsides to imports, including the need to order in bulk and potential for supply interruptions ([59.1], [59.2]). However, these are likely to be mitigated by importers having warehousing. Indeed, we understand that importers are likely to have New Zealand-based warehousing allowing them to smooth out demand and supply fluctuations (or may otherwise distribute via distributors with warehousing or direct to consumer), and this warehousing is non-specialised so it can be easily expanded. Moreover, given that PET packaging is nestable by design and lightweight,[5] it is efficient to transport and/or store.

34. The NZCC also notes that importers face exchange rate risks ([59.3]). However, since local manufacturers import the raw material (plastic resin),[6] they too will be exposed to exchange rate variations (as well as to freight costs), reducing the distinction between importers and local manufacturers.

35. It is also instructive to note that the value of plastic container imports has been increasing materially in recent years. We obtained data from Statistics New Zealand on import values[7] for plastic containers.[8] The data cannot be broken down into imports of PET containers specifically, so may also include other forms of plastic container imports (e.g., injection moulded containers). The data also includes a range of different types of plastic containers, including boxes, cases and crates, whereas we understand the main PET containers that Pact and Flight manufacture are plastic trays, punnets, and clamshells. Nonetheless, the data is instructive in respect of evidence regarding the ease of importing nestable plastic containers.

36. Figure 1 shows the value of nestable (up to 5L) plastic container imports, in both nominal and real[9] terms, for the period 2010-2020 (years ended September), as measured by the total cost of buying imports and shipping them to New Zealand (i.e., including insurance and freight). On average, nominal (real) import values have increased by 15% (13%) per annum over the period shown.

37. This growth rate is materially larger than population and real GDP growth rates over the same period, of 1.2% and 1.8% respectively.[10] Similarly, the growth in imports is greater than growth in two other metrics that might correlate with demand for packaging, supermarket sales and

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[5] Clearance Application, at [7.9(b)(i)].

[6] The Plastics New Zealand Industry Association states on its website that no plastic resins are manufactured in New Zealand – it is all imported, with New Zealand being solely a processing industry. See http://www.plastics.org.nz/doing-business-in-nz/new-zealand-industry. Of course, Flight's wash plant enables it to produce packaging from New Zealand recycled waste.

[7] While Statistics New Zealand also collects import volume data, in this particular case we considered the data to be too unreliable to rely on. In particular, we were advised by Statistics New Zealand that certain volumes in the October 2013-May 2014 and February 2017-November 2017 periods in the categories we were analysing were incorrectly reported on the customs declarations, resulting in reported volumes that were materially greater than the actual import volumes.

[8] The data we analyse is based on the "Plastics: boxes, cases, crates and similar articles for the conveyance or packing of goods" category in Statistics New Zealand's harmonised system classification for import data. Within this category, we have only included the categories of plastics not exceeding 250ml and plastics exceeding 250ml but not exceeding 5L, nestable. We understand that these categories most closely match those E&T containers sold by Pact and Flight (the Clearance Application refers (at [6.6]) to the parties supplying E&T packaging of 5L and below, and (at [7.9(b)(i)]) of the nestable nature of E&T packaging).

[9] Real prices are calculated by deflating by the Consumers Price Index, sourced from Statistics New Zealand.

[10] Determined from Statistics New Zealand data.

agricultural production, which have grown by 5.8% and 1.9% respectively, on average over 2010-2020.[11]

38. The fact that the value of nestable plastic container imports has been increasing by 15% per annum (on average, in nominal terms) over the 2010-2020 period implies that the stated concerns of ordering in bulk, the potential for supply interruptions and exchange rate risks are not material.

Figure 1: Value of plastic container imports (nestable, up to 5L), 2010-2020
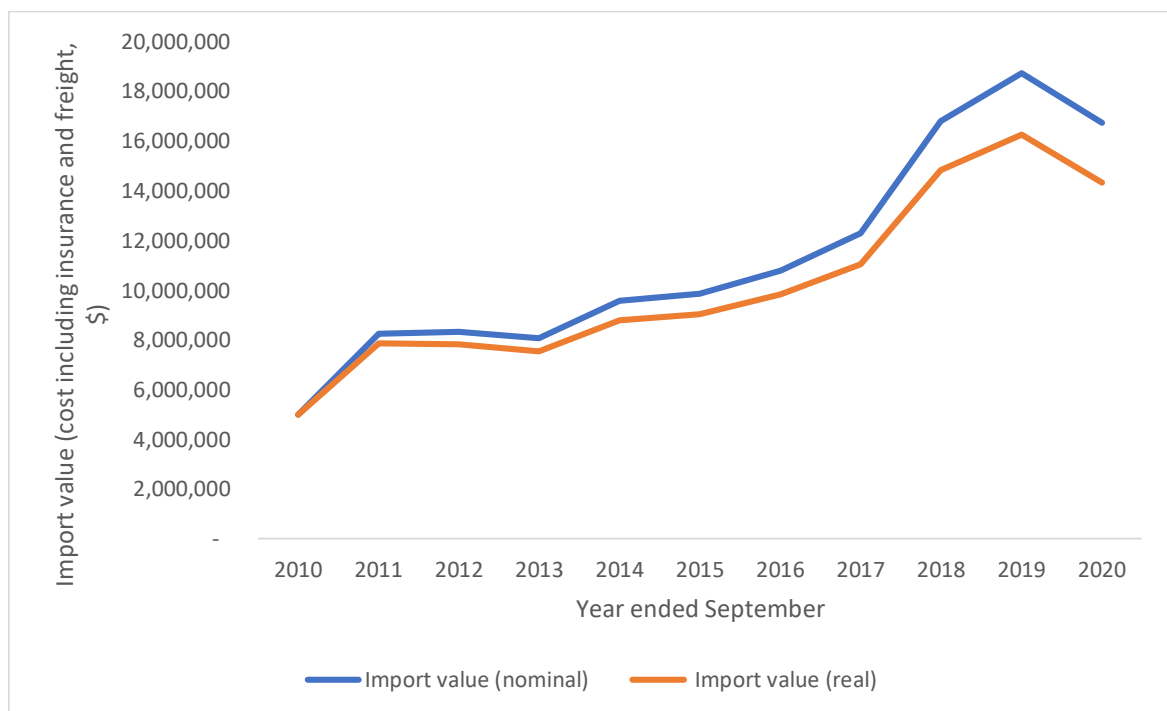
Source: NERA analysis of Statistics New Zealand data

39. A key characteristic of imports is that their supply is likely to be elastic, i.e., if the price of domestically-manufactured PET containers rises post-merger, there is unlikely to be any material constraint on the quantity of imports increasing. The New Zealand market is small, particularly compared to the broader Asian and global markets, and the New Zealand Pact and Flight businesses are small relative to the size of New Zealand importers that also operate in overseas markets.[12] For example:

a. Linpac belongs to the Klockner Pentaplast (KP) group of companies, with US$2b in annual revenues in rigid and flexible packaging and film.[13] In August 2020, KP announced a 17,500 tonne capacity expansion of its rPET extrusion capability in North America;[14] and

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[11] Determined from Statistics New Zealand data, for supermarket and grocery store sales (real), and real agricultural production GDP.

[12] [7.32] of the Clearance Application states that Pact's New Zealand FY19 revenues were approximately $[ ] and Flight's New Zealand FY20 revenues were approximately $[ ].

[13] Clearance Application, at [7.7(e)].

[14] See "Klöckner Pentaplast commits to PET Capacity Expansion for the Sustainable Consumer and Protein Packaging Market in North America", 19 August 2020, available at: https://www.kpfilms.com/en/News_and_events/_news.php?qlId=3824

    b.   Huhtamaki has 77 manufacturing units across 34 countries,[15] with €3.4b in annual revenues (across all products, not just PET);[16] and

    c.   Sealed Air had sales of US$4.8b in FY2019 (across all products).[17]

40.   There is also evidence that importers (and other competitors) have spare capacity and/or an ability to expand, which would allow them to increase output in response to any attempt by the merged entity to restrict output and raise prices. For example, Linpac has manufacturing operations across Europe and in China,[18] and expanded into Australia in 2015, from where it imports to New Zealand.[19] Linpac's Australasian expansion was underpinned by Woolworths Australia's custom, and [ ]. Pact estimates that [ ].[20]

4.   Vertical effects

41.   At [78] of the SoI, the NZCC posits a theory of harm arising from the vertical integration of Flight (under the counterfactual) and the merged entity (under the factual). This theory relates to the incentives of the respective vertically integrated entities to supply to their rivals.

42.   To unpack the incentives of vertically integrated firms to supply their rivals, we generally analyse margins and diversion ratios between the vertically integrated firm and its rivals.[21] At the moment, the NZCC notes that Flight manufactures but does not sell RPET flake or roll-stock ([76]). [ ]

43.   [ ]

44.   [ ]

45.   In our view, the NZCC has not made out a rigorous theory of harm arising from the vertical integration of Flight (under the counterfactual) and the merged entity (under the factual).

5.   Monopsony issues

46.   At [68] to [70] of the SoI, the NZCC posits a theory of harm involving the merged entity using its buyer power to drive the factual PET bale price below the counterfactual PET bale price. This theory of harm rests on the following elements, each of which is questionable (or at least testable):

    a.   [ ]

    b.   That the addition of Pact as a (direct) buyer of PET bales in the NZCC's posited counterfactual would materially increase the price of PET bales:

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[15] Clearance Application, at [7.7(f)].

[16] Huhtamaki, Annual Report 2019.

[17] Sealed Air Fourth Quarter and 2019 Results.

[18] See "A Linpac on each side of Australia", 13 December 2014, available at: http://www.packagingnews.com.au/news/a-linpac-on-each-side-of-australia

[19] See "Linpac increases its Australian footprint with new packaging facility", 7 January 2015, available at: https://www.austrade.gov.au/International/Invest/Investor-Updates/2015/linpac-increases-its-australian-footprint-with-new-packaging-facility

[20] [ ].

[21] See, e.g., [5.8] of the NZCC's *Mergers and Acquisitions Guidelines*, July 2019.

    i.   As the NZCC notes, Pact [ ].[22]

    ii. The effective price of NZ RPET flake is already materially higher than the landed price of imported PET resin ([ ][23] [ ],[24] [ ][25]). Therefore any bidding up of the PET bale price by Pact would make it even harder for Pact (and Flight) to sell NZ RPET packaging products (which, as previously noted, do not appear to command a price premium over PET or non-NZ RPET products).

    iii. Flight already competes against overseas purchasers to buy PET bales.

  c. That the PET bale import price is at least 5% higher than the PET bale export price.

47. It would also be inappropriate for the NZCC to consider a factual in which the merged entity could "force sellers to pay for [PET bales] to be collected" ([69.2]), when the NZCC has already acknowledged that there is an export market for PET bales.

48. The depth and breadth of the global market for PET bales is described in a 3 December 2019 submission by Container Exchange (QLD) Limited ("COAX") to the Council of Australian Governments.[26] COAX is the organisation responsible for administering the Container Refund Scheme (CRS) in Queensland. The following is a snip from page 9 of that submission (with weight in tonnes):

PET Clear Destinations:

PET Clear	Weight	Percentage
Australia	1819.80	39.44%
Malaysia	96.02	2.08%
Northern Ireland	112.90	2.45%
Portugal	222.82	4.83%
Romania	729.66	15.81%
Taiwan	350.92	7.61%
Turkey	1144.23	24.80%
Unknown Export	137.74	2.99%
Grand Total	**4614.10**	**100%**

As can be seen in the above table the market for this material is deep and the global demand is quite broad. The percentage declared to remain within Australia would be accurate as the product has been despatched to NSW-based PET plants.

Although there is some Australian capacity to accept this product, we have noticed that the export product tends to achieve a higher realisable value. Again, underpinning the high value of this processed CRS PET in a global commodity market.

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[22] [ ].

[23] [ ]

[24] [ ]

[25] [ ]

[26] COAX (2020), "Submission to the Council of Australian Governments (COAG) – Waste Export Ban", available at: https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/RecyclingandWasteBills/Submissions.

6.   Market definition

6.1.   Alternative packaging materials

49. In assessing the dimensions of the relevant product market, the NZCC notes (at [31.1]-[31.4]) that PET has certain attributes that make it more suitable for packaging than other materials, for many customers.

50. However, at [33] the NZCC states:

    We recognise that not all customers would need to view alternatives to PET as substitutes to justify a wider market.

51. The NZCC is correct, and in fact there may only need to be a relatively small number of customers that would need to view alternatives to PET as substitutes to justify a wider market. In assessing the market dimensions using the SSNIP test, the market will be widened if a hypothetical monopolist could not profitably impose a SSNIP (generally taken to be a 5% price rise) because sufficient customers would switch to alternative products.[27] In a market with little price discrimination, it is these marginal customers (those that are willing to substitute to PET alternatives) that would protect the inframarginal customers from a price rise.

52. [ ] it is difficult to identify which customers are more or less willing to switch to alternative products. From an economics perspective, if seemingly homogeneous customers] split their packaging decisions (at least in a material way), then it would be difficult for a PET packaging supplier to predict whether a customer [ ] currently using PET might shift in response to a price increase.

53. [ ], while Pact advised us that there is nothing to prevent a customer from on-selling PET products [ ]. These views are consistent with the economics literature on price discrimination, which notes that successful price discrimination requires the ability to identify customers that can be charged a higher price, and the ability to prevent resales from lower to higher priced customers.[28]

54. In a market where there is little price discrimination, we can use critical loss analysis to assist in assessing the extent to which a price increase by a hypothetical monopolist of PET packaging would be constrained by volumes switching to alternative packaging materials.

55. If a hypothetical monopolist of PET packaging were to impose a SSNIP, its profits would change in two offsetting ways:

    a. Profits would decrease due to customers switching to alternative packaging materials; and

    b. Profits would increase due to the additional margin earned on customers that continued to purchase PET products.

56. If sufficient customers switch to alternative packaging materials such that the former effect dominates, then a SSNIP would not be profitable, and the market should be broadened to include alternative packaging materials. Critical loss analysis is a technique used to estimate the fraction of sales volumes (in the relevant market) that would need to be lost in order to make an attempted price increase unprofitable (the "critical loss").

57. The equation generally used to calculate the critical loss is as follows:[29]

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[27] See NZCC (2019), "Mergers and acquisitions Guidelines", July, at [3.20].

[28] Dennis W. Carlton and Jeffrey M. Perloff (2005), *Modern Industrial Organization*, Fourth Edition, Pearson, p.294.

[29] This is based on the breakeven critical elasticity approach and a linear demand curve. See Gregory Werden (2002), "Beyond Critical Loss: Tailoring Applications of the Hypothetical Monopolist Paradigm", US DOJ Antitrust Division Economic Analysis Group Discussion Paper No. 02-9

$$\text{Critical loss} = \left[\frac{SSNIP}{SSNIP + GM} \right]$$

where *SSNIP* is the price rise of the hypothetical monopolist (often taken to be 5%), and *GM* is the gross margin of the hypothetical monopolist.

58. To estimate gross margins, we have used data provided by Pact, assuming that this will be representative of the gross margins of a hypothetical monopolist in PET packaging. For the purposes of critical loss analysis, gross margins are calculated as the percentage difference between prices and variable costs. The relevant question being tested is whether a hypothetical monopolist could impose a 5% SSNIP and sustain that price increase profitably for about a year. Accordingly, a cost is likely to be "variable" if it would be avoided as a result of a SSNIP over a period of one year. In this context, Pact has advised that its FY20 gross margin (across its E&T container business) was [ ].[30]

59. [ ]

60. The critical loss (in percentage terms) based on this gross margin and a SSNIP of 5% is shown in Table 2. To explain this result, if a hypothetical monopolist of PET packaging raised price by 5%, and lost more than [ ] of sales, then the price increase would be unprofitable, and the relevant market should be widened to include more than just PET packaging.

Table 2: Critical loss calculations

SSNIP	Critical loss (%)
5%	[ ]

61. [ ]

62. Optimally we would compare the critical loss to the expected actual loss arising from a SSNIP, using (for example) estimates of residual demand elasticity. We do not have that sort of data in the present case.

63. However, Pact has filed evidence with the NZCC to the effect that customers *selling the same product* use a variety of packaging types for that same product. For example:[31]

    Pact already estimates that flexible packaging and rigid card would make-up approximately [ ]% of the protein tray segment in NZ, and that proportion is only expected to increase further. .

64. Similarly, Pact has advised us of its estimate that non-E&T packaging would make-up approximately [ ] of the retail packaged fruit and produce packaging segment in New Zealand, and that proportion is only expected to increase further. Pact also notes that the majority of fruit and produce is retailed in bulk plastic bins, moulded fibre trays, or cardboard boxes with the consumer left to pack into bags or their own packaging as brought to the supermarket. This proportion of packaging has been excluded from the percentage estimate.

65. We note also the examples set out in Appendix 4 of the Clearance Application. While these examples do not provide an indication of usage percentages, they at least show that within each product category there are a wide range of different packaging types used.

66. This evidence suggests that at current PET packaging prices, a material proportion of customers already use non-PET packaging for products perhaps more traditionally packaged in PET. In

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[30] [ ].

[31] Email from Troy Pilkington to the NZCC dated 5 October 2020.

other words, essentially homogenous products are being profitably packaged in PET and non-PET.

67. As already noted, if seemingly homogeneous customers [ ] split their packaging decisions (at least in a material way), then it would be difficult for a PET packaging supplier to predict whether a customer currently using PET might shift in response to a price increase.

68. The critical loss analysis implies that of those customers using PET, only approximately [ ] (and probably less) would need to switch to non-PET packaging to undermine a SSNIP. Furthermore, in relation to the merged entity itself, it would not just lose sales to other substrates, but to other E&T PET packaging suppliers.

6.2. Recycled PET

69. At [34] of the SoI the NZCC explores the possibility of separate (packaging) markets by PET, RPET and NZ RPET.

70. However, at least in concept these products would be in the same market from the supply-side. This is because the thermoforming processes are the same for PET, RPET and NZ RPET packaging. The only difference is the feedstock that is put into those processes. For example, if a hypothetical monopolist supplier of RPET packaging imposed a SSNIP, suppliers of PET packaging could switch feedstock from PET roll stock to RPET roll stock (which is widely available and economically importable) to produce RPET packaging and undermine the attempted price increase.

71. As a practical matter, it would be harder for a PET/RPET packaging supplier (other than Flight) to switch to NZ RPET flake or roll-stock, because NZ RPET flake and roll-stock are not available for purchase – the responding supplier would need to build a wash plant or export bales and import back the feedstock.

72. However, we are not aware of any evidence that NZ RPET packaging is in a separate market from other RPET packaging on the demand side, even if there is a growing demand for NZ RPET. We note Flight's statement to the NZCC that:[32]

[ ]

73. Indeed, [ ]

Figure 2: [ ]

[ ]

Source: [ ]

74. Data from Pact [ ]. While it is difficult to control for differences in prices across different customers and products, we note that data from Pact for FY20 shows that for a single customer, [ ], and in a single product category, [ ], Pact's gross margin on [ ].

75. Flight's statement above is consistent with another made in the clearance application that [ ].[33]

76. Likewise Flight executives have told us that [ ].[34]

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[32] [ ]

[33] [ ].

[34] [ ]

77. While there is no evidence that supports a distinct market for NZ RPET, even if there were, there would not be any competition concerns arising from the merger as Flight would be the only provider of NZ RPET under the counterfactual. As we discuss in section 2, [ ].[35]

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[35] [ ].

Appendix A.

A.1.   [ ]

A.2.   [ ]