

Anticipated merger between Cargotec Corporation and Konecranes Plc

Provisional findings report

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The Competition and Markets Authority has excluded from this published version of the provisional findings report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets.

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- B: Shares of supply
- C. Bidding analysis
- D. Third party evidence

Glossary

Summary

Introduction

1. The CMA has provisionally found that the anticipated merger between Cargotec Corporation (Cargotec) and Konecranes Plc (Konecranes) (the Merger) may be expected to result in a substantial lessening of competition (SLC), as a result of horizontal unilateral effects in the supply of each of the following categories of equipment in Europe, including the UK (Europe)¹:
 - (a) rubber tyre gantry cranes (RTG);
 - (b) automated stacking cranes (ASC);
 - (c) shuttle carriers (ShC) and straddle carriers (SC);
 - (d) empty container handlers (ECH);
 - (e) heavy duty forklift trucks (HDFLT);
 - (f) reach stackers (RS); and
 - (g) automated terminal tractors (ATT).
2. The CMA has provisionally concluded that the provisional SLCs may be expected to result in adverse effects, for example in the form of higher prices and/or reduced quality, range or service to UK customers than would otherwise be the case absent the Merger.
3. We invite any parties to make representations to us on these provisional findings by no later than **17.00hrs GMT on 17 December 2021**. Parties should refer to the notice of provisional findings for details of how to do this.
4. Alongside these provisional findings, we have published a notice of possible remedies, which sets out the CMA's initial views on the measures that might be required to remedy the SLCs that we have provisionally found. We invite parties to make representations on these initial views **by 17.00hrs GMT on 10 December 2021**.

¹ Europe refers to the whole continent, including both the European Economic Area and the UK.

Background

The reference

5. On 13 July 2021, the CMA, in exercise of its duty under section 33(1) of the Act referred the Merger for further investigation and report by a group of CMA panel members (the Inquiry Group).
6. In exercise of its duty under section 36(1) of the Enterprise Act 2002 (the Act), the CMA must decide:
 - (a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) if so, whether the creation of that situation may be expected to result in an SLC within any market or markets in the United Kingdom for goods or services.
7. We are required to prepare and publish a final report by 1 April 2022.

The Parties and transaction

8. Both Parties are Finnish public listed companies.
9. Cargotec offers equipment and services for cargo handling in ports, terminals, and for ship and road transport worldwide, including in the UK. Cargotec's main activities in the UK are divided into:
 - (a) Kalmar, which offers container handling equipment and terminal automated solutions;
 - (b) Hiab, which offers on-road load handling equipment; and
 - (c) MacGregor, which provides engineering solutions and services for the maritime industry.
10. Konecranes offers equipment and services for lifting and cargo handling in shipyards, ports and terminals, worldwide, including in the UK. Konecranes' main activities are divided into:
 - (a) Port Solutions, which offers container handling equipment and automation technology;
 - (b) Industrial Equipment, which offers hoists, cranes and material handling solutions for manufacturing and processing industries; and

- (c) Service, which offers services and spare parts.
11. The Parties overlap in the supply of container handling equipment (CHE), globally (including in the UK). CHE can be divided into three broad categories:
- (a) mobile equipment, including RS, HDFLT and ECH (Mobile Equipment);
 - (b) horizontal transport equipment, including ShC, SC and terminal tractors (TT); and
 - (c) cranes, including, amongst others, RTG and ASC.
12. In addition, there are vertical links between the upstream activities of Cargotec in relation to spreaders (ie attachment mechanisms that allow cranes and other equipment to pick up containers) and the downstream activities of both Parties in relation to the supply of certain types of cranes and Mobile Equipment.

Industry background

13. CHE is mainly used by maritime container handling terminals. Some of these terminals are managed by global terminal operators (GTO) which have locations in more than one country. Some types of CHE, such as Mobile Equipment, are also used by customers in other industries.
14. Customers of CHE usually require timely after-sales services. After-sales services can be supplied by the original equipment manufacturers (OEMs), distributors or other third parties. Some customers develop their own in-house expertise to perform repair and maintenance of their own CHE.
15. We note that certain trends appear to be becoming particularly important in the CHE industry at present:
- (a) customers are increasingly demanding sustainable products which reduce their carbon emissions; and
 - (b) there is a broader drive towards the digitalisation, automation and electrification of products.

Provisional findings

Relevant merger situation

16. We have provisionally found that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a

relevant merger situation because completion of the Merger would result in the Parties ceasing to be distinct and the jurisdictional turnover test is met.

17. We are therefore required by section 36(1) of the Act to decide whether the creation of that situation may be expected to result in an SLC within any market or markets in the UK for goods or services. We focused our investigation on whether the Merger may be expected to result in an SLC:
 - (a) as a result of horizontal unilateral effects in relation to the supply of: i) RTG; ii) ASC; iii) SC and ShC; iv) RS; v) HDFLT; vi) ECH; and vii) ATT; and
 - (b) as a result of vertical effects in relation to: i) the supply of crane spreaders by Cargotec to its rivals in the supply of RTG, ASC, and MHCs; ii) the purchase by the Merged Entity of spreaders for Mobile Equipment from one of its rivals in the supply of Mobile Equipment spreaders.

The counterfactual

18. In order to assess the effects of a merger on competition, we consider the prospects for competition with the merger against what would be the competitive situation without the merger: the counterfactual.
19. Our provisional findings are that the most likely counterfactual and, therefore, the most appropriate counterfactual in relation to the supply of CHE, with the exception of the supply of ATT, is that the Parties would continue to compete with each other independently in broadly the same manner in their respective markets. While Cargotec submitted that, absent the Merger, it would [redacted], we provisionally found that the evidence does not show with sufficient certainty that Cargotec would have [redacted] within the period taken into account for our competitive assessment.
20. We provisionally found that the appropriate counterfactual in relation to the supply of ATT is stronger competition between the Parties than under the prevailing conditions of competition, as both Cargotec and Konecranes would have competed in the supply of ATT. Cargotec already has a well-advanced ATT offering and the evidence available to us shows that Konecranes also has a strong incentive, as well as the ability, to enter into the supply of ATT in Europe absent the Merger.

Market definition

21. Market definition provides a framework for assessing the competitive effects of the Merger. The boundaries of a market do not determine the outcome of the analysis of the competitive effects of a merger.
22. We have assessed: a) whether each type of CHE is a separate product market (with possible further segmentation) or whether it is part of a broader product market by considering the degree of demand-side and supply-side substitutability; b) the appropriate geographic scope for the assessment of the effects of the Merger in relation to each product market.

Gantry Cranes

Product market definition

23. We provisionally found that there is limited demand-side substitutability between different types of Gantry Cranes, including RTG and ASC, in particular because of their different features, cost profile and functions. There is also limited supply-side substitutability between the supply of different types of Gantry Cranes, as a supplier cannot easily switch manufacturing capacity from one type of Gantry Crane to another. This is consistent with the differences between the market structure in the supply of each type of Gantry Crane, and suggests that conditions of competition are different. Therefore, we have assessed the effects of the Merger in relation to the supply of RTG and ASC separately. Given that the main suppliers of RTG offer automated RTG (A-RTG), we have not assessed the effects of the Merger in the supply of RTG and A-RTG separately, but have considered any differences in the offering of the RTG suppliers, in terms of automation, in the competition assessment.

Geographic market

24. We provisionally found that Europe is the appropriate geographic market for the assessment of the effects of the Merger in the supply of RTG and ASC. This is because: i) the market position of suppliers in Europe (including the UK) is distinct from that of suppliers operating in other regions in the world; ii) factors such as transport cost and the different regulatory environment in Europe make it more difficult for a supplier of RTG and ASC active in other areas of the world to supply customers in Europe; and iii) having a sales and after-sales support presence in Europe, as well as a track record in Europe, is an important factor in the competition for the supply of RTGs and ASC and appears to affect customer preferences. These factors indicate that there are

different competitive dynamics in Europe compared with other regions of the world.

Shuttle and straddle carriers

Product market

25. We provisionally found that there is limited demand-side substitution between SC and ShC and other types of CHE, in particular because of their different features and functions. Furthermore, we provisionally found a limited degree of supply-side substitution, as evidenced by the different market structure in the supply of SC and ShC. We therefore provisionally concluded that SC and ShC form a separate market to other types of CHE.
26. We also currently consider that, although from a demand-side perspective SC and ShC are not directly interchangeable (eg SC are able to stack ,as well as transport containers, while ShC cannot stack containers), there is a significant degree of supply-side substitution (ie it is not difficult for suppliers of SC to start supplying ShC). Notwithstanding the limited degree of demand-side substitution, our current view is that it is appropriate to consider SC and ShC as part of the same product market due to supply-side substitution. This is consistent with the broadly similar market structure between SC and ShC.
27. Given that the main suppliers of SC and ShC offer automated SC and ShC, we have not assessed the effects of the Merger in the supply of automated SC and ShC separately, but have considered any differences in the offering of the SC and ShC suppliers, in terms of automation, in the competition assessment.

Geographic market

28. We provisionally found that Europe (including the UK) is the appropriate geographic market for the assessment of the effects of the Merger in the supply of SC and ShC. This is because: i) some smaller suppliers of SC and ShC operate in other regions of the world and are not present in Europe; ii) factors such as transport cost make it difficult for a supplier of SC and ShC active in other areas of the world to supply customers in Europe; iii) demand characteristics and customer preferences seem to be, to some extent, distinct in Europe compared with other regions; and iv) having a sales and after-sales support presence in Europe is an important factor in the competition for the supply of SC and ShC and appears to affect customer preferences. These factors indicate that there are different competitive dynamics in Europe compared with other regions of the world.

Mobile Equipment

Product market

29. We found that there is limited demand-side substitutability between different types of Mobile Equipment (RS, FLT and ECH), in particular because of their different features, cost profile and functions. There is also limited supply-side substitutability between the supply of different types of Mobile Equipment, with the differences between the market structure in the supply of each type of Mobile Equipment indicating that the conditions of competition within each are different.
30. We provisionally found that FLT with lighter and heavier lifting capacities may not be close substitutes:
- (a) From a demand-side perspective, FLT are generally divided into different categories according to their lifting capacity (although the exact threshold may vary) and FLT with different lifting capacity fulfil different functions, with customers usually specifying which broad category of FLT they require.
 - (b) From a supply-side perspective: i) the market structure and conditions differ significantly between the supply of FLT with a higher lifting capacity and the supply of FLT with a lifting capacity of less than 10 tonnes; and ii) suppliers of FLT with lower lifting capacity cannot easily expand upwards from lighter ranges into producing heavier FLT.
31. While there is some inconsistency in the industry regarding the classification of FLT into 'heavy' and 'light', there is broad agreement that heavy FLT are different from light FLT. For the purposes of our assessment, we took an inclusive approach and considered as heavy FLT as those with a lifting capacity of more than 10 tonnes (HDFLT). Our provisional conclusions would not change if we were to define a market for even heavier FLT (for example, FLT with a greater than 25 tonnes lifting capacity). In our competition assessment, we have taken into account the constraints from suppliers that focus on the supply of FLT with lower lifting capacities.

Geographic market

32. We provisionally found, on the basis of the evidence above, that all product markets identified in relation to Mobile Equipment are no wider than European, with some important UK specific aspects of competition which affect the strength of competitors for some UK customers.

33. There are elements of competition that distinguish Europe from other regions in the world. In particular, factors such as transport cost, the different regulatory environment in Europe and the importance of having a track record in Europe make it difficult for a supplier of Mobile Equipment active in other areas of the world to successfully supply customers in Europe. This is consistent with the market position of suppliers of Mobile Equipment in Europe being distinct from that in other regions in the world.
34. There are also some important UK specific aspects of competition: i) certain distributors have a regional or national presence and perform an important role, including in the supply of after-sales services and establishing customer relationships; ii) having a sales and after-sales support presence at least in Europe, but ideally in the UK, is an important factor in the competition for the supply of Mobile Equipment and appears to affect customer preferences.
35. Nevertheless, there are important similarities between Europe and the UK, in terms of transport cost, regulatory environment and importance of a European track record. These similarities are not present when comparing Europe with the rest of the world.

ATT

Product market

36. Evidence from internal documents and third parties indicates that, while sales to end-users appear to be some years away, several suppliers are already engaged in significant activities intended to support the development and marketing of ATT offerings. We expect that ATT with some level of automation will be offered to customers in the near future, including in the UK, and that ATT are likely to be an important part of suppliers' service offerings in future.
37. We provisionally found that:
 - (a) there is a separate product market for ATT from other CHE equipment (including automated guided vehicles, AGV), given their different features and functions, and that ATT should not be aggregated with other CHE given the limited degree of supply-side substitution;
 - (b) there is limited demand-side substitutability between TTs and ATT, given important differences in functionality and cost, as well as a limited degree of supply-side substitution (eg some TT manufacturers have to establish partnerships to start supplying ATT).

38. Therefore, we provisionally found that it is appropriate to assess the effects of the Merger in relation to the supply of ATT.

Geographic market

39. We provisionally found that the market for the supply of ATT is no wider than European, because: i) the differences in the market structure for the supply of TT between Europe and the rest of the world suggest that the conditions of competition for the supply of ATT are not the same across all regions in the world; and ii) there are some similarities between ATT and Mobile Equipment, including the more prominent role of distributors.

Competitive assessment

40. We have assessed whether the Merger will remove a competitor which previously provided a significant competitive constraint in the different markets defined above and whether, considering the remaining competitive constraints from other suppliers, the Merged Entity will have the ability and/or incentive to worsen or not improve its offering as much as it would absent the Merger. This is a 'horizontal unilateral effects' theory of harm.

The role of Chinese suppliers within the supply of CHE and the extent to which the Parties are able to compete against Chinese suppliers

41. The Parties submitted that Chinese suppliers benefit from cost advantages in access to cheaper inputs and other benefits that state-sponsorship affords to Chinese rivals and that the Parties are unable to compete on the merits against state-sponsored Chinese OEMs. The Parties also submitted that a 'static' analysis of competition in the CHE industry disregards rapid expansion of state-sponsored Chinese OEMs.
42. We have taken into account the constraint posed by the Chinese suppliers in our forward-looking competitive assessment of each theory of harm, based on evidence of the competitive constraint posed by specific Chinese suppliers in each market ie, mainly ZPMC in relation to RTG and ASC, and Sany in relation to Mobile Equipment. In particular, we looked at the competitive strengths and capabilities of these suppliers, in view of the relative importance of the purchasing criteria for most customers.
43. Notwithstanding that Chinese suppliers may benefit from cost advantages resulting from state-ownership and that the Parties perceive that this poses a risk to their market position, the evidence considered clearly shows that the Parties are able to effectively compete against Chinese suppliers.

44. Chinese suppliers face barriers to entry and expansion and, while some Chinese suppliers have had some success to date in certain markets covered by our review, this has not been across all types of CHE. Any potential cost advantages would have existed for some time and we do not expect that these would, in themselves, result in further material expansion of Chinese suppliers. Nor do we consider it appropriate to assume that other Chinese suppliers that are not yet present, or that have a very small presence, are likely to enter or significantly expand, unless that is clearly supported by robust evidence.
45. We recognise that some Chinese suppliers (ZPMC and Sany) are credible competitors in specific markets, but we consider that the Parties have strong offerings and will continue to successfully compete against Chinese suppliers, including based on parameters of competition other than price and especially in the context of increased automation of CHE, proven track record and their broad portfolios.

Horizontal unilateral effects in the supply of RTG

46. The Parties compete closely in the supply of RTG, with both having a strong offering (including on automation) and a proven track-record, and face only two material competitors, ZPMC and Liebherr. Therefore, a significant competitor would be removed by the Merger and only two material competitors (other than the Merged Entity) would remain in the market after the Merger. Further, the positioning of the remaining competitors means that some customers may have even fewer than three competitive offers after the Merger: while ZPMC is a strong competitor for larger volume RTG tenders (where it competes strongly on price), it is less competitive for smaller volume tenders, while Liebherr is seen as having a relatively high end, expensive offer. Our provisional conclusion is therefore that the Merger may be expected to result in an SLC in the supply of RTG.
47. The following evidence, in particular, demonstrates that the Parties compete closely in the supply of RTG:
 - (a) The Parties have very high shares of supply on a European basis, with a significant increment. The Parties are by far the largest two suppliers in Europe, with a combined share of supply in excess of 70% over 2011 to 2020. Although Konecranes' share of supply in the UK is lower we do not interpret this as evidence of significant differences in competitive conditions between Europe and the UK. There are very few sales in the UK, so shares of supply can be heavily influenced by the inclusion or exclusion of particular orders. Konecranes' win of a large RTG order in

2021 in the UK confirms that it is competitive in the UK, as well as in Europe more widely.

- (b) Bidding analysis shows that, in Europe, the Parties face each other in the majority of the opportunities in which they participate, and frequently lose to each other.
- (c) Evidence from third parties consistently shows that the Parties are close competitors, and most third parties raised concerns about the loss of competition that would result from the Merger.
- (d) Evidence from internal documents indicates that the Parties perceive each other as strong competitors. Documents also indicate that both Cargotec and Konecranes have a strong RTG offer, including in terms of quality and automation. The Parties closely monitor each other and produce strategy documents which focus specifically on competing with each other.

48. We consider that the Parties would face few significant competitive constraints following the Merger:

- (a) ZPMC provides the strongest of the remaining constraints on the Parties. It has the next largest share of supply in Europe after the Parties ([10-20]% by revenue, [10-20]% by volume over 2011-20). Its share of supply is larger in the UK, although this results mainly from the supply of RTG to a single customer (HPH). Bidding analysis and third-party evidence indicate that ZPMC is a stronger competitor for larger volume tenders (where it competes strongly on price), than for smaller volume tenders. Third-party evidence also indicates that ZPMC may be at a disadvantage in relation to some customers (in particular customers without a strong in-house maintenance team) in light of the service levels it can offer in Europe. Internal documents are consistent with ZPMC being a material competitor that is improving but remains behind on certain parameters.
- (b) Liebherr imposes some competitive constraint on the Parties, albeit less than that imposed by ZPMC. Liebherr has the joint fourth highest share of supply in Europe (around [0-5]% by both volume and value over 2011-20). Its share in the UK is higher (around [20-30]% over 2011-20) although this derives from sales to two customers only. The Parties lost a small number of tenders to Liebherr in Europe and these all involved small volumes and values. Third-party evidence suggests that Liebherr's offer is generally seen as being high quality but relatively expensive.

- (c) No other suppliers impose a material constraint on the Parties. Mitsui has a relatively small share in Europe and bidding data shows only one tender win in Europe against a Party. Further, Mitsui has not made sales in the UK and we have seen no evidence that it has bid for UK tenders. Kuenz was identified as winning a handful of tenders in mainland Europe, but these were small and we have a concern about the accuracy of this data. It has not bid in UK RTG tenders in the last ten years. Sany was [redacted] and was mentioned in some of the Parties' internal documents (mainly at global level) and by some third parties, but, overall, the evidence does not indicate that Sany imposes a material constraint in relation to UK customers.
- (d) The evidence that we reviewed in relation to entry and expansion does not indicate that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of ASC

- 49. The Parties compete closely in the supply of ASC, with both having a strong offering (including on automation) and a proven track-record, and face only two material competitors, ZPMC and Kuenz. Therefore, a significant competitor would be removed by the Merger and only two material competitors (other than the Merged Entity) would remain in the market after the Merger. Further, the positioning of the remaining competitors means that some customers may have even fewer than three competitive offers after the Merger: ZPMC appears to be a stronger competitor for larger volume ASC tenders (where it competes strongly on price), than for smaller volume tenders. Our provisional conclusion is therefore that the Merger may be expected to result in an SLC in the supply of ASC.
- 50. The following evidence, in particular, demonstrates that the Parties compete closely in the supply of ASC:
 - (a) The Merged Entity would have a high combined share of supply (around [60-70]%) on a European basis over 2011-20, with a significant increment. Although Konecranes has not made sales in the UK in recent years, it has been consistently competing in UK tenders. The Parties' combined share of supply in Europe was significantly lower in the most recent five-year period ([40 – 50]%), however both Parties still have material shares of supply on this basis and the evidence below shows that they continue to be significant players in the ASC market.
 - (b) In the limited number of ASC tenders in the UK, the Parties have competed against each other and Konecranes' presence was

perceived as a substantial competitive threat by Cargotec. In addition, bidding data shows that Konecranes has recently won a significant ASC tender in mainland Europe in opposition to Cargotec.

- (c) Responses from third parties also suggest that the Parties are close competitors and that ZPMC is their main competitor.
- (d) Evidence from internal documents indicates that the Parties perceive each other as being among the main competitors in the supply of ASC. These documents also indicate that they closely monitor each other and produce strategy documents which focus specifically on competing with each other. These documents also indicate that both Cargotec and Konecranes have a strong ASC offer.

51. We consider that the Parties would face few significant competitive constraints following the Merger:

- (a) ZPMC has the fourth largest share of supply in Europe over 2011 to 2020 and the second largest share in the UK (where it is the only supplier other than Cargotec to have sold ASC over the period). ZPMC has become a stronger competitor over recent years (it did not make any sales in Europe over 2011 to 2015 but had a [20-30]% share over 2016 to 2020). Nonetheless, even pre-Merger, the market remains concentrated. In the UK, ZPMC won one tender in the last ten years. Third-party evidence, indicates that ZPMC is a stronger competitor for larger volume ASC tenders (where it competes strongly on price), than for smaller volume tenders. We note that the most recent UK ASC tenders that we identified have been relatively large – i.e. 10 or more ASC units. Third-party evidence also indicates that ZPMC may be at a disadvantage in relation to some customers (in particular customers without a strong in-house maintenance team) in light of the service levels it can offer in Europe. Internal documents are consistent with ZPMC being a material competitor that is improving but remains behind on certain parameters.
- (b) Kuenz has the third largest share of supply in Europe (and in mainland Europe) where it has won some opportunities in opposition to Cargotec) but did not make any sales in the UK over 2011 to 2020. Kuenz [REDACTED]. Some suppliers said that they saw Kuenz as a competitor, however the UK customers that we heard from did not identify Kuenz as an option that they would consider when buying ASC.
- (c) No other suppliers appear to impose a material constraint on the Parties. Liebherr has attempted to enter the market but has not been

identified as an effective competitor by third parties. Internal documents do not support that it imposes a material constraint.

52. The evidence that we reviewed in relation to entry and expansion does not indicate that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of SC and ShC

53. Our provisional conclusion is that the Merger may be expected to result in an SLC in the supply of SC and ShC, as the Parties are the closest competitors in this market and only one relatively weak competitor other than the Merged Entity (ZPMC) will remain in the market after the Merger.
54. The following evidence, in particular, clearly shows that the Parties compete closely in the supply of SC and ShC:
- (a) The Parties currently have close to [90–100]% combined share of supply of SC and ShC on any geographic basis. On this basis alone, there is a strong *prima facie* expectation that the Parties are close competitors in the supply of SC and ShC.²
 - (b) Our review of SC and ShC bidding opportunities in the UK shows that the Parties were the only competitors in all but one of these opportunities; in the opportunity with a third participant, [REDACTED].
 - (c) UK customers rated both Parties as having similarly strong product offerings, and comments from third parties indicated that they considered the Parties as close competitors. We also note that most third parties expected the Merger to negatively impact competition in the supply of SC and ShC.
 - (d) The internal documents that we reviewed in relation to SC and ShC show that the Parties perceive each other as one another's closest competitor, with both Parties actively participating in competition with the other and tracking the other's success.
55. We consider that the Parties would face no other competitors that would impose a material competitive constraint on the Parties post-Merger.
- (a) We consider that ZPMC only provides a limited competitive constraint on the Parties in the supply of SC and ShC. It has [0–5%] share of supply in the UK and [0–5%] share of supply in Europe over 2017 to

² CMA129, paragraph 4.10.

2020, reflecting its limited success in UK and European tenders so far. UK customers did not consider ZPMC as a viable alternative to the Parties, either now or in the near future. The internal documents that we reviewed recognise that ZPMC has entered this market, but also reflect the Parties' [X]. We have not received any evidence that ZPMC will expand and become a strong competitor to the Parties within the next two to three years.

(b) We do not consider that any other suppliers act as constraints on the Parties.

56. The evidence that we reviewed in relation to entry and expansion does not indicate that the constraint imposed by ZPMC (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of RS

57. The Parties compete closely in the supply of RS, with both having a strong offering (including a reliable product, good quality after-sales support and wide range of products) and a proven track-record. The only other material competitors in the UK are Hyster and Sany. Therefore, a significant competitor would be removed by the Merger and only two material competitors will impose a constraint on the Parties in relation to UK customers. Further, to the extent that some customers do not consider Sany to be an effective alternative to the Parties, the remaining constraint on the Parties may be particularly limited in some cases. Our provisional conclusion is therefore that the Merger may be expected to result in an SLC in the supply of RS.

58. The following evidence, in particular, demonstrates that the Parties compete closely in the supply of RS:

(a) The shares of supply indicate that the Parties are the two largest suppliers in Europe, and two of only four significant suppliers in the UK, over 2016 to 2020. Cargotec is the market leader in both geographies and the Merged Entity would have a combined share of supply of [50 – 60]% in the UK and around [70 – 80]% in Europe. Although Konecranes has a lower share in the UK than in Europe, this share is nonetheless material ([10 – 20]%).

(b) Our bidding analysis covering 2016 to May 2021 shows that the Parties lost more opportunities to each other than to any other supplier in Europe and lost a significant number of opportunities to each other in the UK.

- (c) Evidence from third parties consistently shows that the Parties are close competitors and mostly suggest that both Parties have high quality products. Most third parties raised concerns about the loss of competition that would result from the Merger.
 - (d) Internal documents show that Parties have similar strengths in Mobile Equipment more broadly in terms of their proven track records, strong sales and after-sales networks, wide product portfolios, and product development. Internal documents also show that both Parties are taking active steps to develop electrified Mobile Equipment and are monitoring each other's progress in this area. In relation to RS, specifically, internal documents are also consistent with the Parties competing closely, indicating that the Parties perceive each other as strong competitors within this market, and consider themselves as being among the few suppliers that offer a full range of RS (value, premium, and eco-friendly).
59. The evidence shows that Hyster is a strong competitor to the Parties in both the UK and Europe as a whole:
- (a) Shares of supply show that Hyster was the second-largest supplier in the UK over 2016 to 2020 on a volume basis (third-largest on a revenue basis) and the third-largest supplier in Europe over the same period.
 - (b) This is consistent with the results of our bidding analysis, which show that, after each other, Hyster accounted for the next largest proportion of the Parties' lost opportunities in Europe. In the UK, both Parties lost a significant number of opportunities to Hyster.
 - (c) Third-party views and the qualitative tender documents also show that Hyster is a strong competitor. Several third parties indicated that Hyster offers competitive prices and high product quality, although some others considered that it had low product quality.
 - (d) The internal documents that we reviewed confirmed, overall, that the Parties consider Hyster as one of their closest competitors in Mobile Equipment generally and in RS specifically.
60. The evidence indicates that Sany is generally a material competitor to the Parties in the UK, although not for some customers, but is not a material competitor in Europe as a whole. It shows that Sany has grown in the UK over recent years but does not suggest that the constraint from Sany will materially change going forward.

- (a) Shares of supply show that Sany has a [20 – 30]% share of supply in the UK over 2016 to 2020, but is much smaller in Europe ([0 – 5]% share).³ Sany had much higher UK sales in 2019 and 2020 as compared with previous years, although we note that 2019 was an exceptionally good year for Sany. Nonetheless, Sany seems to now be a more significant competitor in the UK than its share of [20 –30]% over 2016 to 2020 would suggest.
- (b) Our bidding analysis is consistent with shares of supply in suggesting that Sany is a material competitor to the Parties in the UK but is not a strong competitor in Europe as a whole.
- (c) Third-party views and qualitative tender documents highlight Sany’s low prices but also express some concerns regarding the quality of its equipment and after-sales service. This suggests that Sany may not be a strong constraint on the Parties in relation to customers that place less weight on price and more on quality.
- (d) Internal documents show that the Parties consider Sany as a material competitor in Mobile Equipment on a global basis and that they perceive Sany as a threat in RS specifically (including in the UK, through its relationship with Cooper). These documents, however, also highlight the weaknesses of Sany’s Mobile Equipment offer, in general, and of its RS offer in Europe and in the UK, in particular, including [X].
- (e) The evidence available to us does not support that Sany’s growing position in the UK will necessarily lead to material future additional growth for Sany in the UK or Europe.

61. The evidence indicates that other suppliers, including CVS, Liebherr, FTMH, and Linde do not compete closely with the Parties for UK customers and exert, at most, a limited competitive constraint on the Parties in Europe and the UK.

62. The evidence that we reviewed in relation to entry and expansion does not indicate that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of HDFLT

63. The Parties compete closely in the supply of HDFLT, with both having a strong offering (including a reliable product, good quality after-sales support

³ We consider that this difference is likely to reflect the role of its national distributor (Cooper).

and wide range of products) and a proven track-record. The only other material competitors in the UK are Hyster and, to some extent, Linde and Svetruck. Hyster is a strong competitor to the Parties, whereas the competitive strength of Linde and Svetruck is more limited (with Svetruck providing a stronger constraint in Europe but a lesser constraint in the UK). Therefore, a significant competitor would be removed by the Merger and, at most, three material competitors will impose a constraint on the Parties in relation to UK customers. Further, the positioning of the remaining competitors means that some customers may have fewer than four competitive offers after the Merger: in particular, unlike the Parties, Linde is not active in the supply of HDFLT with lifting capacities greater than 18 tonnes. Our provisional conclusion is therefore that the Merger may be expected to result in an SLC in the supply of HDFLT.

64. The following evidence, in particular, demonstrates that the Parties compete closely in the supply of HDFLT:
- (a) The shares of supply indicate that, in both Europe and the UK, the Parties are two of only four suppliers with shares of supply greater than 10% over 2016 to 2020. Cargotec is the market leader in Europe and one of the market leaders, alongside Hyster, in the UK. The Merged Entity would have a combined share of supply in HDFLT of [30 – 40]% in the UK and around [50 – 60]% in Europe. The Parties' combined share is higher still at the heavier end of the HDFLT market.
 - (b) Our bidding analysis covering 2016 to May 2021 shows that the Parties lost more opportunities to each other than to any other supplier in both the UK and Europe as a whole.
 - (c) Evidence from third parties consistently shows that the Parties are close competitors, particularly at the heavier end of the HDFLT market, and generally suggests that both Parties have high quality products. A number of third parties raised concerns about the loss of competition that would result from the Merger.⁴
 - (d) Internal documents are also consistent with the Parties competing closely, indicating that the Parties perceive each other as being strong competitors and as having an advantage over other competitors by offering a full range of HDFLT.

⁴ However, several third parties stated that the wider choice of suppliers available for HDFLT relative to other Mobile Equipment indicated that the Merger would have a more limited impact on competition in the supply of HDFLT.

65. The evidence shows that Hyster is a strong competitor to the Parties in both Europe and the UK.
- (a) Shares of supply show that Hyster was the second-largest supplier in Europe over 2016 to 2020 on a volume basis (third-largest on a revenue basis) and one of the market leaders (alongside Cargotec) in the UK over the same period.
 - (b) This is consistent with our bidding analysis, which suggests that, after each other, Hyster accounted for the next largest proportion of both Parties' lost opportunities in Europe. In the UK, both Parties lost a significant number of opportunities to Hyster.
 - (c) Hyster was commonly mentioned as a competitor by third parties but was not always ranked highly. Third parties generally noted that Hyster was high quality, but there were conflicting views about its price competitiveness.
 - (d) Internal documents confirmed that the Parties consider Hyster as one of their closest competitors in Mobile Equipment generally and in HDFLT specifically. Both Parties' documents noted that Hyster is price competitive and offered a wide product range.
66. The evidence indicates that Linde competes with the Parties, in relation to HDFLT with lifting capacities up to 18 tonnes.
- (a) Shares of supply show that Linde has a [10 – 20]% share of supply in the UK but is smaller in Europe ([5 – 10]% share).
 - (b) Our bidding analysis shows that both Parties lost a significant number of opportunities to Linde in both the UK and Europe as a whole.
 - (c) Third-party evidence, including from qualitative tender documents, was mixed, with UK customers ranking Linde more highly than competitors, but overall indicated that Linde was seen as a feasible alternative to the Parties.
 - (d) Linde is considered as a credible competitor in HDFLT in Cargotec's internal documents, but it is not often mentioned in Konecranes' internal documents. It does not seem to offer a range as wide as the Parties in terms of lifting capacity and value positioning.
67. The evidence indicates that Svertruck may compete with the Parties, in relation to certain customers:

- (a) Shares of supply show that Svetruck has a [10 – 20]% share of supply in Europe but is much smaller in the UK ([0 – 5]% share).
 - (b) Our bidding analysis indicates that both Parties lost a significant number of opportunities to Svetruck in both the UK and Europe as a whole.
 - (c) Third-party views regarding Svetruck’s offer were mixed, with some third parties suggesting that Svetruck may not be a strong constraint on the Parties in relation to customers that place less weight on quality and more on price.
 - (d) Svetruck is mentioned in the Parties’ documents and is considered as a credible competitor in these documents, although sometimes only in relation to [✂].
68. Evidence consistently indicates that other suppliers (including Hyundai, Sany, Doosan, ZPMC and a number of other smaller suppliers) do not compete closely with the Parties for UK customers; as such, we consider that these suppliers of HDFLT are not stronger competitors than suggested by their shares of supply.
69. The evidence that we reviewed in relation to entry and expansion does not indicate that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of ECH

70. The Parties compete closely in the supply of ECH, with both having a strong offering (including a reliable product, good quality after-sales support and a wide range of products) and a proven track-record. The only other material competitors in the UK are Hyster and Sany. Therefore, a significant competitor would be removed by the Merger and only two material competitors will impose a constraint on the Parties in relation to UK customers. Further, to the extent that some customers do not consider Sany to be an effective alternative to the Parties, the remaining constraint on the Parties may be particularly limited in some cases. Our provisional conclusion is therefore that the Merger may be expected to result in an SLC in the supply of ECH.
71. The following evidence, in particular, demonstrates that the Parties compete closely in the supply of ECH.
- (a) The shares of supply indicate that the Parties are two of only four significant suppliers in the UK over 2016 to 2020, and two of the three largest suppliers in Europe over the same period. The Merged Entity

will have a combined share of supply of around [30 – 40]% in the UK and around [40 – 50]% in Europe. Although Konecranes has a lower share in the UK than in Europe, its UK share is nonetheless material ([5 – 20]%).

- (b) Our bidding analysis covering 2016 to May 2021 shows that, in Europe, Konecranes lost more opportunities to Cargotec than to any other competitor and Cargotec lost a significant proportion of its lost opportunities to Konecranes. The Parties also lost significant volumes to each other in the UK over the period considered.
- (c) Evidence from third parties consistently shows that the Parties are close competitors and mostly suggests that both Parties have high quality products. Most third parties raised concerns about the loss of competition that would result from the Merger.⁵
- (d) Internal documents are also consistent with the Parties competing closely, indicating that the Parties perceive each other as strong competitors within this market and that they consider themselves as the only suppliers that offer a full range of ECH (value, premium, and eco-friendly).

72. The evidence shows that Hyster is a strong competitor to the Parties in both the UK and Europe as a whole.

- (a) Shares of supply show that Hyster was the largest supplier in both the UK and Europe as a whole over 2016 to 2020. It would remain the largest supplier in the UK post-Merger.
- (b) This is consistent with the results of our bidding analysis based on Europe as a whole, which suggest that Hyster accounted for the highest proportion of Cargotec's lost opportunities and the second highest proportion of Konecranes' lost opportunities (after Cargotec).
- (c) Third-party evidence and the qualitative tender documents about its offer also show that Hyster is a strong competitor. Several third parties indicated that Hyster offers competitive prices and high product quality, although some others considered that it had low product quality.

⁵ The third parties that expressed fewer concerns regarding the Merger noted that Konecranes was not a strong competitor in the supply of ECH.

- (d) The internal documents that we reviewed confirmed, overall, that the Parties consider Hyster as one of their closest competitors in Mobile Equipment generally and in ECH specifically.
73. The evidence indicates that Sany is generally a material competitor in the UK, although not for some customers, but is not a material competitor in Europe as a whole. It does not suggest that the constraint from Sany will materially change going forward.
- (a) Shares of supply show that Sany has a [10 – 20]% share of supply in the UK over 2016 to 2020 but is much smaller in Europe ([0 – 5]% share).⁶
- (b) Our bidding analysis is consistent with shares of supply in suggesting that Sany is a material competitor to the Parties in the UK but is not a strong competitor in Europe as a whole.
- (c) Third-party evidence, including from qualitative tender documents, was mixed, with customers in the UK noting Sany's low prices but also expressing some concerns regarding the quality of its equipment and after-sales service. This evidence suggests that Sany may not be a strong constraint on the Parties in relation to customers that place less weight on price and more on quality.
- (d) The Parties' documents reflect a growing competitive threat from Sany in ECH on a global basis, especially regarding electrification, while also suggesting that Sany has not yet established itself in Mobile Equipment in Europe (except in the UK).
- (e) We found no clear trend in Sany's annual sales of ECH in the UK over the last five years and the evidence, overall, does not support that there will be material future additional growth for Sany in the UK or in Europe.
74. The evidence consistently indicates that other suppliers (including Svetruck, CVS and FTMH) do not compete closely with the Parties for UK customers and exert, at most, a limited competitive constraint on the Parties in Europe and the UK.
75. The evidence that we reviewed in relation to entry and expansion does not indicate that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

⁶ We consider that this difference is likely to reflect the role of its national distributor (Cooper).

Horizontal unilateral effects in the supply of ATT (potential competition)

76. We consider that Cargotec is well placed to be one of the main future suppliers of ATT in Europe. Konecranes is also likely to be a material competitor in this market absent the Merger, but it is not likely to be among the most significant constraints to Cargotec as a standalone competitor.
77. We consider that Terberg is also likely to become one of the main potential competitors in the supply of ATT in Europe and therefore would (assuming that it can continue to operate independently from the Merged Entity) be a key competitor within this market.
78. We note that Terberg currently has a [X] with Konecranes for the development of ATT. The [X] as a result of a change of control over Konecranes.
79. In light of the alternative options that appear to be available to Terberg, we are not concerned that the loss of Konecranes as a partner would materially affect the competitiveness of Terberg post-Merger. We are, however, concerned that the creation of an ongoing contractual link between Terberg and the Merged Entity, as brought about by the Merger could substantially soften the competitive constraint that Terberg would otherwise impose on the Merged Entity.
80. Other than Terberg (which cannot be regarded as a fully independent competitor given the ongoing contractual link referred above), the Hyster-Yale-Capacity-VDL partnership and Q-Truck seem to be well placed to compete with the Merged Entity. While there are other potential suppliers of ATT (Einride, Volvo, Man, Gaussin and ZPMC), that are likely to compete with the Parties in future, there are doubts as to whether their offer will be an effective alternative to the Merged Entity ATT, given the likely relative strength of their offer. The evidence does not suggest that other suppliers with activities within the broader automated vehicles space, such as Waymo/Alphabet, would impose any meaningful constraint on the Parties in relation to port terminals.
81. Given the significance of the competitive constraint Terberg would impose on Cargotec absent the Merger, compared to the constraint posed by the other firms developing an ATT offering, we consider that the contractual link between the Merged Entity and Terberg presents a material risk that competition between two of the main players within this emerging market will be substantially softened and that the remaining potential suppliers of ATT would not impose a sufficient constraint on the Merged Entity. Therefore, by creating a contractual link between the Merged Entity and Terberg, we

provisionally conclude that the Merger may be expected to result in an SLC in the supply of ATT in Europe.

Vertical effects

Input foreclosure: supply of crane spreaders to suppliers of RTG, ASC and MHC

82. We have considered whether, as a result of the Merger, the Merged Entity may attempt to restrict rivals' access to Bromma spreaders, or offer spreaders on worse terms, directly harming the rivals' competitiveness and therefore competition in the downstream market for RTG, ASC and MHC.
83. While the Merged Entity would also have a vertical position in relation to RTG and ASC, our assessment has focused on whether horizontal unilateral effects arise as a result of the Merger in the markets for the supply of RTG and ASC. As we have provisionally found SLCs as a result of horizontal unilateral effects in each of these markets, we have not considered it necessary to assess the potential for any additional vertical effects of the Merger in these two markets.
84. In relation to MHC, we provisionally conclude that the Merged Entity lacks the ability to successfully engage in input foreclosure in the supply of spreaders to MHC suppliers, as the number of MHC opportunities where the Merged Entity may have the ability to reduce Liebherr's competitiveness does not seem substantial. The Merged Entity may also lack the ability to successfully engage in input foreclosure in the supply of spreaders to RTG and ASC suppliers, because the Merged Entity's rivals can source a significant proportion of spreaders through other means.
85. Our provisional conclusion is therefore that the Merger may not be expected to give rise to an SLC as a result of input foreclosure in relation to the supply of crane spreaders to MHC suppliers.

Customer foreclosure: purchase of Mobile Equipment spreaders by the Merged Entity from one its rivals in the supply of Mobile Equipment spreaders

86. Our provisional conclusion is that the Merger may not be expected to give rise to an SLC as a result of customer foreclosure in relation to the supply of Mobile Equipment spreaders.
87. Our current view is that the Merged Entity may not have the ability to foreclose its main rival, Elme, in the Mobile Equipment spreader market. The Merged Entity might reduce its demand for Elme's spreaders and Konecranes is an

important customer for Elme. However, it is not clear whether the potential reduction in scale for Elme (due to the Merged Entity favouring Bromma) would have a significant impact on Elme's overall competitiveness because of: i) Elme's wide range of spreaders (including non-standard and specialised spreaders); ii) the preference of some OEMs to not be reliant on Bromma for strategic reasons; and iii) the fact that spreaders represent a small part of the price of Mobile Equipment, means that a rise in Elme's spreader prices may not be sufficient for OEMs to stop buying from Elme. In addition, there may be at least some scope for Elme to increase demand for its spreaders from customers other than the Merged Entity. Furthermore, an increase in the price of Elme spreaders would not have a significant adverse effect on competition in downstream Mobile Equipment markets.

Entry and expansion

88. We have considered whether effective entry or expansion will occur as a result of the Merger which might be timely, likely and sufficient to counteract the effects of the Merger.
89. We provisionally found that there are three main significant barriers to entry and expansion in the supply of the different markets in which we provisionally found an SLC:
- (a) Significant initial costs are needed to be able to supply CHE and provide parts and servicing. Economies of scale also constitute a significant barrier to entry or expansion and may prevent small-scale entry from imposing an effective constraint. The investment needed to be able to provide maintenance and repair services is likely to constitute a particularly high barrier to entry and/or expansion in relation to the supply of Mobile Equipment, as a potential new entrant (directly or through a distributor) would need to serve a large number of customers in order to be commercially viable.
 - (b) Having a strong track record and reputation are very important in order to satisfy customers' purchasing criteria, and that establishing that strong track record and reputation therefore presents a high barrier for new entrants. The evidence also shows that the importance of having an established customer relationship (among other factors) makes it difficult for new entrants to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.
 - (c) Some customers are averse to multi-sourcing CHE (including CHE which has little or no automation) and, in relation to Gantry Cranes,

Interoperability can become a barrier to expansion for suppliers with a narrow portfolio of CHE.

90. Furthermore, there has not been recent material entry, and the frequency of entry is low, which is consistent with barriers to entry being high and entry being unlikely as a result of the Merger.
91. The evidence available to us does not support that any third party would have the necessary capabilities or intention to materially enter or substantially expand in the markets in which we found an SLC, in the near future, as a result of the Merger.
92. Therefore, our provisional conclusion is that timely entry or expansion of sufficient scale is not likely to occur, as a result of the Merger, in order to prevent an SLC from arising in any of the markets in which we provisionally found an SLC.

Rivalry-enhancing efficiencies

93. The Parties have not currently demonstrated that the Merger would result in rivalry-enhancing efficiencies which would off-set the adverse effects of the Merger on competition.
94. We have provisionally concluded that there are no countervailing factors which would offset the adverse effects of the Merger on competition.

Provisional conclusion

95. We have provisionally found that:
 - (a) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) the creation of that situation may be expected to result in an SLC as a result of horizontal unilateral effects in the supply of each of the following categories of equipment in Europe, including the UK: (i) RTG, (ii) ASC, (iii) SC and ShC, (iv) RS, (v) HDFLT, (vi) ECH and (viii) ATT.
96. We invite any parties to make representations to us on these provisional findings by no later than 17.00hrs GMT, on 17 December 2021. Parties should refer to the notice of provisional findings for details of how to do this.

Provisional findings

1. The reference

- 1.1 On 24 June 2021, Cargotec Corporation (Cargotec) and Konecranes Plc (Konecranes) (the Parties) submitted a request to the Competition and Markets Authority (CMA) for their anticipated merger (the Merger) to be 'fast tracked' for a phase 2 investigation.⁷ In making such a request, the Parties conceded that the test for reference under section 33 of the Enterprise Act 2002 (the Act) was met in relation to a number of markets.⁸
- 1.2 On 13 July 2021, the CMA found that there was a realistic prospect that the Merger would lead to a substantial lessening of competition (SLC) in those markets and referred the Merger for an in-depth phase 2 inquiry. The terms of reference, along with information on the conduct of the inquiry, are set out in Appendix A. We are required to prepare and publish a final report by 1 April 2021.⁹
- 1.3 In exercise of its duty under section 33(1) of the Act, the CMA referred the Merger to its chair for the constitution of a group¹⁰ of CMA panel members (the Inquiry Group). In accordance with section 36(1) of the Act, the Inquiry Group is to investigate and report on the following questions:
- (a) whether arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
 - (b) if so, whether the creation of that situation may be expected to result in an SLC within any market or markets in the United Kingdom (UK) for goods or services.
- 1.4 In answering these questions, the Inquiry Group will apply the 'balance of probabilities' threshold to their analysis. That is, they will decide whether it is more likely than not that the Merger will result in an SLC.
- 1.5 This document, together with its appendices, constitutes the Inquiry Group's provisional findings, published and notified to Cargotec and Konecranes in

⁷ Such a request is considered in accordance with Guidelines 7.5 to 7.21 of the [Mergers: Guidance on the CMA's jurisdiction and procedure \(CMA2 Revised\)](#).

⁸ These markets are reach stackers, straddle carriers, and rubber-tired gantry cranes (RTGs).

⁹ See: [Notice of termination of extension under section 39\(8\) \(Cargotec\)](#) and [Notice of termination of extension under section 39\(8\) \(Konecranes\)](#).

¹⁰ [Section 33\(1\)](#) of the Act provides that the group is to be constituted under Schedule 4 to the Enterprise and Regulatory Reform Act 2013.

line with the CMA's rules of procedure.¹¹ Further information, including the Phase 1 Reference Decision (Phase 1 Decision) can be found on the [inquiry case page](#).¹²

- 1.6 Throughout this document, where relevant, Cargotec and Konecranes are collectively referred to as 'the Parties' or, for statements referring to the future, 'the Merged Entity'.

2. Industry background

- 2.1 The Parties are both active in supply of container handling equipment (CHE).

- 2.2 This Chapter sets out:

- (a) a brief description of different types of CHE;
- (b) a brief description of the main aspects of the supply of CHE, including an overview of: (i) the supply chain; (ii) the main customers; (iii) the importance of maintenance and servicing; (iv) the utilities procurement rules; and (v) impact of UK exit of the EU on the industry in the UK; and
- (c) an overview of the main industry trends.

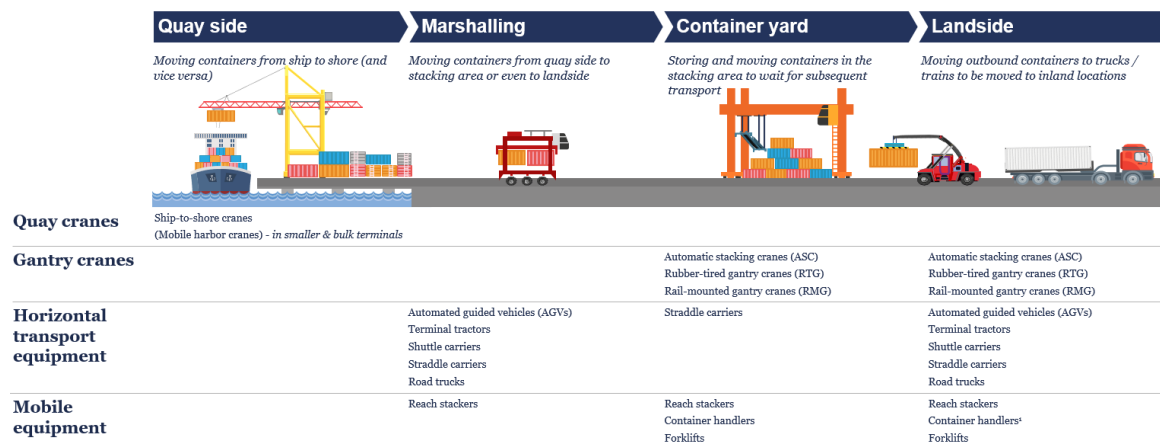
Container handling equipment

- 2.3 CHE is used to transport containers. It is available in a range of types for use in different situations. The main types of CHE used at different parts of a port terminal are shown in Figure 1.

¹¹ [CMA rules of procedure for merger, market and special reference groups \(CMA 17\)](#), Rule 11.

¹² The CMA's case page can be found at: [Cargotec Corporation/Konecranes Plc merger inquiry](#).

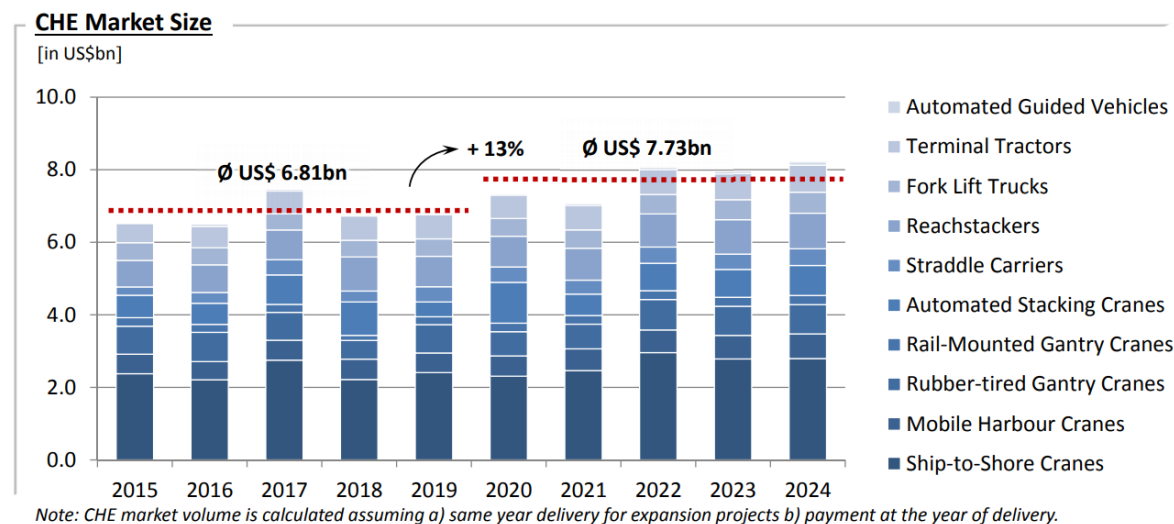
Figure 1: Suitability of different pieces of container and cargo handling equipment at a port terminal



Source: The Parties (Parties' presentation to the CMA on 5 March 2021, p 8).

2.4 A market report by DS Research dated January 2020 (the CTF Market Report) estimates that the CHE global market size, excluding Mobile Equipment, is around \$7 billion.¹³ It forecasts that it will increase to around \$7.7 billion average annual sales between 2020 and 2024.¹⁴ This increase is driven by a projected 10% of price increases (equating to around 2% per annum), 2% of replacement¹⁵ business, and 2% of new terminal business.¹⁶ Figure 2 below shows this forecast split by type of CHE.

Figure 2: CHE market size in US Dollars by type



Source: DS Research (January 2020), Container Terminal Foresight,, p 4.

¹³ DS Research (January 2020), Container Terminal Foresight 2024, p 5.

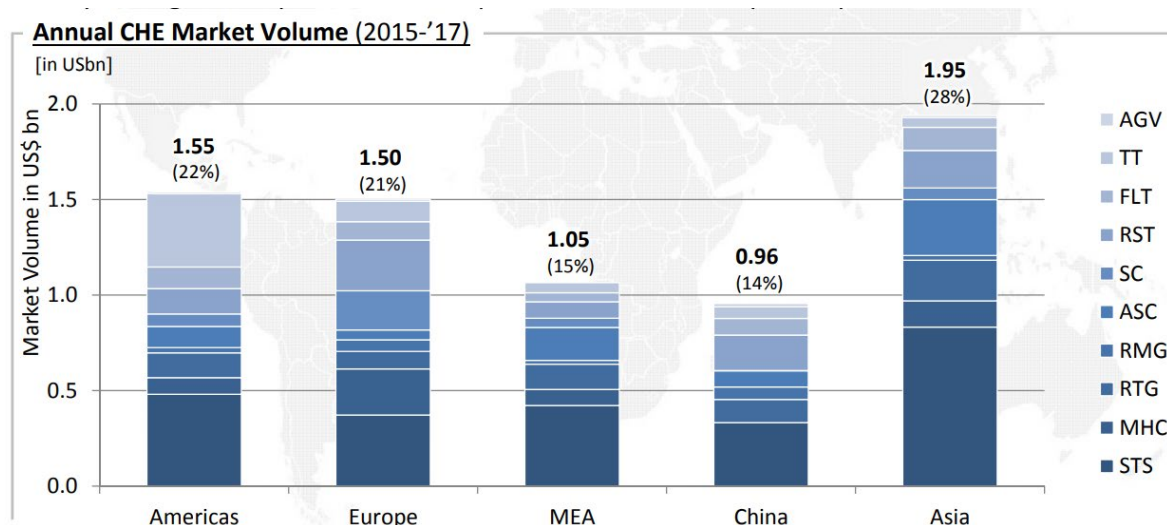
¹⁴ DS Research (January 2020), Container Terminal Foresight 2024, p 4.

¹⁵ Replacement refers to units sold to replace the same type of equipment at the end of operational lifetime.

¹⁶ DS Research (January 2020), Container Terminal Foresight 2024, p 5.

2.5 Figure 3 below shows the market between 2015 and 2017 split by region and by type of CHE.

Figure 3: Percentage shares of global sales revenues by CHE type and region



Source: DS Research (January 2020), Container Terminal Foresight 2024, p 19.

2.6 The CTF Market Report estimates that the throughput¹⁷ of containers at maritime ports in the period from 2005 to 2019 increased by a compound annual growth rate (CAGR) of 5.5%. Table 1 below shows the comparable CAGR in the number of units in operation of different types of CHE.

Table 1: Compound annual growth rate of operational CHE units and comparison with throughput from 2005 to 2019

CAGR type	Operational units CAGR	Difference in percentage points between operational units CAGR and 5.5% throughput CAGR
Quay Cranes		
Ship-to-Shore Cranes	4.1% ¹⁸	-1.4%
Mobile Harbour Cranes	5.4% ¹⁹	-0.1%
Yard Cranes		
Rubber-Tyre Gantry Cranes	5.5% ²⁰	0%
Rail-Mounted Gantry Cranes	3.4% ²¹	-2.1%
Shuttle Carriers	0.9% ²²	-4.6%

Source: DS Research (January 2020), Container Terminal Foresight 2024.

2.7 In this section, we provide high-level information, including some headline revenue and volume statistics, on the following broad categories of CHE:

(a) Quay cranes;

¹⁷ Throughput refers to the quantity of TEUs loaded or unloaded from vessels at maritime ports.

¹⁸ DS Research (January 2020), Container Terminal Foresight 2024, p 21.

¹⁹ DS Research (January 2020), Container Terminal Foresight 2024, p 32.

²⁰ DS Research (January 2020), Container Terminal Foresight 2024, p 39.

²¹ DS Research (January 2020), Container Terminal Foresight 2024, p 49.

²² DS Research (January 2020), Container Terminal Foresight 2024, p 64.

- (b) Yard cranes;
- (c) Horizontal Transport Equipment; and
- (d) Mobile Equipment.

Quay cranes

2.8 Quay cranes comprise ship-to-shore cranes (STS) and mobile harbour cranes (MHC):

- (a) STS are used to move containers from ships to the quayside.
- (b) MHC are quayside cranes used for loading and unloading ships.

2.9 From a global perspective, STS is the dominant type of quay crane (with around 5,900 units), loading and unloading around 90% of all containers.²³

2.10 The CTF Market Report remarks that, '[a]gainst the background of an ever-growing fleet of STS cranes, the replacement business gets more important'. It estimates that the number of replacement units increased from annually five to ten units in the early 1990s, to roughly 40 to 50 units in the early 2000s, and to around 110 units today, which corresponds to around one-half of annual sales.²⁴

2.11 The CTF Market Report estimates that the MHC market comprises around 8% of the total CHE market.²⁵

2.12 Smaller MHCs with a lift capacity below 65 tonnes have increasingly been replaced by other types of cranes, with sales declining from around 40% of MHC sales in 2000 to around 10% in 2019.²⁶

Yard cranes

2.13 Yard cranes (also known as Gantry Cranes) comprise rubber-tyre gantry cranes (RTG), rail-mounted gantry cranes (RMG), and automated stacking cranes (ASC):

- (a) RMG are common in large container terminals and are used to transport and stack containers. They are mounted on rails.

²³ DS Research (January 2020), Container Terminal Foresight 2024, p 11.

²⁴ DS Research (January 2020), Container Terminal Foresight 2024, p 27.

²⁵ DS Research (January 2020), Container Terminal Foresight 2024, p 32.

²⁶ DS Research (January 2020), Container Terminal Foresight 2024, p 32.

(b) RTG are mounted on tires and are used for handling containers in and from the stack. They can be driven from stack to stack and are therefore more flexible than RMG.

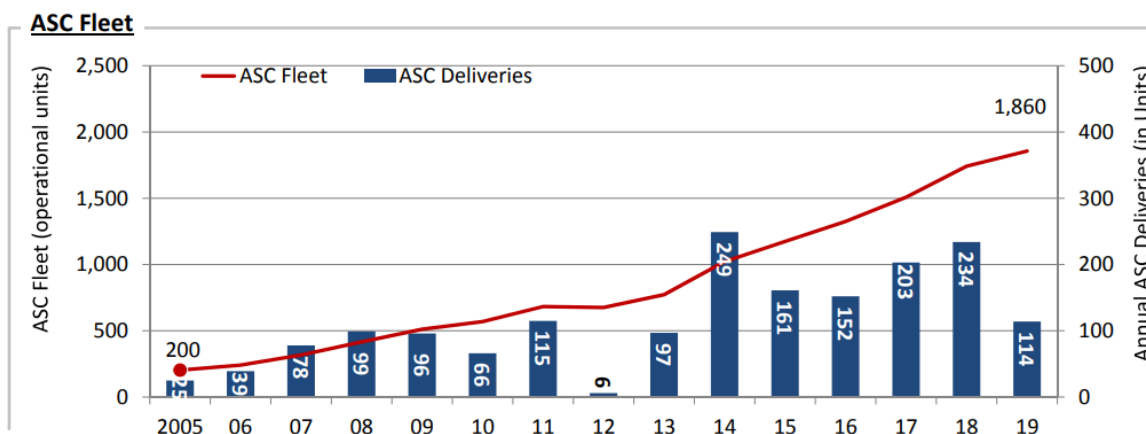
(c) ASC are an automated (driverless) version of RMG. They perform both transport and stacking functions.²⁷

2.14 RTG are the dominant type of yard crane (with around 10,000 units), loading and unloading the majority of containers.²⁸

2.15 The CTF Market Report states that, in the past several years, there has been a trend towards RTGs being substituted with ASCs for new terminal projects and major expansion projects²⁹ The operational ASC fleet and deliveries between 2005 and 2019 is illustrated in Figure 4.

2.16 An article in the November 2020 edition of World Cargo News states that '[t]he rail-mounted yard crane market continues to grow, and deliveries in 2020 were more than double the level of 2019, at 298 cranes [264 ASCs and 34 RMGs]. Some 343 ASCs and RMGs are on order for delivery in 2021 and beyond'.³⁰

Figure 4: Global ASC fleet (operational units) and deliveries from 2005 to 2019



Source: DS Research (January 2020), Container Terminal Foresight 2024, p 58 (chart legend corrected by the CMA).

²⁷ See more details about the characteristics and functions of each of these cranes in Chapter 6.

²⁸ DS Research (January 2020), Container Terminal Foresight 2024, p 11.

²⁹ DS Research (January 2020), Container Terminal Foresight 2024, p 39.

³⁰ World Cargo News (November 2020), p 37.

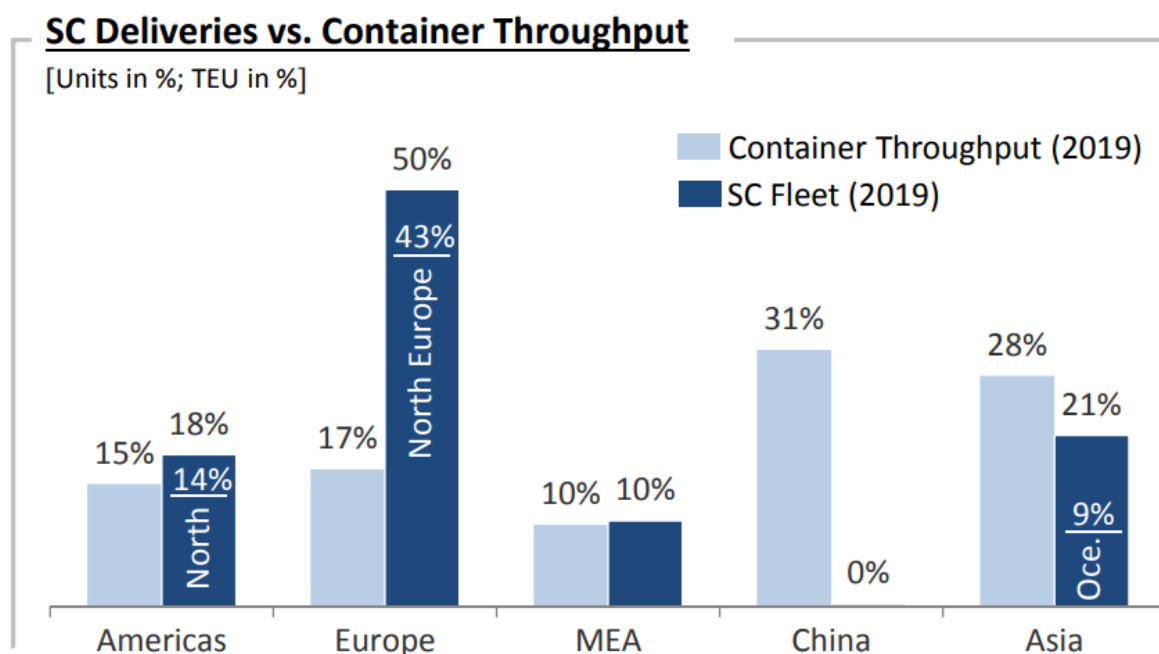
Horizontal Transport Equipment

2.17 Horizontal Transport Equipment comprises straddle carriers (SC), shuttle carriers (ShC), automated guided vehicles (AGV) and terminal tractors (TT).³¹

2.18 The CTF Market Report estimates that the number of operational SC has been broadly stable in recent years, increasing from around 3,600 units in 2005 to around 3,800 units by the end of 2019, achieving a 0.9% CAGR in the period versus a 5.5% CAGR for container throughput, as illustrated in Figure 5.³² It gives the following reasons for the stable market development:

- (a) 'Few new terminal projects choose SC as [horizontal transport equipment], resulting in SC sales mainly driven by replacement demand'.
- (b) 'SC-operating terminals are mainly located in "low growth" regions, such as North America, Europe and Oceania'.³³

Figure 5: Regional distribution of SC deliveries and container throughput in 2019



Source: DS Research (January 2020), Container Terminal Foresight 2024, p 69.

³¹ See more details about the characteristics and functions of each of these cranes in Chapter 6.

³² DS Research (January 2020), Container Terminal Foresight 2024, p 64.

³³ DS Research (January 2020), Container Terminal Foresight 2024, p 64.

Mobile Equipment

- 2.19 Mobile Equipment comprises reach stackers (RS), empty container handlers (ECH), forklift trucks (FLT).³⁴
- 2.20 Cargotec has estimated the global revenues and units sold for each type of Mobile Equipment in 2020. This information is shown in Table 2 below.

Table 2: Cargotec's assessment of Mobile Equipment global 'market' size by revenue and volume

Type of Mobile Equipment	Total 'market'* size / € million	Total 'market' size / units	Average unit price / € thousand†
RST	614	1,908	322
ECH	139	732	190
FLT	597	3,162	189
Spreaders	86	2,770	31

Source: [3X]

Notes:

* In the context of this information, 'market' refers to the market determined by Cargotec.

† Total 2020 'market' size divided by the number of units.

- 2.21 Mobile Equipment is sold to maritime ports³⁵ and other industrial customers (eg in warehouses or industrial applications for other cargo types, such as in paper mills and steel mills).

Spreaders

- 2.22 Spreaders are the piece of CHE used to grip containers. This function is typically based on a hydraulic or electric pump and steel glide plates. Spreaders are used in all types of port cranes (eg STS cranes, Gantry Cranes, MHC cranes, etc), some Mobile Equipment (RS and container handlers) and some horizontal transport equipment (SC and ShC).

CHE supply chain

- 2.23 Based on the evidence we have obtained, we understand that the supply of CHE is largely an assembly business, whereby suppliers source components from third parties rather than manufacturing components themselves.
- 2.24 Large CHE (such as quay cranes, yard cranes and horizontal transport equipment) is typically sold directly to container handling terminals.
- 2.25 Mobile Equipment may be leased, sometimes in collaboration with financial services providers.

³⁴ See more details about the characteristics and functions of each of these cranes in Chapter 6.

³⁵ See list of UK terminal ports in paragraph 2.40.

- 2.26 Some suppliers of CHE also act as distributors. For example, in certain countries, Konecranes supplies manual TT as a distributor of the Dutch supplier, Terberg.
- 2.27 Customers seeking to procure quay cranes, yard cranes or horizontal transport equipment largely use formal tender processes due to the specialist nature of these products, which are often designed and priced separately for each customer, with the final price dependent upon the specification, number of units and delivery location.³⁶
- 2.28 By contrast, customers seeking a small number of Mobile Equipment units on an *ad hoc* basis (for example, industrial customers) do not generally use formal tender processes.³⁷

Maintenance and servicing

- 2.29 After-sales services include services such as preventive maintenance inspections, routine maintenance to adjust and lubricate equipment, compliance inspections to satisfy regulatory and safety requirements, repairs and retrofits, modernisations, as well as the supply of spare parts.
- 2.30 CHE is usually in heavy use, sometimes continuously day and night, which makes regular maintenance and servicing necessary, and this is also important from an operational perspective. Customers usually demand a high degree of responsiveness and expect to receive maintenance and repair services for all types of CHE at short notice. From a container handling terminal operator's perspective, it is important that planned and unplanned downtimes are kept to the minimum to avoid significant disruptions to operations.
- 2.31 After-sales services are provided to customers by original equipment manufacturers (OEMs), distributors or other third parties. Some customers develop their own in-house expertise to perform repair and maintenance of their own CHE.
- 2.32 We provide more detail about the importance of servicing and maintenance in relation to each type of CHE in our competition assessment in Chapters 7, 8 and 9.

³⁶ Parties response to the CMA Phase 1 Decision, 23 July 2021, paragraph 5.2.

³⁷ Parties response to the CMA Phase 1 Decision, 23 July 2021, paragraph 5.4.

Utilities procurement rules

- 2.33 The Government sets thresholds which apply to the award of contracts or framework agreements by ports,³⁸ above which certain advertising and tendering rules apply.³⁹
- 2.34 Contracts by contracting authorities and utilities within the European Union and in the UK which fall within the scope of public procurement rules must be advertised in an 'open and transparent manner' so as to ensure equal access to contract opportunities. This requires contracts to be advertised in prescribed forms in the UK e-notifications service.

Impact of UK Exit

- 2.35 As a consequence of the UK leaving the European single market and customs union, the UK now has autonomy over the technical regulations, standards and conformity assessment procedures required to place products on the UK market.⁴⁰
- 2.36 As part of our competitive assessment, we asked third parties about their perceptions of the impact of the UK's exit from the European single market and customs union on the container handling industry. While third-party views were mixed, there was no consensus that it created significant trade barriers in the UK and this corresponds with our provisional conclusions based on the facts and evidence.

CHE customers

- 2.37 The Parties' CHE is used by container handling terminals, including maritime, river and inland terminals. Some of these terminals are managed by global terminal operators (GTO) which have locations in more than one country. Some types of CHE, such as Mobile Equipment are also used by customers in other industries.
- 2.38 Suppliers of CHE generally differentiate between 'greenfield' projects (new container handling terminals) and 'brownfield' projects (upgrades or expansions of existing operations).⁴¹

³⁸ Entities covered include public and private undertakings which carry on activities relating to the exploitation of a geographical area for the purpose of the provision of maritime or inland ports or other terminal facilities to carriers by sea or inland waterway.

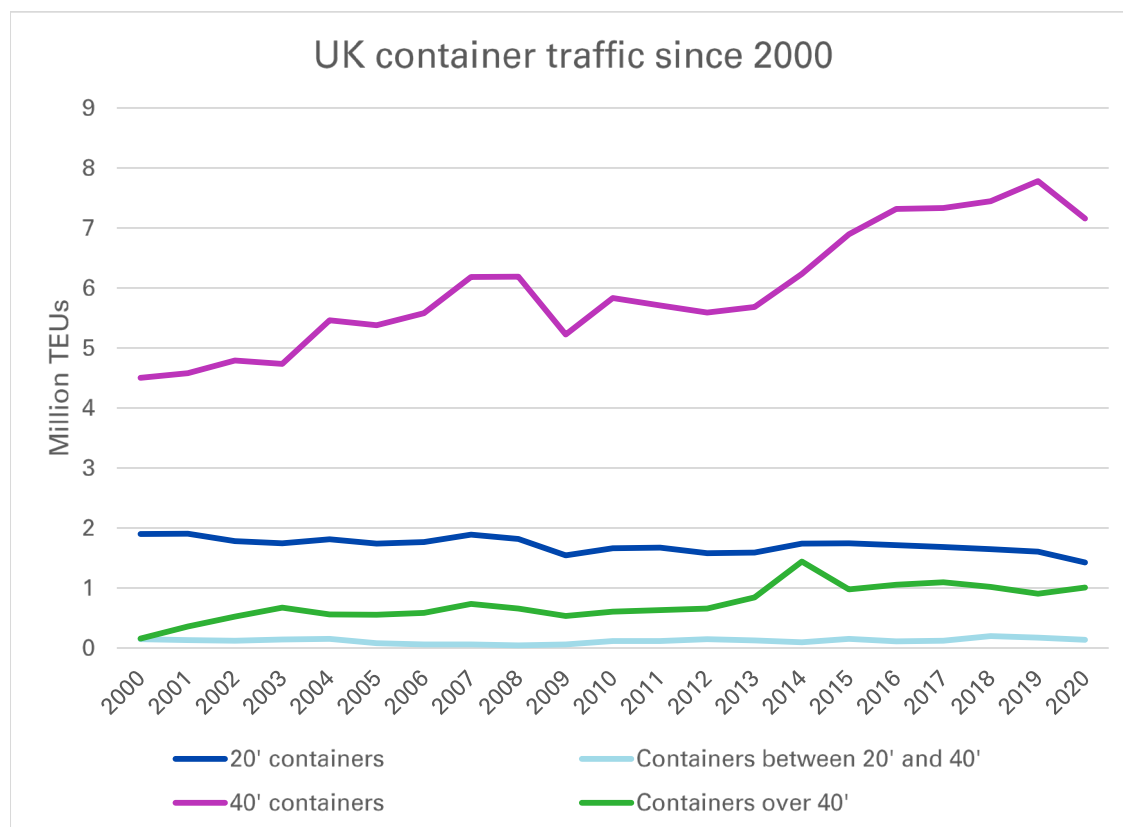
³⁹ In England, Wales and Northern Ireland: the Utilities Contracts Regulations 2016; and in Scotland: the Utilities Contracts (Scotland) Regulations 2016.

⁴⁰ Cabinet Office (July 2021), Policy Paper: The UK's new relationship with the EU.

⁴¹ DS Research (January 2020), Container Terminal Foresight 2024, p 2.

2.39 A provider of research and consulting services, Dewry, estimates that 21 companies (which it classifies as global or international terminal operators) account around two-thirds of global container throughput.^{42,43} As illustrated in Figure 6, over the last 20 years, the number of containers 40 foot⁴⁴ in length which have gone through UK major ports has increased at a CAGR of around 5%.⁴⁵

Figure 6: UK container traffic since 2000 by container size, in millions of twenty-foot equivalent units (TEU)



Source: [Department for Transport \(2020\), Annual Port Freight Statistics](#), p 11 (CMA analysis of data)

2.40 Table 3 below shows the largest container handling terminals in the UK.

⁴² Throughput refers to the quantity of TEUs loaded or unloaded from vessels at maritime ports.

⁴³ Dewry (2020), Global Container Terminal Operators, Annual Review and Forecast 2020/21, p 4.

⁴⁴ There are different sizes of container box. The International Standards Organisation has published standardised dimensions so that space is used efficiently. The most common sizes of container are as follows: a) Length: 20 feet or 40 feet; b) Height: 8 feet 6 inches; c) Width: 8 feet. The standardised measure used is twenty-foot equivalent units (TEU), where one 40 foot container equals two TEU (see GlobalSpec, Engineering 360, ISO Containers).

⁴⁵ [Department for Transport \(2020\), Annual Port Freight Statistics](#), p 11 (CMA analysis of data).

Table 3: UK ports sorted by millions of container tonnage in 2020

<i>Port name</i>	<i>Millions of container tonnage in 2020</i>	<i>Container handling terminal operator</i>
Felixstowe	19.19	Hutchison Ports
London*	15.35	DP World
Southampton	8.42	DP World
Liverpool	5.89	Peel Ports
Teesport	2.83	PD Ports
Forth	2.16	Forth Ports Group
Hull	2.15	ABP
Grimsby & Immingham	2.08	ABP
Belfast	1.57	Belfast Harbour
Bristol	0.82	The Bristol Port Company
Clyde	0.53	Peel Ports
Medway	0.31	Peel Ports
Portsmouth	0.29	Portsmouth City Council
Tyne	0.26	Port of Tyne
Warrenpoint	0.22	Warrenpoint Harbour Authority
Dover	0.06	Dover Harbour Board
Aberdeen	0.02	Aberdeen Harbour

Source: [Department for Transport \(2020\), Annual Port Freight Statistics](#), p 6 (CMA analysis). [UK Major Ports Group website, Members' Ports](#).

Notes:

* Port of London includes London Gateway.

2.41 Hutchison Ports and DP World are GTO.

2.42 There are no greenfield container handling terminals in the UK, however, Teesport has significantly expanded with £120 million of investment over the past decade and 12% growth in year on year container volume in recent years. [§].

Industry trends

2.43 We set out below some of the main industry trends which provide context for our competition assessment.

2.44 The Parties identified the following main trends in the industry:

- (a) the expansion of state-owned Chinese competitors;
- (b) the customers' demand for sustainable products which reduce their carbon emissions;
- (c) a drive towards digitalisation, automation and electrification (at least in part driven by b)), and
- (d) the consolidation of customers.

2.45 We briefly introduce some of these trends below. The Parties' submission about the expansion of state-owned Chinese competitors and consolidation of customers is taken into account in our competitive assessment. The competitive position of the Parties and their competitors in the context of these trends is also considered in the competitive assessment.

Digitalisation

- 2.46 Digitalisation refers to the communication and recording of information, including connections between digital platforms and CHE usage data.
- 2.47 Digitised, ie more 'intelligent', CHE generally relates to equipment using various types of sensors that gather all kinds of data and feed dedicated software. Today, almost all new CHE has sensors and software pre-installed; older equipment is often upgraded with such sensors and systems and thus can be made (almost) equally 'intelligent'. This applies to all types of CHE, ie cranes, horizontal transport and Mobile Equipment. Certain sensors, for instance, are used to detect how much traction or speed is needed for particular tasks and thus can increase the equipment's energy efficiency.
- 2.48 Equipment users, eg port and terminal operators, generally have the possibility and are keen to utilize the data generated by the equipment they operate. Gathering data from CHE allows port operators (or other customers) to run data analytics and thus plan port operations more efficiently, eg by coordinating the interactions of their CHE better.

Automation

- 2.49 Automation refers to CHE which can fulfil its certain functions in an autonomous fashion (with less or without a human operator). There are varying degrees of automation, ranging from, eg certain automated features at equipment level to remotely controlled or even fully automated 'smart' equipment units. Even manual equipment is comparably 'smart' nowadays as there is various technology built into the equipment to enhance safety, precision, operability, etc machines are typically only considered (fully) automated when they can be operated without any (or at least only limited) human involvement (be it an on-board driver or a remote operator). This is what is generally referred to as automated equipment. Automation may involve a degree of human operation or supervision.
- 2.50 CHE can be equipped with automated capabilities when it is manufactured or by retrofitting existing CHE with components, accessories or software.⁴⁶
- 2.51 CHE can be controlled using equipment control systems (ECS). This is a software solution that monitors and guides automated CHE. Container

⁴⁶ Konecranes, Port Services, Retrofits [online], available at <https://www.konecranes.com/service/port-services/retrofits> [accessed 23/11/2021].

handling terminals use terminal operating systems (TOS) to manage their operations.

2.52 The implementation of automated operations generally requires three different layers of automation:

- (a) The equipment layer, ie automated equipment uses certain features (eg sensors, cameras, on-board control software systems) that are built into the equipment and are a prerequisite for automated operations. These features vary between equipment types.
- (b) The ECS layer, ie the software that monitors and guides the automated equipment fleet to operate in a safe and efficient manner. The ECS layer is downwards integrated into the equipment layer and upwards integrated into the TOS.
- (c) The TOS layer, the TOS controls the logistics of a terminal and plan and optimises container movements and storage at a terminal, as well as the use of assets and labour.

2.53 The benefits of automation are typically said to be greater productivity, greater safety, and cost savings. One third party, for example, told us that automation is important for cranes 'due to the reduction of labour'.

2.54 One third party told us that it is important for container handling terminal productivity that there is a 'symbiotic relationship' across its ECS and TOS.

2.55 The CTF Market Report states that the CHE market will be driven by:

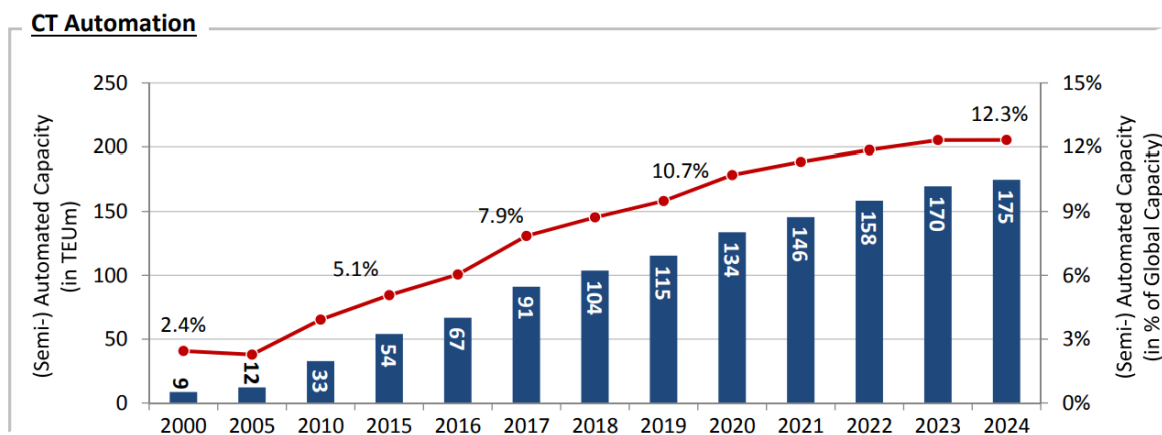
- 47% new terminal business (demand arising from new terminals and capacity expansions).
- 53% replacement demand (increasing replacement demand for outworn equipment at existing terminals).
- The shift towards ASCs and, to a lesser extent, AGVs.
- The trend towards electrification (for example, electric RTGs).⁴⁷

2.56 Whilst there is a clear industry trend towards automation, its rate of adoption and impact appears to be uncertain. Konecranes published a video in 2018 stating that reasons for a slow uptake of automated CHE include:

⁴⁷ DS Research (January 2020), Container Terminal Foresight 2024, p 87.

- (a) 'the difficulty of safely separating man and machine within the automated handling process'; and
- (b) 'how the technology must handle the rough operating conditions of RTG yards'.⁴⁸

2.57 The CTF Market Report states that the global capacity of semi-automated container terminals has increased from around 2.4% of global capacity to 12.3% of global capacity in 2020, as illustrated in Figure 7 below.



Source: DS Research (January 2020), Container Terminal Foresight 2024, p 6.

2.58 The CTF Market Report states that, '[t]he trend towards terminal automation is inevitable, considering 50% of terminal operating costs are personnel costs. We expect that at least 30% of the new build capacity will include some sort of automated equipment'.⁴⁹

Electrification

2.59 The European Commission has published targets for the reduction of greenhouse gas emissions and percentage of energy consumed to come from renewable sources.⁵⁰

2.60 The UK government has set a target of reducing emissions by 78% by 2035 compared to 1990 levels.⁵¹

⁴⁸ Konecranes, (2018), Konecranes ARTG system version 2.0 [online], available at: <https://youtu.be/kHlt0v5MX8g> [accessed 23/11/2021].

⁴⁹ DS Research (January 2020), Container Terminal Foresight 2024, p 1.

⁵⁰ European Commission, Climate action [online], available at: https://ec.europa.eu/info/topics/climate-action_en [accessed 23/11/2021].

⁵¹ Department for Business, Energy & industrial Strategy (April 2021), UK enshrines new target in law to slash emissions by 78% by 2035 [online], available at: [UK enshrines new target in law to slash emissions by 78% by 2035 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035) [accessed 23/11/2021].

- 2.61 Some CHE suppliers are responding to customer demand for low or zero emission CHE by researching and developing new products which are purely electric driven.
- 2.62 Some suppliers have already developed electric options for some types of CHE and are increasingly developing such options across their products. Generally, smaller equipment, such as forklift trucks, and equipment that can be attached to the power grid is electrified first.
- 2.63 Although electrification and automation are technically independent from each other, electrification efforts are – to a certain extent – also driven by increased automation, given that automated equipment almost exclusively uses electric or hybrid drives.

3. The Parties, the transaction and the Relevant Merger Situation

Introduction

- 3.1 On 1 October 2020, Cargotec and Konecranes entered into a Combination Agreement and Merger Plan (the Merger).

The Parties

Cargotec

Company information and ownership

- 3.2 Cargotec is headquartered in Finland.⁵² Its 'B' class shares are listed on the Nasdaq Helsinki.⁵³ Its global consolidated revenue in 2020 was €3.26 billion,⁵⁴ and its UK revenue in 2020 was €[X] billion.

⁵² See <https://www.cargotec.com/en/investors/shareholders/shareholders>

⁵³ Cargotec's A shares are owned by the following major shareholders: Wipunen Varainhallinta Oy, Finland 14.13%, Mariatorp Oy, Finland 12.27%, Pivosto Oy, Finland (10.73%). The three main shareholders Wipunen Varainhallinta Oy, Mariatorp Oy, Pivosto Oy are investment companies owned by family members Ilkka Herlin, Niklas Herlin (deceased in 2017, Mariatorp now owned by his heirs) and Ilona Herlin respectively. Each investment company has between 22% and 24% voting rights in Cargotec. In addition, the three heirs each have a minority participation in Kone, an elevator and escalators company controlled by Antti Herlin.

⁵⁴ Cargotec, Annual Report 2020, p 60. See <https://www.cargotec.com/49262c/globalassets/files/investors/interim-reports/2020/cargotec-annual-report-2020-web.pdf>.

Main activities

- 3.3 Cargotec is active in the supply of material flow solutions. It operates in 46 countries and has three main divisions (2020 revenue shown in brackets):
- (a) **Kalmar**: Cargo handling equipment and terminal solutions (€1.53 billion);
 - (b) **Hiab**: On-road load handling equipment (€1.09 billion); and
 - (c) **MacGregor**: Solutions and services for the maritime industry (€0.6 billion).⁵⁵
- 3.4 Cargotec also supplies spreaders for cranes and Mobile Equipment through its wholly owned subsidiary, Bromma.
- 3.5 Cargotec makes supplies of CHE through its Kalmar division and Bromma subsidiary.
- 3.6 The Parties' main overlap is in the supply of CHE, which is the business activity of Cargotec's 'Kalmar' division.
- 3.7 Cargotec assembles its Gantry Cranes at one location in China. It assembles all of its straddle and shuttle carriers in one facility in Poland, where it also assembles terminal tractors (in addition to terminal tractor production in North America). All of Cargotec's Mobile Equipment is assembled in Poland and China.

Financial performance

- 3.8 Table 4 below outlines Cargotec's revenue and operating profit since 2016.

Table 4: Cargotec's Revenue and Operating profit (2016-2020)

	2016	2017	2018	2019	2020
Revenue / €bn	3.51	3.28	3.30	3.68	3.26
Operating Profit / €bn	0.20	0.23	0.19	0.18	0.07
Operating Profit Margin	6%	7%	6%	5%	2%
Shareholders' Equity / €bn	1.40	1.43	1.43	1.43	1.30

Source: [☒].

⁵⁵ Cargotec, Annual Report, 2020, page 5. See <https://www.cargotec.com/49262c/globalassets/files/investors/interim-reports/2020/cargotec-annual-report-2020-web.pdf>.

Konecranes

Company information and ownership

3.9 Konecranes is headquartered in Finland. Its shares are listed on the Nasdaq Helsinki.⁵⁶ Its global consolidated revenue in 2020 was €3.18 billion, and its UK revenue in 2020 was approximately £[€] million.⁵⁷

Main activities

3.10 Konecranes is active in lifting solutions for manufacturing and process industries, shipyards, ports and terminals. This includes, industrial cranes and hoists, port handling equipment, and industrial services. It has local subsidiaries in around 50 countries and has three main divisions (2020 revenue shown in brackets):

(a) **Port Solutions:** Cranes for containers in marine/inland terminals and Mobile Equipment (€1.07 billion);⁵⁸

(b) **Industrial Equipment:** Overhead cranes and hazardous environment cranes and hoists, lifting systems (€0.97 billion);⁵⁹ and

(c) **Service:** Servicing and spare parts (€1.19 billion).⁶⁰

3.11 Konecranes makes supplies of CHE through its Port Solutions division.

3.12 Konecranes assembles Gantry Cranes in China and Europe (Croatia, Finland and Poland). It assembles its entire straddle carrier, shuttle carrier and AGV fleet in Germany, while Mobile Equipment is assembled in Sweden and China.

Financial performance

3.13 Table 5 below outlines Konecranes' revenue, operating profit, and shareholders' equity since 2016.

⁵⁶ Konecranes' main shareholders are as follows: HC Holding Oy (10.01%), Solidium Oy (8.51%), Keskinainen Eläkevakuutusyhtiö Ilmarinen (2.85%), and others (78.63%). (Parties presentation to the CMA on 5 March 2021, page 4.). See <https://www.cargotec.com/en/investors/shareholders/shareholders>.

⁵⁷ €[€]million, approximately GBP [€] million using the European Central Bank's 2020 year-end average exchange rate of 0.8897.

⁵⁸ Konecranes Financial Review 2020, page 39. www.cargotec.com/en/investors/shareholders/shareholders

⁵⁹ Konecranes Financial Review 2020, page 38. www.cargotec.com/en/investors/shareholders/shareholders

⁶⁰ Konecranes Financial Review 2020, page 37. www.cargotec.com/en/investors/shareholders/shareholders

Table 5: Konecranes' Revenue and Operating profit (2016-2020)

	2016	2017	2018	2019	2020
Revenue / €bn	2.12	3.14	3.16	3.33	3.18
Operating Profit / €bn	0.08	0.32	0.17	0.15	0.17
Operating Profit Margin	4%	10%	5%	5%	5%
Shareholders' Equity /€bn	0.45	1.26	1.27	1.24	1.24

Source: [REDACTED].

Overlap

- 3.14 The Parties overlap with regard to after-sales services and spare parts supply; terminal consultancy services; sale of used CHE and short-term rentals; and terminal software and automation.
- 3.15 The Parties have overlapping service sites located in [REDACTED] cities.
- 3.16 The Parties submitted that they do not overlap with regards to the supply and/or servicing of industrial cranes and hoists.

The transaction

Timeline of key events

- 3.17 Konecranes told us that, over the past ten or more years, the Parties have occasionally been in contact with each other to explore possibilities for combining their 'Ports' businesses. It stated that these 'contacts have been based on the assumption of [REDACTED]'. However, 'the contacts never led to any concrete steps in the past for various reasons, such as [REDACTED]'.
- 3.18 Cargotec told us that [REDACTED]. However, [REDACTED].
- 3.19 The Parties submitted that the key events leading up to the Combination Agreement and Merger Plan were as follows:
- (a) **February/March 2020:** Initial exploratory discussions between the two main shareholders of the Parties who 'recommended to the Parties' respective boards that they investigate the feasibility of the possible combination.
- (b) **April 2020:** The Parties first discussed entering into some form of commercial cooperation agreement in late April when Cargotec's board first approached Konecranes regarding a potential friendly combination. The Parties subsequently engaged in more detailed discussions about a potential merger of two equal parties, including by appointing joint advisors.

- (c) **October 2020:** The Parties entered into the Combination Agreement.
- (d) **December 2020:** The Parties' extraordinary meetings approved the Merger Plan.

Transaction terms

- 3.20 On 1 October 2020, the Parties entered into a Combination Agreement and Merger Plan. The Parties consider the Merger to be a 'merger of equals'. The Merger would be implemented as a statutory absorption merger pursuant to the Finnish Companies Act. On completion of the Merger, all assets and liabilities of Konecranes would be transferred without a liquidation procedure to Cargotec. Konecranes shareholders would receive newly issued shares in Cargotec as consideration for the Merger, giving them approximately 50% of the shares and votes of the Merged Entity.
- 3.21 The long-stop date for the Merger to be completed is 30 June 2022.

Rationale for the Merger

Parties' submissions

- 3.22 The Parties submitted that the Merger would:
- (a) bring 'together largely complementary offerings across Cargotec's and Konecranes' businesses in industries, factories, ports, terminals, road and sea-cargo handling'; and
 - (b) give the ability to the Merged Entity to:
 - (i) 'create a more efficient cost-structure which is necessary to compete effectively on a global market dominated by cost-efficient and State-backed Chinese players'; and
 - (ii) 'further enhance its R&D capabilities and to provide a European platform for innovation, digitalisation and automation as well as sustainability and electrification'.
- 3.23 The Parties told us that the Merger would lead to estimated full annual run rate savings of [X] from [X], of which:
- (a) [X] would relate to the 'ports business' of the Merged Entity; and
 - (b) [X].

3.24 The evidence we have seen indicates that the Parties expect the following savings to be realised:

(a) Around [REDACTED] in relation to procurement costs.

(b) Around [REDACTED] in relation to general and administration costs.

3.25 The Parties claimed that the Merged Entity would ‘cover an even wider part of the value chain with its offering, thereby enabling it to serve customers more efficiently with end-to-end services’.

Evidence relating to Cargotec’s rationale

3.26 An internal Cargotec document dated 27 April 2020 (around the beginning of the Parties’ initial merger discussions)⁶¹ states that the Merger:

(a) ‘[REDACTED]; and

(b) ‘[REDACTED]’.

3.27 This document states that the acquisition of Konecranes’ ‘Port Solutions’ ‘[REDACTED]’, however, ‘[REDACTED]’.

Evidence relating to Konecranes’ rationale

3.28 A report prepared by McKinsey & Company dated 16 June 2020 (around two months after the Parties entered into discussions regarding the Merger) includes the following statements:

(a) ‘In [the] case of a potential merger [between Cargotec and Konecranes], [REDACTED]’.

(b) ‘[REDACTED]’.

3.29 The Parties told us that this report, ‘[REDACTED]’.

Evidence gathered on synergies

3.30 The Parties’ Synergy Assessment sets out a vision for the Merged Entity [REDACTED]:

(a) [REDACTED].

⁶¹ This document was produced at an early stage in the Parties’ due diligence process. We consider the statements made in this context.

Revenue synergies

3.31 A report prepared by Bain & Company, management consultants, on behalf of Konecranes dated 23 October 2020 (the same month as the Parties entered into the Merger) identifies [REDACTED]:

(a) [REDACTED].

(b) [REDACTED].

Combinational synergies

3.32 The McKinsey report with the initial results of the Merger Synergy Analysis states that the Merger ‘would create a leading Western player in the ports business with [a] stronger competitive position against the large Asian peers. Increased scale enabling to capture cost synergies’. It estimates that the Merged Entity would ‘have a combined synergy potential of [REDACTED]’. The document states that the biggest synergies are expected to arise from a reduction in the following costs:

(a) [REDACTED];

(b) [REDACTED].

3.33 This report states that there are ‘[h]ighly overlapping logistics networks’.⁶²

3.34 The Parties’ Merger Announcement states that the Merged Entity’s preliminary financial targets include the following:

(a) ‘Above-market sales growth’;

(b) ‘Reaching >10% comparable operating margin’;

(c) Synergies greater than €100 million; and

(d) Gearing less than 50%.⁶³

⁶² [Third party report]. We note the Parties’ submission that ‘[t]he report represents a high-level financial but not operational assessment on behalf of McKinsey, on the basis of assumptions and financial models relying on input which the Parties have not been able to validate’. We have not placed significant weight on this evidence, but this analysis is still relevant as a third party report relying on detailed financial information this consultant had access to.

⁶³ Cargotec (October 2020), Cargotec and Konecranes to merge creating a global leader in sustainable material flow [online], available at www.cargotec.com/en/nasdaq/stock-exchange-release-kalmar-hiab-macgregor/2020/cargotec-and-konecranes-to-merge-creating-a-global-leader-in-sustainable-material-flow/ [accessed 23/11/2021].

Transformational synergies and improvement programs

3.35 In addition to the above combination synergies, the initial report on the Synergy Analysis includes the following 'initial list of transformational synergies' which it classifies as being 'merger-specific':

(a) [REDACTED]

(i) [REDACTED];⁶⁴

(ii) [REDACTED]; and

(iii) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED]

(i) [REDACTED];

(ii) [REDACTED];

(iii) [REDACTED].

(e) [REDACTED].

(f) [REDACTED].

3.36 The Parties told us that the report prepared by McKinsey & Company, 'represents a high-level financial – but not operational – assessment by McKinsey, on the basis of their own assumptions and financial models relying on input which the Parties have not been able to validate. Also, for the R&D analysis, McKinsey relied for the most part on third party sources and other assumptions. This document therefore does not reflect the management view of either Party'.

3.37 Furthermore, the Parties told us that, '[REDACTED]. However, the Parties anticipate that an important part of the deal rationale is to ensure that the parties are better placed to address sustainability challenges in the industry, by providing a platform for innovation in automation, robotics, electrification and digitalization. The Transaction will allow the Merged Entity to develop innovative products at an accelerated rate (as compared to each Party alone)

⁶⁴ Konecranes submitted that [REDACTED].

and so to meet intense competition from American, European and Asian suppliers who are currently outpacing the Parties’.

3.38 Based on the evidence we have seen, the combinational synergies identified by the Parties appear to largely come from procurement and corporate functions and management cost removal.

Relevant merger situation

3.39 Following the reference to phase 2 of the Merger, the CMA is required to determine on the balance of probabilities whether the Merger, if carried into effect, would result in a relevant merger situation (RMS)⁶⁵ (the jurisdictional test).

3.40 Sections 23 and 24 of the Act set out two criteria required for the existence of an RMS.

(a) Firstly, two or more enterprises must cease to be distinct;⁶⁶ and

(b) Secondly, either:

(i) the value of the turnover in the UK of the enterprise being taken over exceeds £70 million (the turnover test); or

(ii) the merged enterprises both supply or acquire goods or services of a particular description and will after the merger supply or acquire 25% or more of those goods or services in the UK (or a substantial part of the UK) (the share of supply test).⁶⁷

3.41 These two limbs are considered in turn below.

Enterprises ceasing to be distinct

3.42 The Act defines an ‘enterprise’ as ‘the activities or part of the activities of a business’. A ‘business’ is defined as ‘including a professional practice and includes any other undertaking which is carried on for gain or reward or which is an undertaking in the course of which goods are supplied other than free of charge’.⁶⁸

⁶⁵ Section 36(1)(a) of the Act.

⁶⁶ Defined in further detail in section 26 of the Act.

⁶⁷ Where an enterprise already supplies or acquires 25% of any particular goods or services, the test is satisfied so long as its share is increased as a result of the merger, regardless of the size of the increment (where there is no increment, the share of supply test is not met).

⁶⁸ Section 129(1) and (3) of the Act.

- 3.43 Cargotec and Konecranes are companies that operate as a going concern with the necessary assets, employees and customer contracts and therefore clearly satisfy the definition of an enterprise for the purposes of the Act.
- 3.44 The concept of 'ceasing to be distinct' is described in [section 26](#) of the Act. This provides that any two enterprises cease to be distinct if they are brought under common ownership or common control.⁶⁹ This is the case regardless of whether or not the business to which either of them formerly belonged continues to be carried on under the same or different ownership or control.
- 3.45 Pursuant to the Combination Agreement as well as the Merger Plan which the respective extraordinary general meetings of the Parties approved, the Merger would be implemented as a statutory absorption merger pursuant to the Finnish Companies Act whereby all assets and liabilities of Konecranes are transferred without a liquidation procedure to Cargotec.
- 3.46 Upon completion, Konecranes' shareholders will receive newly issued shares in Cargotec as merger consideration and Konecranes will automatically dissolve. Each of Konecranes and Cargotec's shareholders will own approximately 50% of the enlarged Cargotec.⁷⁰
- 3.47 Accordingly, in relation to the first limb of the jurisdictional test, the Merger is in contemplation and would, were it carried into effect, bring under common ownership Cargotec and Konecranes, enterprises which were previously separate and which would, as a result of the Merger 'cease to be distinct'. We therefore provisionally conclude that the first limb of the jurisdictional test is met.

UK nexus

- 3.48 The second limb of the jurisdictional test seeks to establish whether the Merger has sufficient connection with the UK. This connection can be met on the basis of either (i) the target company's turnover (ie the turnover test); or (ii) the Parties' combined 'share of supply' (ie the share of supply test).

⁶⁹ 'Control' is not limited to the acquisition of outright voting control but may include situations falling short of outright voting control. [Section 26](#) of the Act distinguishes three levels of interest (in ascending order): (i) material influence (ii) de facto control, and (iii) a controlling interest (also known as 'de jure', or 'legal' control). Since the circumstances of the present case fall within 'common ownership' we have not considered the issue of 'control' further.

⁷⁰ According to the Combination Agreement, the Transaction is conditional, inter alia, on receiving clearances from those 'jurisdictions where the threshold for a pre-merger control approval is met and which are required for the Completion'. This would include the European Union and US, but not the UK.

Turnover test

- 3.49 The turnover test is satisfied where the value of the turnover in the UK of the enterprise being taken over exceeds £70 million.
- 3.50 As referred to in paragraph 3.45 above, all of Konecranes' assets and liabilities would transfer to Cargotec as a result of the Merger. As a result, we consider that Konecranes is the enterprise being taken over for the purposes of the turnover test. Konecranes' turnover in the UK for the financial year of 2020 was £[redacted] million.⁷¹ Therefore, we provisionally conclude that the turnover test is met in this case.⁷²

Provisional finding

- 3.51 In the light of the above assessment, we provisionally conclude that the Merger would result in the creation of an RMS.

4. Counterfactual

Introduction

- 4.1 The counterfactual is an analytical tool used in answering the question of whether the merger gives rise to an SLC. It does this by providing the basis for a comparison of the prospects for competition with the merger against the competitive situation without the merger. The latter is called the counterfactual.⁷³

Framework for assessing the counterfactual

- 4.2 The CMA may examine several possible scenarios to determine the appropriate counterfactual. The counterfactual may consist of the prevailing conditions of competition, or conditions of competition that involve stronger or weaker competition between the merger firms than under the prevailing conditions of competition. The appropriate counterfactual may increase or reduce the prospects of an SLC finding by the CMA.⁷⁴

⁷¹ €[redacted] million, ie approximately £[redacted] million using the ECB's 2020 year-end average exchange rate of 0.8897. Alternatively, if the Merger is classified as a true merger, the turnover test is satisfied because the 2020 UK turnover of both Parties exceeds £70 million (Cargotec £[redacted] million (€[redacted] million) and Konecranes £[redacted] million). [Section 23\(1\)\(b\)\(i\)](#) of the Act. See CMA2, paragraph 4.59.

⁷² Data obtained in phase 2 confirms that the share of supply test is also satisfied (see for example Chapter 8, where the Merger results in an increment and the Parties' combined share of supply in the UK is 100%).

⁷³ [CMA129](#), paragraph 3.1.

⁷⁴ [CMA129](#), paragraph 3.9.

- 4.3 The CMA's conclusion on the counterfactual does not seek to ossify the market at a particular point in time.⁷⁵ A 'prevailing conditions of competition' counterfactual is not static and does not imply that the conditions of competition are expected to remain exactly the same as in the situation prior to the merger being contemplated by the parties (which we refer to below as the 'pre-merger' situation). Instead, the 'prevailing conditions of competition' refers to a scenario where the firms in the market continue to compete in broadly the same manner that they have done pre-merger, including any evolution in their competitive offerings, business models and customer propositions.
- 4.4 Three specific examples of situations where the CMA may use a different counterfactual from the 'prevailing conditions of competition' are:
- (a) entry or expansion by one of the merger firms;
 - (b) the exiting firm scenario; and
 - (c) where there are competing bids.⁷⁶
- 4.5 The CMA seeks to avoid predicting the precise details or circumstances that would have arisen absent the merger.⁷⁷ Establishing the appropriate counterfactual to assess the merger against is an inherently uncertain exercise and evidence relating to future developments absent the merger may be difficult to obtain. Uncertainty about the future will not in itself lead the CMA to assume the pre-merger situation to be the appropriate counterfactual.⁷⁸
- 4.6 The time horizon that the CMA considers when describing the counterfactual will depend on the context. In some markets, relevant developments may not take place for some years while in others the relevant time horizon for the counterfactual will be shorter.⁷⁹
- 4.7 The CMA is likely to only focus on significant changes where there are reasons to believe that those changes would make a material difference to its competitive assessment. If two or more possible counterfactual scenarios lead to broadly the same conditions of competition the CMA may not find it necessary to select the particular scenario that leads to its counterfactual.⁸⁰

⁷⁵ CMA129, paragraph 3.1.

⁷⁶ CMA129, paragraph 3.11.

⁷⁷ CMA129, paragraph 3.11.

⁷⁸ CMA129, paragraph 3.14.

⁷⁹ CMA129, paragraph 3.15.

⁸⁰ CMA129, paragraph 3.9.

- 4.8 As set out in the Merger Assessment Guidelines (CMA129), the CMA will generally conclude on the counterfactual conditions of competition broadly – that is, prevailing or pre-merger conditions of competition, conditions of stronger competition or conditions of weaker competition. If two or more possible counterfactual scenarios lead to broadly the same conditions of competition the CMA may not find it necessary to select the particular scenario that leads to its counterfactual.⁸¹
- 4.9 To help make an overall judgement as to whether or not an SLC has occurred or is likely to occur at phase 2, the CMA will select the most likely conditions of competition as its counterfactual against which to assess the merger. In some instances, the CMA may need to consider multiple possible scenarios before identifying the relevant counterfactual. In doing this, the CMA will consider whether any of the possible scenarios make a significant difference to the conditions of competition and, if any do, the CMA will find the most likely conditions of competition absent the merger as the counterfactual.⁸²

Counterfactual scenarios considered by the CMA

- 4.10 Based on the Parties' submissions and evidence available to the CMA, we have assessed which of the following three potential counterfactual scenarios is the most likely and, thus, the appropriate counterfactual in this case. These are:
- (a) **Prevailing conditions of competition in all markets.** Under this scenario, absent the Merger, both of the Parties would have continued under separate, independent, ownership. As noted above, this counterfactual is not static and incorporates the continued dynamic evolution of the market, and potentially any foreseeable financial restructuring or re-orientation of the Parties' business models, so long as the firms in the market continue to compete in broadly the same manner.
 - (b) [REDACTED].
 - (c) **Entry by one or both of the Parties in the supply of Automated Terminal Tractors (ATT).** Under this scenario, absent the Merger, one or both of the Parties would have made efforts to enter or expand in the supply of ATT.

⁸¹ CMA129, paragraph 3.9.

⁸² CMA129, paragraph 3.13.

4.11 We have considered and set out our provisional conclusions on each of these potential counterfactual scenarios below.

Prevailing conditions of competition in all markets

4.12 Under this counterfactual, both Parties would continue to compete in broadly the same way, absent the Merger. As noted above, this counterfactual is not static and incorporates the continued dynamic evolution of the market, and potentially any foreseeable financial restructuring or re-orientation of the Parties' business models, so long as the firms in the market continue to compete in broadly the same manner as they have been doing prior to contemplation of the Merger.

4.13 As such, this counterfactual includes scenarios where firms adapt their competitive offerings and business models and respond to competitive and other pressures (including funding pressures). Such adaptations of competitive offerings and business models could include for example:

(a) Expanding service and product offerings to provide additional services; and

(b) making incremental product improvements.

4.14 The prevailing conditions of competition may also include stronger or weaker competition from rivals (which would have occurred absent the merger).

Parties' submissions

4.15 With the exception of [REDACTED], both Parties submitted that the appropriate counterfactual in this case is the 'pre-existing conditions of competition'.

4.16 The Parties told us that 'the relevant markets are characterised by a fundamental transformation' which is 'due to the expansion of Chinese players and major industry trends'.

Our provisional assessment

4.17 We found no evidence from our review of the Parties' business strategy documents (except in relation to the supply of ATT, as considered further below) suggesting that, absent the Merger, either Cargotec or Konecranes would not have continued to compete in broadly the same way.

4.18 No third parties have proposed that we should use an alternative counterfactual to the prevailing conditions of competition.

- 4.19 We note the Parties' submissions regarding the 'fundamental changes' to the markets in which they operate resulting from the entry/expansion of Chinese suppliers and industry trends. There is no suggestion that such changes would not have occurred absent the Merger,⁸³ and therefore we assess the impact of such potential changes, including whether there would be any entry and/or expansion by Chinese players, as part of our competitive assessment of the Merger.
- 4.20 We note that Cargotec recently sold: a) its 49% ownership interest in a joint venture with a Chinese company, Jiangsu Rainbow Heavy Industries Co. Ltd, ('Rainbow') to its joint venture partner on 11 May 2020; b) its TOS business, Navis, to Accel-KKR on 26 March 2021.⁸⁴ Cargotec's internal documents clearly show [REDACTED] and therefore they have not been considered to form part of Cargotec's activities for the purposes of our assessment.
- 4.21 Therefore, we provisionally consider that it is likely that, absent the Merger, the Parties would continue to compete with each other independently in broadly the same manner in their respective markets. Thus, the appropriate counterfactual for the assessment of the Merger is, in general, the prevailing conditions of competition.
- 4.22 However, we consider below whether different counterfactual scenarios are appropriate in relation to:
- (a) [REDACTED]; and
 - (b) the supply of ATT.

[REDACTED]

- 4.23 Under this scenario, absent the Merger, Cargotec would have [REDACTED].

Cargotec's submission

- 4.24 During the course of the inquiry, Cargotec told us that [REDACTED].
- 4.25 Cargotec told us that:
- (a) '[REDACTED]'.

⁸³ CMA129, paragraph 8.28.

⁸⁴ Navis was sold for €380 million. Cargotec (March 2021), Cargotec sells Navis business [online], available at <https://www.cargotec.com/en/nasdaq/stock-exchange-release--kalmar--/2021/cargotec-sells-navis-business-to-technology-investment-firm-accel-kkr-for-an-enterprise-value-of-eur-380-million/> [accessed 23/11/21].

(b) '[REDACTED]'.

(c) '[REDACTED]'. In particular, Cargotec told us that: '[REDACTED]'.

(d) '[REDACTED]'.

4.26 In response to the CMA's counterfactual working paper, Cargotec disputed the CMA's position that there is insufficient evidence to support [REDACTED]. Cargotec disagreed that there remained some uncertainty around [REDACTED]. Cargotec also noted that the fact that it has not submitted that [REDACTED] does not mean that, absent the Merger, [REDACTED]. At the Main Party Hearing, Cargotec stated that '[REDACTED]'.

Our provisional assessment

4.27 We provisionally conclude that the evidence provided by Cargotec does not support the position that a counterfactual other than the prevailing conditions of competition is appropriate for [REDACTED]. In particular, the evidence does not show with sufficient certainty that the most likely counterfactual scenario is that Cargotec would have [REDACTED] in the near term.

4.28 First, Cargotec made clear that it is not arguing that it would [REDACTED]. At the same time, Cargotec's submitted that its '[REDACTED]' and that the '[REDACTED]'. We note that, while Cargotec [REDACTED].⁸⁵ Together with the evidence of the [REDACTED], this evidence does not support, in itself, that Cargotec would have been likely to [REDACTED].

4.29 Second, as is clear even from Cargotec's own submissions, [REDACTED]. Cargotec explained that, '[REDACTED]'. Other options that we have seen being considered include, [REDACTED]. Various projects undertaken by Cargotec since [REDACTED]. The fact that Cargotec is considering different options indicates that Cargotec is [REDACTED]. Even if these measures have been taken, as submitted by Cargotec, in [REDACTED], they are difficult to reconcile with the suggestion that [REDACTED].

4.30 Third, Cargotec submits that [REDACTED]. Cargotec stated that [REDACTED].

4.31 We note, in this respect, that '[REDACTED]'.⁸⁶ Having this principle in mind, we consider that the evidence available to the CMA does not support that at Cargotec's Board Meeting a decision had been made to [REDACTED].

4.32 [REDACTED]. Given the date of these minutes, and for the reasons set out above, we can only place very limited weight on this and other documents

⁸⁵ See [REDACTED]. CMA129, paragraph 3.29.

⁸⁶ CMA129, paragraph 3.24.

contemporaneous of the Merger. In any case, these minutes report the view of the management (with no indication that the board shared this view).

- 4.33 It is uncertain whether Cargotec's board would take a decision in line with management's view. [REDACTED].
- 4.34 The main document submitted by Cargotec, produced before the Merger was in contemplation, that mentions [REDACTED]:
- (a) [REDACTED];
 - (b) [REDACTED]; and
 - (c) [REDACTED].
- 4.35 [REDACTED].
- 4.36 In fact, none of the internal documents submitted by Cargotec include a detailed [REDACTED].⁸⁷
- 4.37 This means that, not only is there no evidence supporting that a decision was made to [REDACTED], but also the evidence available to the CMA does not indicate that Cargotec's [REDACTED].
- 4.38 Absent additional evidence, [REDACTED].
- 4.39 In particular, we note that [REDACTED]. Therefore, we provisionally conclude that the most likely counterfactual in relation to [REDACTED] is the prevailing conditions of competition.

Entry by one or both of the Parties in the supply of ATT

- 4.40 Whereas manual terminal tractors (TT) are wholly controlled by a human operator, ATT have a higher level of software intervention provided by equipment control systems (ECS) which allows some or all of their functions to be performed automatically.
- 4.41 The term 'automation' is used to refer to a wide spectrum of functions, ranging from remote operation by a human operator to fully self-driving.
- 4.42 During the course of the inquiry, we found that some suppliers, [REDACTED], have taken some steps towards developing automation technology with the aim of entering the supply of ATT in the future.

⁸⁷ We note that [REDACTED].

- 4.43 We have considered whether either of the Parties is likely to enter the supply of ATT, absent the Merger.
- 4.44 In assessing whether the evidence shows that the entry or expansion by one of the Parties is the most likely counterfactual, the CMA's guidance states that we may consider the Parties' incentive and ability to enter or expand in competition with each other.⁸⁸

Entry by Cargotec in the supply of ATT

- 4.45 We assess below whether it is likely that, absent the Merger, Cargotec would have made efforts to enter the supply of ATT.
- 4.46 If Cargotec were to enter in the supply of ATT (as a competitor of Konecranes in the supply of ATT as considered at paragraphs 4.63 to 4.142 below) this could have resulted in conditions of competition involving stronger competition between the Parties than under the prevailing conditions of competition.
- 4.47 Our assessment of whether Cargotec's entry in the supply of ATT is the most likely scenario in this case is structured as follows:
- (a) Cargotec's views on its entry in the supply of ATT;
 - (b) the context for assessing Cargotec's entry in the supply of ATT; and
 - (c) the CMA's assessment of the likelihood of Cargotec's entry in the supply of ATT.

Cargotec's views on its entry in the supply of ATT

- 4.48 Cargotec told us that it [✂].
- 4.49 [✂].
- 4.50 [✂].

The context for assessing Cargotec's entry in the supply of ATT

- 4.51 Cargotec is active in the supply of TT under its Kalmar brand. It claims to be the 'world's leading manufacturer of terminal tractors, delivering more than 70,000 units since the very first terminal tractor was built in 1958'.⁸⁹

⁸⁸ CMA129, paragraph 3.18.

⁸⁹ Cargotec, Kalmar website [online], available at <http://www.kalmarglobal.com/equipment-services/terminal-tractors/> [accessed 23/11/2021].

4.52 Cargotec told us that it delivered [REDACTED]. TT units worldwide between 2018 and 2020. It estimated that it had a worldwide share of supply of manual TT of around [REDACTED]% between 2018 and 2020.

4.53 Cargotec explained its view that:

(a) [REDACTED];

(b) It 'is of the view that [REDACTED]'.

CMA's assessment of the likelihood of Cargotec's entry in the supply of ATT

4.54 We have assessed the likelihood of Cargotec's entry in the supply of ATT. In our assessment, we have set out below:

(a) Cargotec's pre-Merger incentive to enter the supply of ATT.

(b) Cargotec's pre-Merger ability to enter the supply of ATT.

Cargotec's pre-Merger incentive to enter the supply of ATT

4.55 As explained below, we consider that Cargotec's submissions, as well as evidence from its internal documents, show that it believes [REDACTED], and that [REDACTED] (as summarised at paragraphs 4.48 to 4.50 above).

4.56 Cargotec's internal documents indicate that [REDACTED].

4.57 Another internal [REDACTED].

4.58 Our provisional conclusion is that the available evidence demonstrates that Cargotec considers the supply of ATT to be strategically important to it and that it has an incentive to enter the supply of ATT.

Cargotec's pre-Merger ability to enter the supply of ATT

4.59 As set out above, Cargotec has a broad range of capabilities that will support its development of an ATT offering. This is consistent with the position set out in Cargotec's internal documents, which [REDACTED]. On this basis, we provisionally consider that Cargotec also has the ability to enter the supply of ATT.

4.60 Based on the evidence we have seen, which is summarised in paragraphs 4.51 to 4.53 and paragraphs 4.55 to 4.58 above, we consider that Cargotec has the ability to enter the supply of ATT.

CMA's provisional conclusions about the likelihood of entry by Cargotec in the supply of ATT

- 4.61 Having considered Cargotec's submissions and the available evidence, our provisional conclusion is that Cargotec would have entered the supply of ATT absent the Merger. As such, we consider that the prevailing conditions of competition scenario includes Cargotec's entry in the supply of ATT.
- 4.62 We expect this entry to occur in the time period used in the competitive assessment of the supply of ATT.

Entry by Konecranes in the supply of ATT

- 4.63 We assess below whether it is likely that, absent the Merger, Konecranes would have made efforts to enter as a competitor of Cargotec in the supply of ATT.
- 4.64 Our assessment of whether Konecranes' entry in the supply of ATT is the most likely scenario in this case is structured as follows:
- (a) Konecranes' views on its entry in the supply of ATT;
 - (b) the context for assessing Konecranes' entry in the supply of ATT; and
 - (c) the CMA's assessment of the likelihood of Konecranes' entry in the supply of ATT.

Konecranes' views on its entry in the supply ATT

- 4.65 Konecranes told us that, '[t]imely entry in TT or ATT by Konecranes is highly unlikely'.⁹⁰
- 4.66 In particular, Konecranes submitted that:
- (a) 'It would take at least [X] for entry with a credible offering into the TT market, and several million euros in R&D, staff and facilities investments during which time competitors would also have continued to develop their own products. As such, Konecranes does not have the ability on its own to enter in a timely manner to reasonably be considered a "potential competitor"'.

⁹⁰ [X]

- (b) 'There are no [REDACTED] and in any event Konecranes would still not be able to develop a competitive ATT within at least the next [REDACTED]'.
- (c) 'There would need to be equipment-specific ECS, as the other horizontal transport equipment's operational and technological configuration is different than for TT (or in the future for ATT)'.
- (d) In response to the CMA's working papers on ATT and the counterfactual, Konecranes submitted that it did not have any plans to develop its own [REDACTED] offering that it could have used to enter the ATT market in a timely way.

The context for assessing Konecranes' entry in the supply of ATT

4.67 In this section, we provide an overview of the context for Konecranes' entry in the supply of ATT by considering the following:

- (a) Konecranes' activities in relation to the supply of TT and development of ECS.
- (b) Konecranes' [REDACTED] with Terberg.
- (c) Konecranes' [REDACTED].

4.68 In 2017, Konecranes acquired a manual TT business as part of its acquisition of the Material Handling and Port Solutions (MHPS) business of Terex. However, in the same year, [REDACTED]. Konecranes told us that this step was taken '[REDACTED]'. Konecranes also told us that it has not subsequently taken any action to develop manual TT in-house.

4.69 Konecranes is the distributor of Terberg's manual TT in Russia, Kazakhstan, and Belarus.

4.70 Konecranes has a subsidiary, TBA Group, which specialises in optimising port, terminal and warehousing operations and automation using software and services.⁹¹ TBA Group supplies equipment control software (ECS) built for AGV and automated SC. Its website states, '[a]dvanced equipment control & scheduling system (ECS) for automated and efficient operation of all your automated container terminal equipment. TEAMS ECS schedules and operates any type of automated container terminal equipment and runs your terminal operation efficient, safe, reliable and optimized for your standardized

⁹¹ Refinitiv (August 2021), TBA Group corporate ownership.

operational procedures and equipment set up'.⁹² We note that Konecranes refers to TBA Group in certain internal documents as an '[REDACTED]' in [REDACTED] that could be used [REDACTED].

4.71 We note that Konecranes made the following strategic decisions in the year prior to the Parties entering into discussions regarding the Merger:

(a) In March 2019, it entered into the [REDACTED] with Terberg for the [REDACTED].

(b) In February 2020, it entered into [REDACTED].

Konecranes' [REDACTED] with Terberg

4.72 In May 2017, Konecranes and Terberg entered into a Memorandum of Understanding (MoU), '[REDACTED]'. The MoU sets out, inter alia, that '[REDACTED]'.⁹³

4.73 Konecranes and [REDACTED] (around one year prior to the Parties entering into discussions regarding the Merger) for the [REDACTED].

4.74 The preamble of the [REDACTED] refers to the MOU as outlining [REDACTED]. The MOU seems to still be effective to the extent that it has not been superseded by the [REDACTED].

4.75 The [REDACTED] imposes the following general obligations:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

4.76 The 9 also imposes the following project-by-project obligations:

(a) [REDACTED].

(b) Once Konecranes and Terberg have decided to jointly submit an offer for an ATT business opportunity, each should '[REDACTED]' and, upon submission of the tender, the Parties are [REDACTED].

⁹² TBA Group, TEAMS Equipment Control System [online], available at tba.group/en/software/equipment-control-system-teams [accessed 23/11/2021].

⁹³ [REDACTED] states that:

- a) [REDACTED];
- b) [REDACTED];
- c) [REDACTED].

was estimated as having a \$3-4 million impact on gross profit (from the sale of TT equipment alone) between 2018 and 2024. [REDACTED].

- 4.84 A Konecranes internal document, '[REDACTED]', prepared in [REDACTED]⁹⁵ (around five months before the Parties entered into discussions regarding the Merger) refers to '[REDACTED]' as the fourth target (out of nine) under the heading, 'MAIN ACTIONS 2020' and the sub-heading, 'Develop new products/platforms'. The same document shows [REDACTED].
- 4.85 In February 2020 ([REDACTED] before the Parties first discussed entering into some form of commercial cooperation agreement), Konecranes signed a [REDACTED], reached an agreement on the main commercial terms, carried out due diligence and estimated that the [REDACTED] would be [REDACTED]. The [REDACTED] states that Konecranes was willing in principle [REDACTED].
- 4.86 On [REDACTED], Konecranes sent a letter to [REDACTED] chairman and chief executive officer, [REDACTED], notifying him of Konecranes' intention to [REDACTED], stating the reason for this was the [REDACTED].
- 4.87 Konecranes told us that:
- (a) Its plans to [REDACTED] were cancelled in April 2020 when '[REDACTED]'.
 - (b) It 'had [REDACTED] at the time the Merger was negotiated and agreed'.
 - (c) '[REDACTED] would not necessarily bring about Konecranes' immediate entry into [REDACTED], as [REDACTED]. Konecranes would need to supply test units to [REDACTED] in order to earn references and establish credibility with customers. [REDACTED] would require some technical and industrial design modifications to be marketed and sold [REDACTED], as they are currently designed for the [REDACTED]. Examples include [REDACTED], and changes to the [REDACTED]. While not difficult to implement, these changes will still need to be engineered and tested'.
- 4.88 In response to the CMA's working papers, Konecranes submitted that negotiations with [REDACTED] were cancelled due to Covid-19 concerns, unrelated to the Merger. Konecranes noted that the plans for [REDACTED] were 'in a very early stage' and that the time of cancelling [REDACTED], the deal still had to be approved by Konecranes' Board. Konecranes also stated that, [REDACTED]'. Konecranes further submitted that, the emergence of COVID-19 meant that there was no certainty as to whether a new agreement on price could have been reached.

⁹⁵ [REDACTED] pre-dates when the Parties told us that two of their main shareholders recommended to their respective boards that they investigate the feasibility of the Merger.

4.89 Konecranes also told us that it 'informed [REDACTED] of this decision and decided to focus on preserving profitability and ensuring the successful continuity of existing business operations. Therefore, Konecranes has [REDACTED] in this product area'.

CMA's assessment of the likelihood of Konecranes' entry in the supply of ATT

4.90 We have set out below our provisional conclusion on the likelihood of Konecranes' entry in the supply of ATT. In advance of this, and by way of context to our assessment, we have set out below:

- (a) Konecranes' incentive to enter the supply of ATT.
- (b) Konecranes' ability to enter the supply of ATT and its decision-making around the time of the Merger.

4.91 We also consider below whether the Coronavirus (COVID-19) pandemic had a material effect on Konecranes' incentive and ability to [REDACTED].

Konecranes' incentive to enter the supply of ATT

4.92 In order to assess the incentive of Konecranes to enter the supply of ATT, we reviewed internal documents for evidence of the following:

- (a) The strategic importance placed by Konecranes on the possibility of adding ATT to its future portfolio of CHE; and
- (b) The steps taken by Konecranes towards supplying ATT, including entering into the [REDACTED] with Terberg and potentially [REDACTED].

Evidence of the strategic importance placed by Konecranes on the possibility of adding ATT to its future portfolio of CHE

4.93 The internal document, '[REDACTED]' dated March 2019, shows that Konecranes considered entry in the supply of ATT to be a [REDACTED].

4.94 In particular, it states that:

- (a) [REDACTED].
- (b) '[REDACTED].
- (c) Konecranes was targeting a [REDACTED]% market share in the supply of ATT.
- (d) Konecranes believed that it needed to have an ATT solution [REDACTED].

(e) Konecranes considered that offering ATT would [REDACTED].

(f) [REDACTED].

4.95 A Konecranes internal document, 'Proposal to Board of Directors' dated 6 September 2019 regarding the proposed [REDACTED] states that:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

4.96 This document also states that TT and ATT were '[REDACTED]', and that '[REDACTED]'. In addition, the document shows that Konecranes considered the [REDACTED] would be a good fit with its pre-existing broader commercial strategy.

4.97 Konecranes' internal document, [REDACTED] dated October 2019 [REDACTED] and states (amongst other reasons) that entering ATT (through an [REDACTED]) [REDACTED] and that [REDACTED].

4.98 Konecranes' internal document, 'Backup slide', dated 9 February 2020 forecasts sales of Konecranes' [REDACTED].

4.99 We consider that this evidence over a period of several months in 2019 and 2020 shows that Konecranes had assessed the potential opportunity from entering the supply of ATT and assessed that it had strategic incentive to do so.

The steps taken by Konecranes towards supplying ATT, including entering into the [REDACTED] with Terberg and [REDACTED]

4.100 As noted at paragraph 4.71, in the year prior to the Parties entering into discussions regarding the Merger, Konecranes:

(a) Entered into the [REDACTED] with Terberg; and

(b) carefully considered the capabilities of [REDACTED] and how the [REDACTED] might enhance its position within the supply of ATT.

4.101 In relation to the [REDACTED], the internal document, '[REDACTED]' dated 17 December 2019, mentioned above states that '[REDACTED]'. It also includes a diagram showing its [REDACTED] with milestones.

- 4.102 We note that the internal document, '[REDACTED]' dated March 2019, indicates that the [REDACTED] and the [REDACTED] with Terberg were not considered mutually exclusive opportunities within the supply of ATT.
- 4.103 In relation to the [REDACTED], the Proposal to the Board of Directors of 6 September 2019 shows that, although [REDACTED] has [REDACTED], Konecranes had the capability to electrify and automate it in [REDACTED]. A footnote in the document notes that [REDACTED] are covered by funding for existing projects.
- 4.104 Konecranes' internal document, 'Backup slide', dated 9 February 2020 sets out, amongst other business strategies, Konecranes' potential business plan for [REDACTED] in relation to, [REDACTED]. This document shows that Konecranes may be able to utilise its existing investment in supplying CHE, parts and servicing, including its distributor network, to make it easier to [REDACTED], as it was planning to do in relation to TT: [REDACTED].
- 4.105 We consider that this email also shows that Konecranes was closely monitoring the progress of its competitors and potential competitors in developing automation technology.
- 4.106 On 24 February 2020, Konecranes' Chief Executive Officer, [REDACTED], sent an email to Konecranes' Vice President of Technologies, [REDACTED], which states that: '[REDACTED]'. We note, in particular, that this document shows that Konecranes had a [REDACTED] in February 2020 and members of its senior leadership were directly involved in overseeing its development. In response to being asked about where the [REDACTED] had been tested, Konecranes told us that it received a version of an [REDACTED] at its facilities in Dusseldorf for the purposes of developing [REDACTED]. However, on testing, Konecranes determined that the equipment was [REDACTED] and sent it back to [REDACTED].
- 4.107 Konecranes' internal document, '[REDACTED]', dated [REDACTED] (shortly before the Parties entered into discussions regarding the Merger in [REDACTED]) sets out the 'Process status' in relation to the [REDACTED]. It records that [REDACTED] was well advanced and no major issues in the [REDACTED] had been identified. It also shows that Konecranes expected, in March 2020, that an agreement to [REDACTED] would be signed in [REDACTED] with completion in the [REDACTED].

Provisional conclusion on Konecranes' incentive to enter the supply of ATT

- 4.108 Our provisional conclusion is that the internal documents referred to above show that Konecranes had a clear incentive to enter into the supply of ATT, given the business opportunity that the supply of this equipment represented in view of the expected automation of port terminals and new customer segments. These documents show that the entry in the supply of ATT was

aligned with Konecranes commercial strategy and that Konecranes had taken steps towards supplying ATT by entering into the [REDACTED] with Terberg and being on the cusp of [REDACTED].

Konecranes' ability to enter the supply of ATT

4.109 We consider below Konecranes' ability to enter into the supply of ATT.

4.110 Based on the internal documents considered below and the context set out in paragraphs 4.67 to 4.71 regarding Konecranes' activities and automation capabilities, we consider that Konecranes already possessed several attributes that made it well-placed to enter the supply of ATT. In particular Konecranes has:

- (a) developed the ability [REDACTED] to service the [REDACTED] with Terberg (an internal email from Konecranes' Chief Executive Officer dated February 2020 refers to a [REDACTED]) and as has the '[REDACTED]';
- (b) experience of customers' manual TT requirements from having acted as a distributor for Terberg;
- (c) established a reputation and track record in the supply of CHE other than ATT in adjacent markets; and
- (d) developed automation technology and knowhow for other types of CHE through its subsidiary, TBA Group, and [REDACTED] to the development of ATT, '[REDACTED]'.

4.111 We also note:

- (a) An internal document from Konecranes quotes an 'industry expert' saying: '[REDACTED]'.
- (b) Another internal document dated 24 October 2019, states that '[REDACTED]'.

4.112 We consider that Konecranes is a large and well-resourced business that would have been readily able to make the investments required to develop a credible ATT offering. For example, Konecranes held €378 million in cash as at 31 December 2019 (around four months before it abandoned [REDACTED]) and €592 million in cash as at 31 December 2020.

4.113 Konecranes' pre-Merger and more recent ([REDACTED]) roadmaps [REDACTED] indicate that Konecranes has the ability to develop ATT in the near term.

4.114 We consider that also internal documents show that Konecranes carefully considered the following costs and risks of [REDACTED] (amongst others) and made the decision to pursue [REDACTED] having made that assessment.

4.115 The [REDACTED] carried out by Konecranes⁹⁶ on [REDACTED] in 2019-2020 shows that there were no obstacles to the [REDACTED]. We note that this evidence is difficult to reconcile with Konecranes' submission (as set out in paragraph 4.87(a) above) that [REDACTED].

Provisional conclusions on Konecranes' ability to enter the supply of ATT

4.116 We consider that Konecranes had the [REDACTED]. While it lacked some capabilities, there were credible ways in which it could have developed an ATT offering such as through its [REDACTED] with Terberg and/or its potential [REDACTED].

4.117 Our provisional conclusion is that Konecranes had the ability to enter the supply of ATT, absent the Merger.

The effect of the Coronavirus (COVID-19) pandemic on Konecranes' incentive and ability to enter the supply of ATT

4.118 In this section we look at whether the Coronavirus (COVID-19) pandemic would have changed Konecranes' incentive and ability to enter the supply of ATT absent the Merger.

4.119 We note the CMA's guidance on Merger assessment during the Coronavirus (COVID-19) pandemic, which says '[a] merger control investigation typically looks beyond the short-term and considers what lasting structural impacts a merger might have on the markets at issue. Even significant short-term industry-wide economic shocks may not be sufficient, in themselves, to override competition concerns that a permanent structural change in the market brought about by a merger could raise'.

4.120 We further note that the Merger Assessment Guidelines (CMA129) set out that '[t]he time horizon for considering the counterfactual will be consistent with the time horizon used in the CMA's competitive assessment.⁹⁷ Therefore, we take into account elements of scenarios which would have occurred after the immediate impact of the Coronavirus (COVID-19) pandemic in March 2020.

⁹⁶ It states that [REDACTED].

⁹⁷ CMA129, paragraph 3.15.

The effect of the Coronavirus (COVID-19) pandemic on the [REDACTED]

- 4.121 As noted above, Konecranes told us it ‘jointly decided [with Terberg] to [REDACTED] due to the impact of Coronavirus (COVID-19) and the limited progress described above’.
- 4.122 We have not seen any internal documents which refer to a ‘joint decision’ between Konecranes and Terberg [REDACTED] [REDACTED]. Konecranes has not otherwise provided any contemporaneous evidence to support its position that this arrangement had been suspended for reasons unrelated to the Merger. We note that Konecranes’ website still refers to its cooperation with Terberg in the supply of ATT.⁹⁸
- 4.123 [REDACTED] told us that:
- (a) [REDACTED].
 - (b) [REDACTED].
 - (c) [REDACTED].
- 4.124 Konecranes confirmed that it has jointly carried out [REDACTED].
- 4.125 We consider that this evidence [REDACTED]. While the Coronavirus (COVID-19) pandemic may have affected the progress of the development of ATT in the short-term, the evidence considered in paragraphs 4.92 to 4.108 above shows that Konecranes’ incentive, over the period of the counterfactual, to continue with the [REDACTED] was not materially affected by the Coronavirus (COVID-19) pandemic.
- 4.126 We consider the potential entry of Terberg and other potential entrants in Chapter 10, in which we also assess the effect of the [REDACTED] on the conditions of competition absent the Merger.⁹⁹

⁹⁸ Konecranes website, states that Konecranes is ‘pleased to announce that we now supply automated terminal tractors (A-TT). Terberg will be our partner in this effort, as a certified supplier of terminal tractors. Konecranes will supply the automation technology as part of turn-key automated container handling delivery’. Konecranes stated that the reference on its website to ATT was published on 28 June 2017 and is outdated since it pre-dates [REDACTED]. Konecranes, Automated Terminal Tractor [online], available at <https://www.konecranes.com/equipment/container-handling-equipment/automated-terminal-tractor> [accessed 8 September 2021].

⁹⁹ CMA129, paragraph 3.7.

The effect of the Coronavirus (COVID-19) pandemic on the possible [REDACTED]

- 4.127 As noted in paragraph 4.86 above, on [REDACTED], Konecranes sent a letter to [REDACTED] chairman and chief executive officer, [REDACTED], notifying them of Konecranes' intention to [REDACTED]. The letter states that '[REDACTED]'.
- 4.128 By way of context, we note that this correspondence seems to broadly coincide with the beginning of the discussions between the Parties in relation to the Merger. The Parties told us that they 'first discussed entering into some form of commercial cooperation agreement with each other in [REDACTED], when Cargotec's board first approached Konecranes regarding a potential friendly combination'.
- 4.129 We note that Konecranes' decision to [REDACTED] was made around the same time as the possible impacts of the Coronavirus (COVID-19) pandemic were becoming apparent and the Parties first entered into discussions regarding the Merger. Furthermore, as noted at paragraph 4.88 above, Konecranes told us that, '[REDACTED]'. Although no evidence was submitted to support this assertion, we are therefore not in a position to conclude on the relative importance of each of these events on Konecranes' decision making.

The effect of the Coronavirus (COVID-19) pandemic on Konecranes' incentive to enter the supply of ATT

- 4.130 Based on the evidence we have received, the immediate effect of the Coronavirus (COVID-19) pandemic on Konecranes' incentive to enter the supply of ATT is unclear. In essence, we note the following:
- (a) Although Konecranes told us that it has decided to '[REDACTED] with Terberg, it has carried out [REDACTED] and made [REDACTED] with Terberg in [REDACTED] in 2021.
 - (b) Whereas Konecranes wrote to [REDACTED] stating that it has decided that it will '[REDACTED]', it retained the ability to restart negotiations when the Coronavirus (COVID-19) pandemic eased.
 - (c) In determining the time horizon for considering the counterfactual, we are not limited to the specific point in time that Konecranes decided to abandon its [REDACTED].¹⁰⁰
- 4.131 The evidence shows that Konecranes had a strong incentive to enter the supply of ATT (as summarised at paragraphs 4.92 to 4.108) pre-Merger, and

¹⁰⁰ CMA129, paragraph 3.15.

in the longer term once the short-term operational and financial challenges of from the Coronavirus (COVID-19) pandemic eased.

- 4.132 We have not seen any evidence which indicates that Konecranes' pre-Merger incentive to enter the supply of ATT was materially affected by the Coronavirus (COVID-19) pandemic.

The effect of the Coronavirus (COVID-19) pandemic on Konecranes' ability to enter the supply of ATT

- 4.133 We note that Konecranes reported an operating profit of €174 million for its 2020 financial year (2019: €149 million). This represents an increase of around 17%.
- 4.134 Konecranes' Annual Review states that, '[g]lobal container throughput recovered in the second half and ended 2020 above the year before. Despite the challenging market environment and hurdles to delivery execution caused by the Coronavirus (COVID-19) pandemic, Port Solutions finished 2020 by achieving new all-time high quarterly records for both order intake and sales'.¹⁰¹
- 4.135 We further observe that Konecranes' had net current assets of €539 million¹⁰² at the end of its 2020 financial year (2019: €499 million).¹⁰³ This equates to an increase of around 8%. Konecranes held around €592 million cash and cash equivalents at the end of its 2020 financial year (2019: €378 million).
- 4.136 Moreover, we note that, on 11 May 2020 (around one month after Konecranes [☒]), Konecranes' Board proposed to its Annual General Meeting that a dividend of €0.65 per share was paid.¹⁰⁴
- 4.137 We recognise that the Coronavirus (COVID-19) pandemic created unprecedented uncertainty around April 2020. We cannot be certain about its short-term effect on Konecranes' ability to enter the supply of ATT. However, the impact of the Coronavirus (COVID-19) pandemic has subsided since April 2020, with the global economy and trade growing again. This is reflected in Konecranes' strong performance in 2020.

¹⁰¹ Konecranes Annual Review 2020, p 18.

¹⁰² €1.976 bn total current assets less €1.437 bn total current liabilities. Konecranes Annual Review 2020, p 58.

¹⁰³ €1.868 bn total current assets less €1.369 bn total current liabilities. Konecranes Annual Review 2020, p 58.

¹⁰⁴ Konecranes Stock Exchange Release, Konecranes' Board of Directors changes its dividend proposal, 11 May 2020.

Provisional conclusion on the effect of the Coronavirus (COVID-19) pandemic on Konecranes' incentive and ability to enter the supply of ATT

- 4.138 In view of the evidence above,¹⁰⁵ we provisionally conclude that Konecranes' ability and incentive to ultimately enter the supply of ATT did not materially change as a result of the Coronavirus (COVID-19) pandemic.
- 4.139 As explained above, there is evidence that Konecranes had multiple plausible routes to enter into the supply of ATT. Konecranes submitted some evidence that suggests that the Coronavirus (COVID-19) pandemic may have affected its decision not to proceed with the [X].
- 4.140 The evidence considered above is also consistent with Konecranes having the ability to enter into the supply of ATT, even considering the impact of the Coronavirus (COVID-19) pandemic. We note, in this respect, that Konecranes' financial performance in 2020 exceeded the prior year and it had a relatively strong balance sheet and cash position. Further, Konecranes' Board proposed a dividend on 11 May 2020.¹⁰⁶
- 4.141 Our provisional conclusion, therefore, is that the most likely scenario is that Konecranes would have continued or resumed its plans to enter the supply of ATT once the operational and financial challenges brought about by the Coronavirus (COVID-19) pandemic eased.

Provisional conclusion on the likelihood of entry by Konecranes in the supply of ATT

- 4.142 Having considered the submissions above and the available evidence we provisionally conclude that, absent the Merger, Konecranes would have continued to make efforts to enter the supply of ATT because it had the incentive and ability to do so. We expect this entry to occur in the time period used in the competitive assessment for the supply of ATT.

Provisional findings on the most likely counterfactual

- 4.143 For the reasons set out above, our provisional findings are that the most likely counterfactuals and, thus, the most appropriate counterfactuals in this case is a scenario with:

¹⁰⁵ Noting that, as provided for in [CMA129](#), 'Where internal documents support claims being made by merger firms or third parties that have an interest in the outcome of the CMA's investigation, the CMA may be likely to attach more evidentiary weight to such documents if they were generated prior to the period in which those firms were contemplating or aware of the merger, or if they are consistent with other evidence' (paragraph 2.29(a)).

¹⁰⁶ Konecranes Stock Exchange Release, Konecranes' Board of Directors changes its dividend proposal, 11 May 2020.

- (a) **Prevailing conditions of competition** in regard to the following types of CHE: yard cranes; horizontal transport equipment (excluding ATT); and Mobile Equipment.
- (b) **Conditions of competition involving stronger competition** than under the prevailing conditions of competition in relation to the supply of ATT, arising from Cargotec's and Konecranes' entry into the ATT market. In particular, having considered the submissions above and the available evidence we provisionally conclude that, absent the Merger, Konecranes would have continued to make efforts to enter the supply of ATT because it had the incentive and ability to do so. We expect this entry to occur in the time period used in the competitive assessment for the supply of ATT.

5. Market definition

- 5.1 Market definition provides a framework for assessing the competitive effects of a merger.¹⁰⁷ Within that context, the assessment of the relevant market(s) is an analytical tool that forms part of the analysis of the competitive effects of a merger and should not be viewed as a separate exercise.¹⁰⁸
- 5.2 While the boundaries of the relevant product market are generally determined by reference to demand-side substitution alone, the CMA may widen the scope of the market where there is evidence that firms routinely use their production assets to supply a range of products and where the conditions of competition for those products are similar.¹⁰⁹
- 5.3 The boundaries of a market do not determine the outcome of the analysis of the competitive effects of a merger, as it is recognised that there can be constraints on merging parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. We take these factors into account in our competitive assessment.¹¹⁰

¹⁰⁷ CMA129, Chapter 9.

¹⁰⁸ CMA129, paragraph 9.1.

¹⁰⁹ CMA129, paragraph 9.8.

¹¹⁰ CMA129, paragraph 9.4.

Gantry Cranes

Product market definition

Parties' views

- 5.4 The Parties submitted that all Gantry Cranes form one single relevant product market. The Parties stated that there is demand-side substitutability at the greenfield stage of a port's development, and supply-side substitutability between all Gantry Cranes.
- 5.5 The Parties submitted that all Gantry Cranes can be, and typically are, produced in the same manufacturing plants using the same equipment. The same manufacturing lines and the same technicians / engineers are employed for the manufacturing of the different Gantry Cranes. Further, there is a high degree of substitutability for the key components used for the manufacture of the various Gantry Cranes. Konecranes manufactures all of its Gantry Cranes in the same primary subcontractor manufacturing facilities located in China, Croatia, Finland and Poland. Similarly, Liebherr manufactures both RTGs and RMGs in the same facility located in Killarney (Republic of Ireland).
- 5.6 In response to the working papers, the Parties further noted that in greenfield projects, there is a significant degree of cross-competition between different types of Gantry Cranes, especially at the conceptual stage when a new terminal is designed, and reiterate that there is considerable supply-side substitutability, noting that many suppliers offer a full suite or several types of Gantry Crane and that the Parties, as well as ZPMC, Sany and others, began supplying RTGs and then expanded into ASCs, and use the same sub-contracting network and internal organization for both type of Gantry Cranes.

Past decisional practice

- 5.7 In Konecranes/Terex, the EC considered whether there was any substitutability between ASC, RTG and RMG. The EC found that the choice of ASC or RTG depends on the layout and planned logistic flows of the container terminal and that any substitutability between different types of Gantry Crane may only be relevant at the 'greenfield' stage of the terminal. The EC ultimately left the product market definition open.¹¹¹

¹¹¹ European Commission case M.7792 *Konecranes/Terex MHPS*, 8 August 2016, paragraphs 60 and 61.

Our assessment

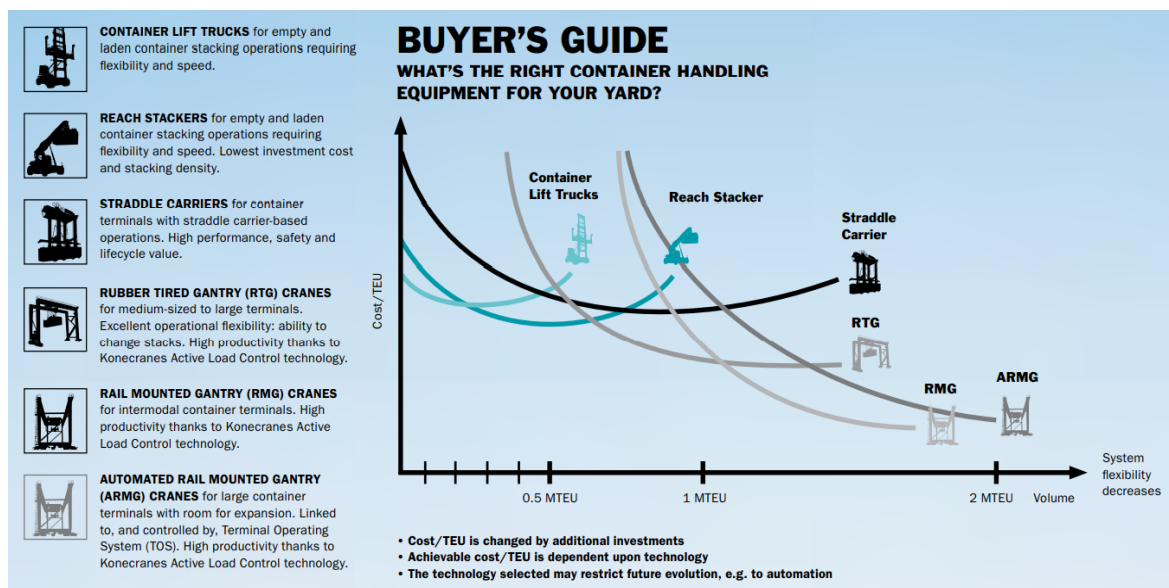
Demand-side substitution

- 5.8 As explained in Chapter 2, Gantry Cranes¹¹² are used in the container yard and landside area for stacking containers and loading/unloading trucks and railcars. They have an overhead structure with hoisting machines mounted on a frame which is typically supported by four or more legs. RTGs are the most common yard handling system in large container terminals and specialised container storage yards. RTGs typically operate in a single stack location but can also be driven from stack to stack when required to reconfigure or better manage workload in a yard. ASCs are automated RMGs and, similarly to automated RTGs, they are not controlled individually onboard the crane by a human operator but via an ECS.
- 5.9 The evidence that we have reviewed indicates that demand-side substitutability between different types of Gantry Crane is limited.
- 5.10 Figure 8, from a promotional brochure produced by Konecranes in 2016,¹¹³ indicates that different types of Gantry Crane have varying cost profiles depending on the volumes being handled, such that one type is unlikely to be a close substitute for another when it comes to handling a given volume of containers.

¹¹² We are focusing our assessment on the demand-side and supply-side substitutability between different types of Gantry Cranes. Based on the different type of functions of STS and MHC (see 2.8 to 2.14), evidence from third parties and the different market structure between STS, MHC, and Gantry Cranes (see fn 163 and 164 and Chapter 7)), we consider that there is limited demand- and supply-side substitution between STS, MHC, and Gantry Cranes. For example, one third party told us that 'it is highly unlikely that a manufacturer of other cranes would be able to move production to build MHCs' and that 'A MHC is a product that has a great deal of technical know-how which would be difficult to replicate.'

¹¹³ We consider that the fact that this brochure is marketing material does not mean that it cannot be information relevant for product market definition. This document describes the functionality, use and cost profile of each type of equipment and these factors are relevant to the assessment of demand-side substitution.

Figure 8: Buyer's guide for a container handling customer



Source: [redacted].

5.11 Another internal document of Konecranes of October 2019 distinguishes different terminal systems (including RTG Terminal, RMG Terminal and ASC Terminal) based on different usage, characteristics and levels of automation (see Figure 9). We consider that, even at concept stage, the envisaged type of terminal determines the type of equipment that will be used and not vice versa.

Figure 9: [redacted]

[redacted]

Source: [redacted]

5.12 There are also significant price differences between the various types of Gantry Crane, which limit demand-side substitutability.¹¹⁴ RTGs in particular, which are the most widespread Gantry Cranes in the market, are more affordable than the other types of Gantry Cranes. Evidence submitted by the Parties indicates that the average price of a RTG was €[redacted] million for Cargotec and €[redacted] million for Konecranes, for a RMG it was €[redacted] million for Cargotec and for an ASC it was €[redacted] million for Cargotec and €[redacted] million for Konecranes between 2018-2020. As regards ASCs, the Parties estimated that

¹¹⁴ The Parties submitted, in response to the working papers, that a one-to-one price comparison is not an accurate metric and prices for the various types of Gantry Cranes would be relatively similar if compared on a total-cost-of-ownership basis. The Parties, however, have not provided evidence to support this statement. In any case, we consider that the difference in price is a factor that customers will take into account in their choice: customers will pay more for an ASC because of its different functionalities and features compared with a less expensive RTG.

the average unit price for ASCs was €[REDACTED] million in 2019. The Parties also provided documents that support broadly similar figures.¹¹⁵

5.13 [REDACTED].

5.14 Third-party evidence is also consistent with limited demand-side substitution:

- (a) One customer told us that RMG, RTG and ASC are all designed for specific purposes and therefore are not substitutable. This customer also told us that it considers that ASCs are not substitutes for RTG because RTG gives flexibility as it can move from one yard block to another yard block. ASC cannot be moved as freely.
- (b) Another customer told us that, due to the different shapes and sizes of the terminals, different container terminals use different equipment.
- (c) Another customer told us that there are significant differences between operating a port using RMG compared to RTG. RMG operate on rails that are built into the ground for the wheels, whilst RTG operate on runways. This means that RTG are significantly more flexible in terms of their usage compared to RMG. Additionally, an RTG operation will use fewer units than an RMG operation; as a consequence, there is less resilience built into a rail-based operation.
- (d) Another customer similarly highlighted that the fact that RMG use rails and RTG have tyres for transportation limits their substitutability.
- (e) One competitor told us that ASC are used in terminals in which trucks are loaded at the end of the stack of containers, whereas RTG are used in a more traditional set up where there is a truck lane parallel to the block. This competitor noted that customers are unlikely to convert RMG operations to RTG operations because making the change requires a big investment (e.g. construction and electrification).

5.15 Customers typically tender for a specific type of Gantry Crane rather than comparing bids for a range of different types. [REDACTED].

5.16 The evidence above indicates that there is limited demand side substitution between different types of Gantry Cranes, indicating that different types of Gantry Crane would constitute separate markets.

¹¹⁵ Documents submitted by the Parties show that the average unit price of a RTG was \$[REDACTED] million in 2019, whilst the average unit price of a RMG was \$[REDACTED] million in 2019 and the largest RTGs might exceed a unit price of \$[REDACTED] million (see Konecranes Port Products – Average prices)

Supply-side substitution

- 5.17 The evidence that we have reviewed indicates that supply-side substitutability between different types of Gantry Crane is limited.
- 5.18 First, evidence indicates that not all major suppliers offer a full suite of Gantry Cranes, or that they have a much more limited presence in certain types of Gantry Cranes, which suggests that conditions of competition are different for different types of Gantry Crane.
- 5.19 Liebherr supplies RTGs and RMGs but does not supply ASCs. Mitsui also supplies RTG but also does not supply ASC. There are a number of suppliers that only, or primarily, supply RMGs (eg DSD Hilgers). Based on the shares of supply and the tender data for 2016 to 2020 which is assessed in Chapter 7, while some suppliers, including the Parties, ZPMC and Kuenz, offer a full suite of Gantry Cranes, Kuenz has a more material presence in the supply of ASC than it does for other Gantry Crane types.
- 5.20 Second, in some internal documents, Cargotec assess the competitive situation in relation to the supply of RTG and ASC separately, which suggests that the competitive conditions are different.
- 5.21 Third, evidence from third parties highlights that there are some factors that make it difficult for a supplier of RTG to start supplying ASC and vice versa.
- (a) One RTG competitor said that, even with a history of supplying one type of Gantry Crane, it can still be difficult to establish a track record in a different type of Gantry Crane. It told us that it has tried entering the ASC market but it considers that this is a difficult market to enter in terms of references and has been excluded from tenders [✂] because it does not have references.
- (b) One customer told us that, based on its experience as a port that transitioned from using RMG to RTG, it viewed some suppliers as having a stronger position in producing one type of equipment rather than another.
- (c) Another competitor told us that the supply of ASC also requires a supplier to develop specific automation software or to team up with other suppliers eg Siemens and ABB who supply ECS. This suggests that there may be limited supply-side substitutability between ASC and other types of gantry crane.
- 5.22 As explained in more detail in Chapter 12, evidence from third parties suggests that it is necessary for a potential new entrant to establish a strong

track record and reputation in order to satisfy customers' purchasing criteria. Internal documents from Cargotec also suggest that having a strong track record and reputation is an important advantage. It is therefore challenging to enter the RTG or ASC market from an adjacent area without any track record in RTG or ASC respectively. Recently, only Kuenz has entered the RTG market to a limited extent, having started supplying ASC.

- 5.23 The evidence above indicates that the conditions of competition are not the same between RTG and ASC and suggests that a supplier of one type of Gantry Crane cannot easily switch manufacturing capacity to another type of Gantry Crane, and that it takes time to develop experience and a track record in a particular type of Gantry Crane. It therefore would not be appropriate to define a single Gantry Crane market on the basis of supply side substitution.

Manual versus automated Gantry Cranes

- 5.24 Evidence from customers and tender data also indicates that customers choose between a non-automated gantry crane or an automated gantry crane only when a terminal has not yet been automated, i.e. substitution between automated Gantry Cranes and non-automated Gantry Cranes is one-sided. Once automation has been implemented in a given terminal, it makes limited sense from a cost perspective to switch back to non-automated operations. Therefore demand-side substitutability between automated and non-automated Gantry Cranes is likely to be limited once a terminal has undergone a shift to automation. Given that the main suppliers of RTG also offer automated RTG (A-RTG), we have not assessed the effects of the Merger in the supply of RTG and A-RTG separately. We have considered any relevant differences between RTG suppliers in terms of automation in the competition assessment.

Provisional conclusion on the relevant product markets

- 5.25 Our provisional conclusion is that there are separate product markets for the supply of RTG and ASC, due to limited demand and supply-side substitutability, as supported by evidence from third parties and evidence on the market structure. This suggests different competitive conditions in the supply of each type of crane.

Geographic market definition

Parties' views

5.26 The Parties submitted that there is clear evidence that the markets for RTG and ASC¹¹⁶ are worldwide rather than European.¹¹⁷ The Parties submitted that:

- (a) *A lack of presence in all jurisdictions by some suppliers does not point to a narrower geographic market.* The Parties submitted that the location of OEMs' production facilities generally has no bearing on customers' purchasing decisions. For example, ZPMC has successfully penetrated the market as a cranes supplier worldwide (including the UK) even though its activities are concentrated in China;
- (b) *There is no need for pre-existing regional servicing capabilities.* Customers without in-house service capabilities can rely on a wide range of service providers, new entrants that wish to acquire servicing capabilities have numerous different straightforward ways of doing so, and the supply of spare parts is typically centralised so OEMs would not need to establish a network of regional warehouses;
- (c) *There is no need for an established regional track record.* The Parties state that this is not a prerequisite for success in the markets for RTGs and ASCs. Customers of port cranes have terminals in several regions and countries and purchase globally or negotiate framework agreements centrally at group level. These customers expect the same quality requirements and technical specifications across the world; and
- (d) *Transportation costs are relatively low compared to the overall upfront investment.* The Parties estimate that on average transportation costs account for around 10% of the price of the product.

5.27 The Parties further submitted that there are no significant differences in regulatory, safety and environmental standards between Europe and the rest of the world.¹¹⁸

5.28 In their response to working papers, the Parties submitted that the market for Gantry Cranes is a global market and should be viewed against the backdrop

¹¹⁶ The Parties say that these factors also apply to Mobile Equipment and SC and ShC, ie to all

¹¹⁷ The Parties' [Response to Issues Statement](#), paragraphs 2.1 to 2.13.

¹¹⁸ The Parties' [Response to Issues Statement](#), paragraphs 2.1 to 2.13 and 3.12.

of a number of key factors that apply across equipment types in the CHE industry.

- 5.29 The Parties also stated that the use of shares of supply by the CMA to conclude on a narrower regional market is misplaced. They submitted that a 'share of supply' analysis is static and does not reflect the dynamic nature of competition and the geopolitical decisions that have been taken by "Chinese nationals" to enter certain container handling segments.
- 5.30 The Parties submitted that the evidence cited by the CMA with regard to the requirements for any local presence is at best mixed, for example a local after-sales service. A local presence is not a prerequisite and is not indicative of a narrower geographic scope of the gantry crane segment.
- 5.31 Having an established track record is also not considered by the Parties to be a determining factor that could result in a narrower geographic market definition. The Parties submit that several non-European competitors have established global servicing networks, including in Europe.
- 5.32 In addition, the Parties noted that they both use manufacturing facilities in China, which means that they face the same transportation obligations as their Chinese competitors. Both the Parties use sub-contractors for the manufacturing of their Gantry Cranes, which includes sub-contractors in China. Furthermore, they state that APM's strategic alliance with ZPMC refutes any suggestion that manufacturers active in the 'Far Eastern Market' are not capable of effectively competing in Europe and worldwide.

Past decisional practice

- 5.33 In *Konecranes/Terex*, the EC considered that the geographic markets for CHE may be EEA wide or wider, but ultimately left the exact geographic definition open. This decision did not however address the Gantry Cranes markets specifically, but mobile harbour cranes and some types of horizontal and Mobile Equipment.

Our assessment

- 5.34 We have assessed the appropriate geographic market for our assessment of the effects of the Merger in the supply of RTG and ASC, including by considering factors that influence the suppliers that UK customers would consider as an alternative (i.e. whether UK customers would consider suppliers based outside the UK or Europe). We have considered:

- (a) The market position of the suppliers of RTG and ASC in the different regions;
- (b) factors that may affect the ability of RTG and ASC supplier active in other areas of the world to supply customers in Europe; and
- (c) importance of a sales and after-sales presence.

5.35 Most of the evidence considered below refers to both RTG and ASC.

The market position of the suppliers of RTG and ASC in the different regions

- 5.36 The market position of suppliers of RTG and ASC in Europe (including the UK) is different from the position of these suppliers in other regions in the world and a few suppliers of RTG and ASC are not present in Europe, but operate in other regions in the world. This different structure of supply points at different conditions of competition between Europe and other regions. In particular, shares of supply (presented in Chapter 7) indicate that some Gantry Crane suppliers are less strong in certain regions compared with others. The Parties typically have significantly higher shares of supply in Europe than in the rest of the world. Conversely, ZPMC typically has a significantly lower share of supply in Europe than in the rest of the world.
- 5.37 One third party analyst reports that both Parties use in their ordinary course of business¹¹⁹ considers the competitive situation in different regions across the world, including Europe and shows that, while major suppliers of RTG and ASC sell in different regions of the world, these do not have the same strength across the globe (see Figure 10 and Figure 11).

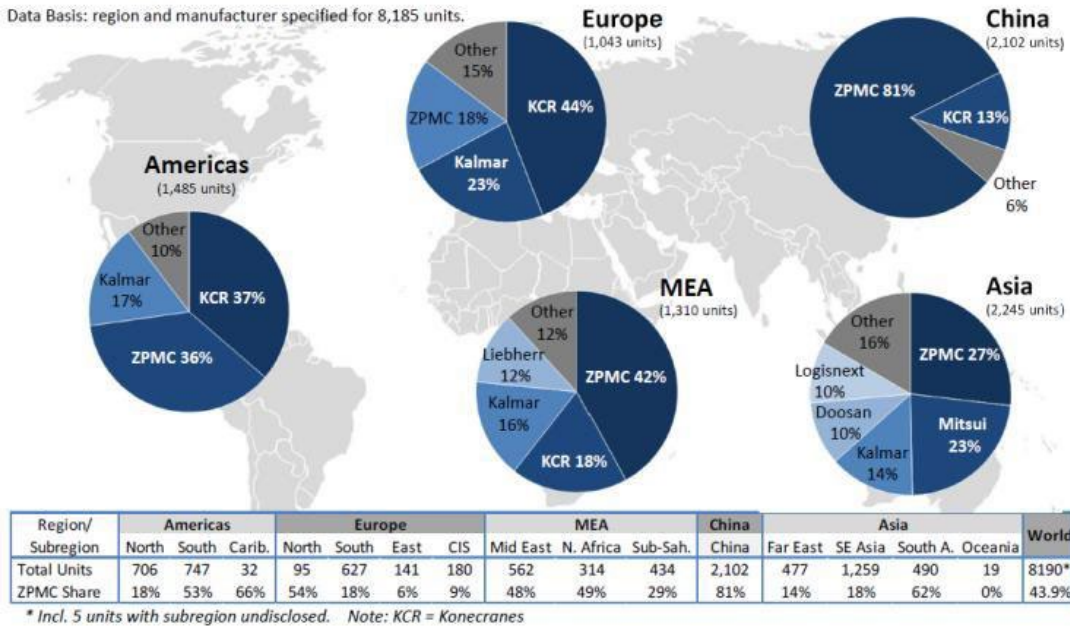
¹¹⁹ DS Research (January 2020), Container Terminal Foresight 2024, page 47.

Figure 10: Regional RTG shares

REGIONAL RTG MARKET SHARES (2005-2019)

DS Research

Data Basis: region and manufacturer specified for 8,185 units.



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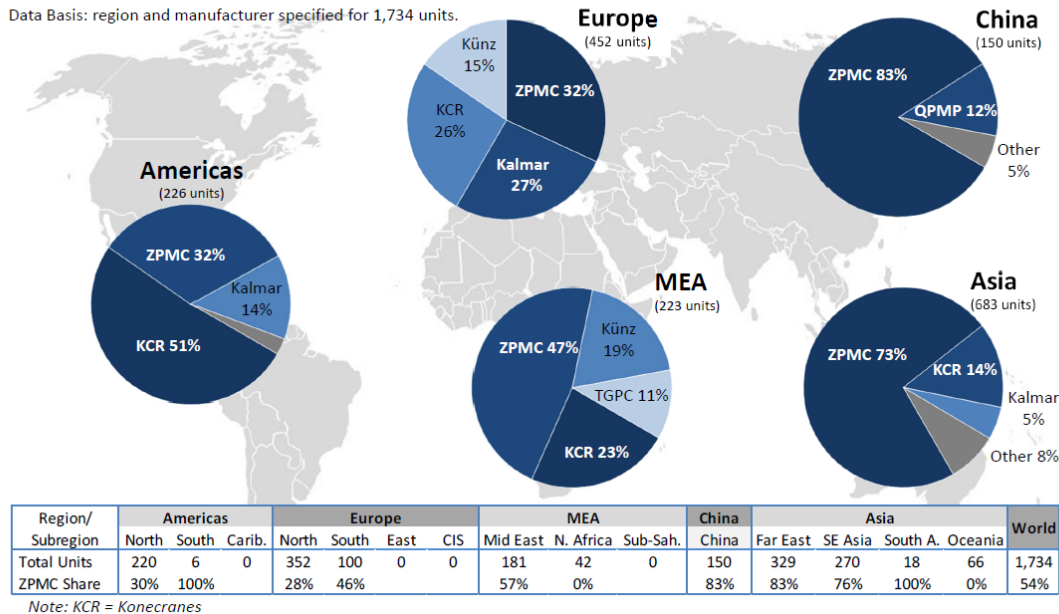
Source: DS Research (January 2020), Container Terminal Foresight 2024, page 47.

Figure 11: Regional ASC shares

REGIONAL ASC MARKET SHARE (2005-2019)

DS Research

Data Basis: region and manufacturer specified for 1,734 units.



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Source: DS Research (January 2020), Container Terminal Foresight 2024, page 61.

- 5.38 Internal documents from Cargotec also show that there are differences in the competitive landscape. For instance, [REDACTED].^{120,121}
- 5.39 We consider that the differences in the structure of supply are indicative of different market dynamics and demand patterns in Europe, since several RTG and ASC suppliers that are active in other regions do not compete in Europe.

Factors that may affect the ability of RTG and ASC suppliers active in other areas of the world to supply customers in Europe

- 5.40 We have considered whether different factors may affect the ability of RTG and ASC suppliers active in other areas of the world to supply customers in Europe, including: i) transport costs; ii) the regulatory environment; and iii) risks associated to tariff escalation and trade tensions.
- 5.41 Evidence from internal documents and third parties also indicate that transport costs affect the competitive strength of cranes suppliers in each region.
- 5.42 One competitor said that competitors based outside Europe face significant transportation costs that affect their ability to compete for tenders based in Europe. [REDACTED]. This competitor noted that ‘The transport costs [from China] are affordable when clients purchase four, eight or twelve cranes but are not when transporting a single unit’ and that it ‘is stronger in the market for STS cranes than for yard cranes as the high transport cost factor matters much more for yard cranes (because their product value is less than that of an STS crane), which gives local players certain advantages’.
- 5.43 Another competitor said [REDACTED].
- 5.44 [REDACTED].
- 5.45 In one strategy document for Port Solutions, Konecranes recognises that transportation costs are the main reason for price differences across regions: ‘[REDACTED]’.
- 5.46 [REDACTED]. In its submission [REDACTED] acknowledges the importance and volatility of transport costs, as one of the risks that Cargotec (as would be the case for other competitors) would have to manage. Cargotec noted that [REDACTED]. It also stated that [REDACTED].

¹²⁰ [REDACTED].

¹²¹ The Parties submitted that these documents do not reflect its view on competitive dynamics. The CMA notes that these documents are, however, aimed to ‘inform the board of directors on relevant issues and it is notable that in its reporting, Cargotec assesses the competitive situation separately for each region.’

- 5.47 The Parties noted that they also use manufacturing facilities in China - facing the same transportation obligations as their Chinese competitors. As made clear by the above Cargotec submission, however, the transport costs between China and Europe appear to be material, pointing towards a regional market.
- 5.48 Although Cargotec and Konecranes use manufacturing facilities for producing and assembling yard cranes outside Europe (including through sub-contractors):
- (a) The Parties have other advantages associated with their local presence in Europe, such as customer relationships and track-record, while for ZPMC price is a more important factor to its competitiveness.
 - (b) Furthermore, [REDACTED].¹²²
- 5.49 We also note that while port cranes were exempt from the 25% tariffs imposed by the former US administration on goods produced in China, some internal documents show that Cargotec was mindful of the risk of escalating trade tensions between China and Western countries.¹²³ In fact, the Parties noted, in the context of explaining the 'shortcomings' of its current assembly set-up for cranes in China, [REDACTED]. This evidence supports that risks associated to tariff escalation and trade tensions may affect the trade of Gantry Cranes between Europe and the other regions of the world.
- 5.50 Finally, based on evidence from third parties, we also consider that the European regulatory environment may have an impact on the ability of non-European based suppliers to compete in Europe and points towards a European market.
- (a) One competitor stated that 'the European standard requirements are too different for some Japanese and Korean players to fulfil'.
 - (b) Another competitor stated that there are 'many features that differ in supplying Europe and the rest of the world', including the European regulations related to the CO₂ emission which are similar in the UK, Europe and the US, but differ in other parts of the world (e.g. Middle East and Africa).
 - (c) One [REDACTED] of [REDACTED] said that Sany's cranes are set-up for the Far Eastern market and, as such, [REDACTED] documentation is not suitable for the European

¹²² [REDACTED].

¹²³ See [REDACTED]. Another Cargotec's internal document - [REDACTED].

market, which makes it difficult to get through the first stage of a tender process at present.

Importance of a sales and after-sales presence in Europe

- 5.51 Evidence from third parties highlights that having a sales and after-sales support presence in Europe is an important factor in the competition for the supply of RTGs and ASC, including during the warranty period, and appears to affect customer preferences:
- (a) One port customer said it would be concerned about purchasing equipment from a supplier without a presence, or the intention to create a presence, in the UK or Europe, unless an alternative solution was proposed which could ensure the prompt delivery of people and parts necessary to ensure ongoing operation of assets. This customer also noted that it has a strong in-house engineering function which does support on a wide variety of maintenance tasks, but where specific specialism or knowledge is required or when warranties are in place, third party (including from the OEM) support can be requested under the applicable contract.
 - (b) Another customer submitted that it undertakes routine maintenance itself but, if there is a particular problem, the manufacturer needs to be available to be contacted.
 - (c) One [redacted] competitor said that, while it tries to ensure timely maintenance, repairs, servicing and spare parts for UK and European ports, in order to do that it needs to rely on a number of components that are manufactured by European suppliers. This means that it is important to have access to a regional supply of components and spare parts.
 - (d) One competitor said that most of the Asian OEMs are unable to offer competitive delivery times to European yard crane customers. It also said that the competitive landscape of the Asian market is different because other suppliers from China, Korea and Japan are active, [redacted].
- 5.52 Contrary to the Parties' submission summarised in 5.30 about the need for a regional after sales presence, we consider that the evidence set out above clearly supports that a regional presence, including an after-sales servicing, is important at least for some customers. As set in Table 14 in Chapter 7, RTG and ASC customers have given a score of 4 or 5 to 'Differences in strength of local aftersales presence' as a purchasing criteria (in a scoring from 1-6, in

which 6 is the highest in importance). We also note that Cargotec services a material proportion of the RTG that it sells in the UK.¹²⁴

- 5.53 Having a track record of successfully supplying RTG and ASC to European customers seems to be an important factor in customer choice and an obstacle to achieving sales for suppliers that have not previously supplied customers in Europe. One customer told us that having an established track record in Europe was highly influential when deciding which supplier to use, alongside having a competitive offer and a product that is known to the customer. [REDACTED].
- 5.54 We note that the fact that ZPMC has succeeded in establishing a track record and gaining some business in Europe for RTG and ASC, as reflected in its recent alliance with APM, does not contradict that having a European sales and after-sales presence and track record is important. The obstacles set out above do not mean that a non-European supplier of RTG and ASC cannot compete in Europe, but that they will not be able to quickly and easily do so, given the different competition conditions in Europe and other regions. ZPMC is the only non-European supplier that gained a material presence in Europe. and had to set up a regional presence to gain that presence.

Provisional conclusion on the relevant geographic market

- 5.55 Based on the evidence set out above, our provisional conclusion is that the appropriate geographic market for the assessment of the effects of the Merger in the supply of both RTG and ASC is European (including the UK) due to the different competitive dynamics in Europe compared with different regions of the world.
- 5.56 While we provisionally conclude that the relevant markets for RTG and ASC are Europe-wide, we have also taken account of evidence relating to the impact of the Merger on UK customers specifically. In doing so, we have considered shares of supply to UK customers (including imports to the UK), tender data for UK contracts and evidence from UK customers on the alternatives available to them.

¹²⁴ We note that the annual proportion of Cargotec's sales (by volume) where the arrangement was for Cargotec to service RTG under warranty was between [REDACTED]% in 2015 and [REDACTED]% in 2020 (Cargotec's response to CMA's RFI of 12 November 2021). We note that data submitted by Cargotec indicating that [REDACTED] sold in UK in the last 10 years had been serviced in-house during the warranty period (ie were not serviced by Cargotec) (see CMA's RFI of 21 October 2021) does not appear consistent with DP World's (Cargotec's only customer of ASC in the UK) submission to the CMA that 'even though it does most of the maintenance on ASCs in-house, it still relies on support from the OEM'. In particular, DP World believes that, 'the higher the level of automation, the more likely it is that it will need support from the OEM when there is an issue with the interfaces between the equipment and the software or between different pieces of software.'

5.57 Furthermore, we have carefully taken into account and assessed the competitive constraints on the Parties, both within and outside the relevant geographical market.

SC and ShC

Product market definition

Parties' views

5.58 The Parties submitted that there is generally 'limited demand-side substitutability' between SC and other types of horizontal transport equipment (HTE) (including ShC) due to their versatility in being able to both transport and stack containers. However, the Parties submitted that, at the terminal design stage, SC and ShC face competition from other types of equipment (eg reach stackers, Gantry Cranes, and terminal tractors) that could fulfil the same functions if the terminal was designed in an appropriate way.

5.59 The Parties submitted that the question of whether ShC form part of the same market as SC can be left open given that ShC are a 'niche' product. Nevertheless, they submitted the following:

(a) From a demand-side perspective, ShC are different from SC due to their lack of stacking functionality, so a customer using SC may not readily switch to ShC as they would lose the stacking functionality. The Parties also submitted that the prices of SC and ShC are broadly in the same range, but that SC are typically more expensive than ShC, such that a customer using ShC may not readily switch to SC due to the additional cost (unless the SC are also intended to replace the customer's existing stacking capabilities).

(b) From a supply-side perspective, ShC are almost identical to SC, with the main difference being that ShC have shorter legs.

5.60 In response to the working papers, the Parties submitted that the distinction between greenfield and brownfield projects has not been adequately recognised by the CMA. It is important as, particularly in greenfield projects, there is a significant degree of cross-competition between different equipment types at the conceptual stage when a new terminal is designed.

Past decisional practice

5.61 In *Konecranes/Terex*, the EC considered SC to constitute a separate product market from other types of container transport and/or stacking equipment,

such as reach stackers, terminal tractors, and Gantry Cranes, because of their versatility. ScH were neither explicitly included or excluded.¹²⁵

Our assessment

- 5.62 Horizontal Transport Equipment comprises SC, ShC, AGV and TT. AGVs are not relevant for the provisional findings and will, therefore, not be considered further.
- 5.63 SC and ShC are both mounted on wheels and have a hoisting structure allowing them to lift containers. Both are used for stacking containers at the yard and for (horizontally) transporting containers to and from the yard. Both are also used for loading/unloading trucks and railcars. SC are able to lift containers and stack them up to four high (although they usually only stack three containers at a time and use the vertical space above the third container as working room, so-called '1-over-3 straddle carriers').
- 5.64 ShC are largely identical to straddle carriers but they are built with shorter legs and are therefore not used for stacking but rather primarily to transport containers horizontally.

Demand-side substitution between SC/ShC and other CHE

- 5.65 The evidence we reviewed indicates that demand-side substitutability between different types of HTE is limited.
- (a) Evidence from customers indicates that different types of HTE are designed to fulfil different functions, and thus are not usually substitutable.
- (i) One customer noted that it 'issues tenders for different equipment types separately', especially for the most 'technical' equipment, which includes SC and ShC.
- (ii) Another customer stated that 'typically, container handling equipment types are procured for specific purposes and are not seen as substitutable with other types of equipment'.
- (b) Figure 8 above, from a promotional brochure produced by Konecranes in 2016, shows that straddle carriers have different functions, use and varying cost profiles depending on the volumes being handled compared to other types of equipment (eg reach stackers, Gantry Cranes), such that

¹²⁵ EC case M.7792 *Konecranes/Terex MHPS*, 8 August 2016.

each type of equipment is unlikely to be a substitute for another to handle a given volume of containers.

- (c) For the reasons explained above in paragraph 5.11 (see Figure 9) SC Terminals are distinguished from other terminal systems (eg RTG Terminals and ASC Terminals) based on different usage, characteristics and levels of automation. We consider that, even at the conception stage, the envisaged type of terminal determines the type of equipment that will be used and not vice versa.

5.66 One competitor told us that SC and ShC would be substitutable with ASC for large customers that are 'looking to increase their capacity'. We consider that this further demonstrates that different types of CHE are suitable for different volumes of container handling.

5.67 Furthermore, we have seen evidence suggesting that demand for SC and ShC is driven mostly by the replacement of existing equipment rather than new demand from greenfield sites or substantial expansions.

- (a) One competitor noted that 'new ports would not use SC'.

- (b) An independent market research report noted that 'few new terminal projects choose [SC and ShC] as yard equipment, resulting in [SC and ShC] sales mainly driven by replacement demand'. This report further noted that the number of operational SC and ShC globally has declined from over 4,000 in 2009 to 3,780 in 2019.¹²⁶

5.68 If the demand is driven by replacements, other types of CHE are unlikely to be an alternative to customers for that purpose.

5.69 Therefore, we provisionally conclude that there is limited degree of demand-side substitution between SC and ShC, on the one hand, and other types of CHE (including ASC), on the other hand.

Supply-side substitution between SC/ShC and other CHE

5.70 Some suppliers of other types of CHE (including other equipment used for stacking, such as ASC) differ from those active in straddle and shuttle carriers (e.g. Kuenz does not supply SC or ShC), which suggests that the conditions of competition are different.

5.71 Furthermore, Cargotec's internal documents analyse competition for SC and ShC separately from other types of CHE, which suggests that the competitive

¹²⁶ DS Research (January 2020), Container Terminal Foresight 2024, pp 64–5.

conditions are not similar.¹²⁷ For example, a Cargotec market analysis document produced for Kalmar Automation Solutions in December 2019 analyses [✂]. A similar document from 2018 also has [✂].

- 5.72 For the reasons set out above, we provisionally conclude that SC and ShC are distinct from other types of CHE and should not be aggregated with other CHE based on supply-side substitution considerations.

Demand-side substitution between SC and ShC

- 5.73 Due to the similarity between SC and ShC in particular (see Chapter 3), we have considered whether there should be either a single product frame of reference for both types of equipment or two separate frames of reference.
- 5.74 From a demand-side perspective, we understand that SC and ShC are not directly interchangeable because SC, unlike ShC, are able to stack containers as well as transport them.
- (a) An independent market research report produced in 2020 notes that the average global price of a ShC in 2019 was \$0.81m, compared with a range of \$1.17m to \$1.3m for SC.¹²⁸ Therefore, we consider that a user of SC would be unlikely to switch to ShC because replacing the stacking capability of SC with an additional piece of equipment would likely outweigh the (upfront) cost saving from switching to ShC (for example, the same market research report notes that the average global price of reach stackers in 2019 was around \$0.5m, and for rubber-tired Gantry Cranes was around \$1.75m).¹²⁹
- (b) An earlier edition of the same independent market research report produced in 2017 states ‘In the years before 2008 delivery numbers [for SC] were higher, because the market was driven by both replacement demand and demand from capacity expansion projects. This has changed. Since 2009 demand was almost exclusively resulting from unit replacements, whereas very few new terminals were opting for [straddle carriers]. Shuttle carriers are an exception here; they are mainly ordered for new-built terminals.’ This report, therefore, suggests that straddle carriers are most often purchased to address replacement demand

¹²⁷ The Parties submitted that the fact a presentation that been arranged by product is not indicative of the products concerned being separate markets. We consider, however, that the documents are organised to better inform about the competitive situation, and it is, therefore, notable that in its reporting, Cargotec assesses the competitive situation separately for each Mobile Equipment.

¹²⁸ DS Research (2017), Container Terminal Foresight 2022, p 67.

¹²⁹ DS Research (2017), Container Terminal Foresight 2022, pp 42 & 74.

(brownfield projects), while shuttle carriers are purchased mostly for new terminals (greenfield projects).¹³⁰

- (c) Similarly, a user of ShC would be unlikely to switch to SC as this equipment is more expensive (unless the SC were intended to replace existing stacking capabilities as well).
- (d) A competitor also told us that ‘SC can be differentiated following their functions. For instance, while one-over-three SC can stack containers, ShC only transport the containers horizontally.’

Supply-side substitution between ShC and SC

- 5.75 From a supply-side perspective, the Parties told us that there are [] involved in switching production between SC and ShC. Competitors also told us that it was easy switch production. One competitor told us that while ‘there are minor differences between manufacturing ShC and SC from an automation perspective. It is relatively easy to start producing ShC if a manufacturer produces SC.’ Another competitor told us that the differences between ShC and SC do not require different production capabilities.’
- 5.76 We further note that the major suppliers active in the supply of SC (the Parties and ZPMC) are the same as those active in the supply of ShC, such that the competitive dynamics are likely to be similar for both types of equipment.
- 5.77 We are aware of two suppliers (Mobicon and Combilift) that only produce ShC but note that neither has delivered a ShC in Europe since 2017. An independent market research report states that Mobicon and Combilift produce a ‘lighter type of ShC, which is mainly used at small terminals or inland ports, warehouses or distribution centres, rather than maritime container terminals’.¹³¹
- 5.78 The evidence above suggests that there is some level of supply-side substitutability and similar competitive dynamics in the supply of both products.

Manual versus automated ShC and SC

- 5.79 We understand that automation is a small part of the SC and ShC market at present, with automated SC accounting for roughly 7% of global deliveries in 2017 to 2019. Within the UK and Europe, automation is almost non-existent

¹³⁰ DS Research (2017), Container Terminal Foresight 2022, page 4

¹³¹ DS Research (2017), Container Terminal Foresight 2022, p 63.

within the SC and ShC market - there were no deliveries of automated SC or ShC in 2017 to 2019, although ZPMC has recently delivered automation-ready SC in Sweden. There is only one automated shuttle terminal currently in operation (in Australia).

- 5.80 An independent market research report notes that demand for SC and ShC is primarily driven by replacement needs at existing locations rather than new demand from greenfield sites. The report further notes that new terminals are more likely to choose automated SC and ShC than existing terminals.¹³² As such, we conclude that future demand for automated SC and ShC may be slow to increase.
- 5.81 As all three suppliers of SC and ShC – Cargotec, Konecranes and ZPMC - appear to offer both manual and automated SC and ShC, there is no evidence that the competitor set is likely to be distinct for manual and automated SC and ShC.
- 5.82 Therefore, we have not assessed the effects of the Merger separately for manual and automated SC and ShC because this distinction does not seem to affect the provisional findings of our competition assessment.

Provisional conclusion on the relevant product market

- 5.83 Our provisional conclusion is that SC and ShC is a separate market from other horizontal transport equipment, and that SC and ShC are part of the same product market, due to the significant degree of supply-side substitution.

Geographic market definition

Parties' views

- 5.84 The Parties submitted that the market for SC and ShC is global in scope. They noted that the major suppliers are active across the world, and that customer procurement tenders typically involve several international suppliers. The Parties noted that the expansion of China-based ZPMC into the supply of SC and ShC further demonstrates the global nature of the market. The Parties also submitted that transports costs for intercontinental shipping are not prohibitive.
- 5.85 In response to working papers, the Parties reiterated their position that the market for SC and ShC is global in nature and also disagreed with the CMA's approach to calculating shares of supply for SC and ShC. Both Parties

¹³² DS Research (2020), Container Terminal Foresight 2024, pp 64 & 97.

generated revenue in China during the 2017 to 2019 period and both Parties (and their competitors) are present in China with assembly facilities. Therefore, the Parties argued that presenting the shares of supply on a 'worldwide excluding China' basis is mischaracterising the market in which the Parties operate.

- 5.86 The Parties also submitted that customers do not require maintenance staff and spare parts to be physically located within a sufficiently close proximity. The Parties argued that the CMA's working paper made an unproved leap between the proximity of maintenance staff and a customer's preference for OEMs with at least a European presence. The Parties cited the example of Logisnext as having a global presence and not operating on a regional basis.

Past decisional practice

- 5.87 In *Konecranes/Terex*, the EC considered that the geographic markets for CHE may be EEA wide or wider, but ultimately left the exact geographic definition open. These decisions did not however address the horizontal equipment or straddle and shuttle carrier markets specifically, but mobile harbour cranes and some types of horizontal and Mobile Equipment.¹³³

Our assessment

- 5.88 There are three main suppliers of SC and ShC (the Parties and ZPMC) operating on a worldwide basis and their market positions do not differ significantly whether assessed on a Europe-wide or worldwide (excluding China) basis. There are also some smaller suppliers that operate in other regions of the world and not in Europe:
- (a) Logisnext operates predominantly in Taiwan and Japan and is not active in Europe.^{134,135}
 - (b) Suzhou Dafang appears to operate only in China and is not active in Europe.
- 5.89 We have also reviewed evidence that suggests that there are some factors that affect the competitive dynamics and may prevent suppliers without a sufficient European presence from being an effective alternative to UK customers. Some third parties noted that transport costs can affect the

¹³³ EC case M.7792 *Konecranes/Terex MHPS*, 8 August 2016, paragraphs 64 and 65.

¹³⁴ DS Research (2020), *Container Terminal Foresight 2024*, p 68.

¹³⁵ The Parties' submitted that Logisnext has a broad global presence based its overall operations. We have not seen evidence, however, that Logisnext supplies SC or ShC in Europe.

competitiveness of suppliers based outside Europe when competing for European customers.

(a) One UK customer considered that ‘the cost of delivery is a factor when buying from China’ and that ‘buying six straddle carriers from China would be expensive in terms of delivery costs’.

(b) [REDACTED].

5.90 For the same reasons discussed in paragraph 5.49, the risks associated to tariff escalation and trade tensions may also affect the trade of SC and ShC between Europe and the other regions of the world.

5.91 We also note that the demand characteristics and customer preferences seem to be, to some extent, distinct in Europe compared with other regions. A market report by DS Research in 2017 suggests that SC and ScH are more prevalent in European terminal designs and that Europe is the main market for SC and ScH, mainly due to the size of terminals that favour the use of this equipment. This report states that ‘The use of straddle carriers is exceptionally high in North Americas (13%), North Europe (41%) and Oceania (8%)’ and that ‘[SC]-operating terminals are located mainly in world regions, which have achieved only moderate growth, as North Americas, North Europe and Oceania.’¹³⁶

5.92 Evidence from third parties highlights that having a sales and after-sales support presence in Europe is an important factor in the competition for the supply of SC and ScH and appears to affect customer preferences.

5.93 Customers typically require maintenance staff and spare parts to be located within sufficiently close proximity to respond to any issues within a reasonable time, including during the warranty period. In practice, this means that a UK-based customer may prefer to use a supplier with at least a European presence.

(a) One UK customer that uses SC told us that it would be concerned about purchasing cranes and SC from a supplier without a presence in Europe unless an alternative solution was proposed which could ensure the prompt delivery of people and parts necessary to ensure ongoing operation of assets. As explained above, although a strong in-house engineering function which does support on a wide variety of maintenance tasks, where specific specialism or knowledge is required or when warranties are in place, third party (including from the OEM) support can

¹³⁶ DS Research (2017), Container Terminal Foresight 2022, page 33.

be requested under the applicable contract, The same customer suggested that a track record in Europe for equipment like SC and ShC is important for competitors to succeed in the supply of SC and ShC to the UK.

(b) [REDACTED].

Provisional conclusion on geographic market definition

5.94 Our provisional conclusion is that Europe is the appropriate geographic market for the assessment of the effects of the Merger in the supply of SC and ShC. Nevertheless, we note that the precise boundaries of the geographic market for the supply of SC and ShC do not affect the provisional findings of our competition assessment. We note that shares of supply are broadly similar between the UK, Europe and worldwide (excluding China) (see below). Irrespective of our views on the scope of the geographic market, we have carefully taken into account and assessed the competitive constraints on the Parties, both within and outside the relevant geographical market.

Mobile Equipment

Product market definition

Parties' views

5.95 The Parties submitted that there is a certain degree of demand-side substitutability between Mobile Equipment types, but differences in application and price limit the extent to which customers would use one type of Mobile Equipment as an alternative to another. The Parties consider that:

- (a) Reach stacker may not be entirely substitutable with empty container handlers and forklift trucks from a demand-side perspective (considering differences in price and applications) and may therefore need to be considered separately;
- (b) Full and empty container handlers may form part of the same product market, due to a large degree of supply-side substitutability;¹³⁷

¹³⁷ From a demand-side perspective, the Parties submitted that there is a certain degree of substitutability between full and empty container handlers (and reach stackers), but also acknowledged that 'empty container handlers cannot be used to handle full containers' and that 'while customers sometimes use full container handlers (and/or reach stackers) to handle empty containers, customers would usually not replace an empty container handler with a full container handler, given that there are significant differences in price'.

(c) The market for forklift trucks should not be segmented further based on lifting capacity (light and heavier models) or the type of engines. On the demand-side, customers can use different forklift trucks for different industrial applications and may choose to substitute a light forklift with a heavier model (eg in order to increase flexibility in terms of materials lifted). Forklift trucks of various lifting capacity (especially heavier forklifts) can be manufactured using the same facilities and design principles, so there is supply-side substitutability between the different sizes.

5.96 In relation to FLT, in particular the Parties rejected the distinction between FLT with a lifting capacity greater or less than 10 tonnes that was referred to in the Issues Statement.¹³⁸ On the demand-side, the Parties noted that lighter FLT (<10 tonnes) are often used indoors (e.g. in warehouses), while heavier FLT are commonly used outdoors, in heavy industries, and for container handling. However, they submitted that customers can use different types of FLT interchangeably — for example, a customer may choose to substitute a ‘light’ FLT with a heavier model that can lift multiple pieces of lighter cargo at the same time.¹³⁹

5.97 On the supply-side, the Parties noted manufacturers could adjust their production to different types of FLT relatively easily, without having to invest in changes in production facilities (and a number of manufacturers produce FLT with a wide range of lifting capacities).¹⁴⁰

5.98 In its response to the working papers, the Parties further noted there is no consistency across the industry in terms of how participants assess subsets of FLT.

Past decisional practice

5.99 In *Konecranes/Terex*, the EC considered the relevant market for CHE, including reach stackers. It considered that each equipment type may form a separate market, but ultimately left the exact scope of the market open.¹⁴¹

Our assessment

5.100 Mobile Equipment is mainly used to transport and lift containers, other cargo, and flat racks¹⁴² in terminals, and by industrial and logistics companies. There

¹³⁸ The Parties’ [Response to Issues Statement](#), paragraph 7.17.

¹³⁹ The Parties’ [Response to Issues Statement](#), paragraph 7.17.

¹⁴⁰ The Parties’ [Response to Issues Statement](#), paragraph 7.17.

¹⁴¹ *Konecranes/Terex*, paragraph 65.

¹⁴² Flat rack containers are a type of specialized containers having walls only at the short end of the container

are three main types of Mobile Equipment - reach stackers, container handlers and forklift trucks.

- 5.101 Reach stackers have a boom with a spreader that grips the container from above, allowing it to operate several rows deep (ie they are also able to reach containers located in the second or third row of a container stack).
- 5.102 Container handlers are offered either as full container handlers or as ECH. Both are mast lift trucks able to stack containers only in the first row. ECH have a lower lifting capacity than full container handlers and are used to stack unladen containers, generally up to eight containers high. ECH exist in versions for single or double container handling. As the Parties do not overlap in the supply of full container handlers, our competition assessment will focus on ECH.
- 5.103 FLT are used to lift and move materials over short distances. They are equipped with a fork. FLT normally have a cabin for the driver. FLT differ in the weight of materials they can lift and move, ranging from lighter lifting capacity FLT which are used in various industries, to medium and heavy capacity FLT, which are used for container handling among other things.
- 5.104 Whereas reach stackers are used mainly by port terminals, FLT are used both by port terminal and industrial customers.

Demand-side substitution between different types of Mobile Equipment

- 5.105 We have received evidence from customers that suggests that different types of Mobile Equipment are not substitutable from a demand-side perspective.
- 5.106 Customers indicated that typically they would not substitute one type of Mobile Equipment for another because each serves a different function. For example, a customer said that 'reach stackers are generally not substitutable with other types of CHE, such as container handlers'. Another customer 'considers that a reach stacker and ECH have unique functions and are not substitutable'. Several customers noted that they usually tender for each type of equipment separately.
- 5.107 A competitor to the Parties expressed a similar view, noting that 'different types of machines are suitable for different tasks/applications'. This competitor further considered that 'ECH cannot substitute a reach stacker' and that 'it is inefficient to use FLT for stacking containers'.
- 5.108 Figure 8, in paragraph 5.10, from a promotional brochure produced by Konecranes in 2016, indicates that reach stackers and container lift trucks have varying cost profiles depending on the volumes being handled, such that

one type is unlikely to be a close substitute for another when it comes to handling a given volume of containers.

5.109 We also note that Cargotec's internal documents [REDACTED]. This suggests that the competitive conditions are not similar for each type of Mobile Equipment.

Supply-side substitution between different types of Mobile Equipment

5.110 We note that, as set out in the CMA guidance, 'the boundaries of the relevant product market are generally determined by reference to demand-side substitution alone'¹⁴³ We note, however, that from a supply-side perspective, we do not consider that the different main types of Mobile Equipment should be aggregated, as the conditions of competition appear to be different. For example, Sany is a significantly smaller supplier (by share) of heavy-duty FLT (as defined below) than reach stackers and ECH, and a number of suppliers of HDFLT (such as Linde and Svetruck) either do not supply other types of Mobile Equipment at all, or supply small volumes.¹⁴⁴

5.111 Overall, our provisional conclusion is that there are separate product markets for reach stackers, ECH and FLT because there is limited demand-side and supply-side substitution.

Segmentation between light and heavy FLT

- *Demand-side substitution between light and heavy FLT*

5.112 In relation to FLT, we have considered whether the market should be segmented according to the lifting capacity of the FLT.

5.113 From a demand-side perspective, the evidence set out below clearly shows FLT are generally divided into different categories according to their lifting capacity (although the exact threshold may vary) and is consistent with these different FLT with different lifting capacity fulfilling different functions and with the fact that customers tend to specify which broad category of FLT they wish to purchase.¹⁴⁵

¹⁴³ CMA129, paragraph 9.8.

¹⁴⁴ As discussed at paragraph 5.95(b) above, the Parties submitted that full and empty container handlers may form part of the same product market. However, we note that the Parties also submitted that 'in practice there is no market for FCH opportunities outside of the US and Australia' and that 'neither Party has made sales of full container handlers in the UK in the last three years'. This is in contrast to ECH where, as shown in Chapter 9, both Parties are active in the UK and Europe more widely.

¹⁴⁵ See tender data submitted by [REDACTED].

5.114 Several third parties told us that FLT are generally divided into different categories according to their lifting capacity:

- (a) One customer considered that FLT can be divided into heavy (lifting capacity greater than around 10 to 12 tonnes) and light (lifting capacity less than around 10 to 12 tonnes) segments.
- (b) One customer made a similar distinction at a slightly different threshold— heavy duty FLT were defined as those with a lifting capacity of above 8 tonnes, and FLT with lifting capacities below 8 tonnes were defined as light.
- (c) Another customer used three segments: light (lifting capacity up to 7 tonnes), medium (lifting capacity of 7 to 16 tonnes) and heavy (lifting capacity greater than 16 tonnes).
- (d) A competitor stated that it has internal segments for FLT with lifting capacities of 10 to 18 tonnes, 25 to 32 tonnes, and greater than 36 tonnes.

5.115 Competitors of the Parties also appear to distinguish in their public offering between the heavier-duty FLT and the lighter FLT. For example, Hyster advertises ‘high capacity forklift trucks’ separately from other types of FLT. In addition, Hyster also advertises only HDFLT (>10 tonne capacity) to certain customer groups on its website, for example to ‘Ports & Terminals’.¹⁴⁶

5.116 The Parties’ internal documents regularly consider a market for HDFLT, often starting with a minimum capacity of either 9 or 10 tonnes. When the Parties benchmark themselves against competitors in FLT, it appears that they do so in particular against competitors also active in FLT with a lifting capacity of more than 10 tonne capacity):

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

¹⁴⁶ See [Hyster, Forklift Trucks and Materials Handling Solutions Tailored to Your Needs \[online\]](https://www.hyster.com/en-gb/europe/), available at <https://www.hyster.com/en-gb/europe/> [accessed 3/11/2021].

5.117 Some of the differences between heavy and light FLT are reflected in the type of FLT used by different types of customer (port customers and industrial customers):

- (a) A competitor told us that 'heavy forklift trucks tend to be sold to ports, heavy metal production and distribution companies, timber industry construction and utilities'. It further stated that lighter FLT (<10 tonnes) tend to be more interchangeable, while heavier FLT (10 to 18 tonnes) tend to be specialist equipment for a specific task.
- (b) A distributor told us that ports and terminals tend to purchase FLT with higher lifting capacity, whereas general industry would tend to purchase the 16 to 20 tonnes range. As the lifting capacity increases, the proportion of forklifts sold to general industry falls, with 32 tonne and 48 tonne FLT supplied mostly to ports and terminals.
- (c) Another distributor stated that 'anything over 7 ton capacity is considered a distinct category of product due to the bespoke nature of the customer's requirements'.
- (d) An [REDACTED].

5.118 Public tender notices for forklifts often specify the lifting capacity (tonne) of the required FLT.¹⁴⁷

5.119 Internal documents produced by the Parties also segment FLT by lifting capacity:

- (a) [REDACTED].
- (b) [REDACTED].
- (c) A [REDACTED].

- *Supply-side substitution between light and heavy FLT*

5.120 From a supply-side perspective, some manufacturers of FLT with a lifting capacity of more than 10 tonnes are also active in the supply of lower capacity FLT. However, differences in market shares and the evidence below suggest that the market structure and conditions differ significantly in the supply of FLT

¹⁴⁷ See, for example, <https://ted.europa.eu/udl?uri=TED:NOTICE:450524-2018:TEXT:EN:HTML> and <https://opentender.eu/uk/tender/9f53beb3-8a23-4288-91ab-46464a6a1d56>.

with a higher lifting capacity and the supply of FLT with a lifting capacity of less than 10 tonnes.

5.121 Third parties also noted differences in the range of suppliers of FLT with lighter and heavier lifting capacities:

- (a) A distributor stated that for FLT with lifting capacity greater than 10 tonnes, there are fewer competitors and smaller volumes than in the segment of 'small' FLT with lifting capacities up to 5 tonnes, and further noted that 'the number of manufacturers [...] drops dramatically in FLT with lifting capacities above 16 tonnes'.
- (b) A distributor indicated that the competitor set for FLT with lighter lifting capacities is different, and wider, than that for FLT with heavier lifting capacities.
- (c) A customer considered that 'the heavier the FLT the more limited the selection of suppliers', noting that in 'heavy' FLT it 'has only a few options of suppliers'.
- (d) A customer stated that 'some suppliers do not offer FLT in heavier categories'.
- (e) A competitor stated that the Parties are 'competitors in the area of FLT with a lifting capacity of 10 to 18 tonnes' and that it 'does not consider the Parties as competitors in the area of FLT with a lifting capacity of up to 10 tonnes'. This competitor also noted that 'most of the players active in the 10 to 18 tonnes lifting capacity FLT segment are also active in the market for FLT with a lifting capacity above 18 tonnes' and that Cargotec and Konecranes 'have a similar position in the market for FLT with a lifting capacity between 10 and 18 tonnes' as in the market for FLT with a lifting capacity greater than 18 tonnes. This competitor noted that 'it is not active in the supply of FLT with a lifting capacity greater than 18 tonnes'.

5.122 We also note that Konecranes does not produce FLT with a lifting capacity of less than 10 tonnes. Cargotec seems to concentrate its activities in FLT with a lifting capacity higher than 10 tonnes, as they account for around 63% of Cargotec's overall FLT activities by volume in Europe. This percentage is likely to be higher if calculated based on value of sales, given the higher price of FLT with higher lifting capacity.

5.123 Evidence from third parties is consistent with suppliers that are currently active only in lower capacity FLT not being able to easily start producing and supplying HDFLT:

- (a) A distributor said that a manufacturer of FLT with lighter lifting capacities would find it very difficult to enter into the supply of FLT with heavier lifting capacities as the scale of production is different. This distributor explained that manufacturers build FLT on platforms (for example, all 8 to 16 ton trucks will be built on the same platform) and that starting production on FLT for which a manufacturer does not have a platform would be a huge investment.
- (b) Another distributor stated that FLT with a lifting capacity above 7 tonnes 'are constructed on a solution orientated approach, rather than a commoditised approach as seen in the smaller scale machines'. This distributor also noted that it faces 'a different set of competitors for forklift trucks above 7 tones to those below'.
- (c) A distributor explained that previously there was a 'sort of barrier' of 8 to 10 tonnes for small FLT manufacturers, such that these manufacturers would not be able to 'handle' FLT with a lifting capacity greater than 10 tonnes. The distributor considered that this barrier has now moved to around 16 tonnes.
- (d) A competitor noted that FLT with a lifting capacity of 10 to 18 tonnes use 20-inch tyres and that FLT with a lifting capacity above 18 tonnes need bigger tyres, which also affects the required specifications of axles and other components.

5.124 The evidence above does not support the Parties' assertion that manufacturers of lighter FLT are said to have the ability to expand upwards from lighter ranges into producing heavier FLT.

5.125 Within FLT, our provisional conclusion is that FLT with lighter and heavier lifting capacities may not be close substitutes. Product markets are not always defined by reference to bright lines. While there is some inconsistency in the industry about the classification of FLT into 'heavy' and 'light', there is broad agreement that heavy FLT are different from light FLT (in both customer usage and the range of suppliers). There is closer competition between suppliers of FLT at the medium and higher end of the spectrum than between these suppliers and suppliers of FLT at the light end of the spectrum. For the purposes of our assessment, we took an inclusive approach and considered as heavy FLT as those with a lifting capacity of more than 10 tonnes (HDFLT). Evidence set out in our competitive assessment suggests that, if we were to define a market for even heavier FLT (for example, FLT with a greater than 25 tonnes lifting capacity), our provisional conclusions would not change. In our competition assessment, we have taken into account the constraints from suppliers that focus on the supply of FLT with lower lifting capacities, although

we note that the evidence suggests that the Parties are constrained mainly by competitors that supply HDFLT

Port and industrial customers

- 5.126 As mentioned above in paragraph 5.117, the heavy lifting capacity of the Mobile Equipment, in particular FLT, are reflected in the type of equipment used by different types of customer (port customers and industrial customers). Port terminals and some heavy industry customers tend to use FLT with higher lifting capacity, while general industry customers tend to use lighter FLT.
- 5.127 In relation to supply-side substitution between port and industrial customers, some third parties noted that the strengths and weaknesses of certain suppliers vary in relation to different types of customers:
- (a) One competitor said that, while ports are on its 'target list', 'it has been unable to break into the market'; it elaborated that 'word of mouth' is important for ports and thus it can be 'difficult to break into' this segment.
 - (b) One distributor suggested that some competitors (e.g. Doosan) do better in relation to industrial customers than port customers and that some competitors, such as the Parties, specialise in port customers. This distributor also mentioned that some port customers tend to buy from suppliers focused on their sector of activity.
- 5.128 We have currently not considered separate customer segments for port terminals and industrial customers. We note that this distinction does not seem to affect the findings of our competition assessment. We have, however, when relevant, considered any differences between the competitive constraints in the supply to port terminals and industrial customers in the competition assessment.

Provisional conclusion on the relevant product markets for Mobile Equipment

- 5.129 Overall, our provisional conclusion is that there are separate product markets for reach stackers, ECH and FLT because there is limited demand-side and supply-side substitution. We have also provisionally found that the supply of FLT can be segmented between light and heavy FLT, although the boundaries between these segments are fluid (as explain above). While we have provisionally found there are no separate customer segments for port and industrial, we have considered any differences between the competitive constraints in the supply to port terminals and industrial customers in the competition assessment.

Geographic market definition

Parties' views

- 5.130 The Parties submitted that all Mobile Equipment markets are worldwide in scope because customers are increasingly globalised and purchase from global suppliers. They submitted that a local sales and/or service presence is not a prerequisite for selling in a given region because approximately 70% of maintenance work for Mobile Equipment is provided by in-house teams, and customers without this can rely on a wide range of third-party providers (such as dealers and distributors).¹⁴⁸ The Parties submitted that it is 'straightforward' for a supplier to provide servicing capabilities in this way.¹⁴⁹
- 5.131 In this regard, the Parties explained that '[m]obile equipment is highly commoditised and often sold via external independent distribution partners' and 'suppliers will have plenty of alternatives when it comes to selecting dealers and distributors both in the UK and in Europe'. The Parties further explained that third-party providers often service equipment from several different brands and are generally not exclusively bound to particular OEMs by long-term contracts so are able to, and do, switch to supply equipment from other OEMs.
- 5.132 The Parties further submitted that suppliers do not need an established regional track record, and that there are no significant differences in regulatory, safety and environmental standards across regions.¹⁵⁰
- 5.133 In the Parties' response to the CMA's working paper on MEQ, the Parties submitted that that working paper conflated a four-hour servicing response time with the geographic market definition for OEM product supply and fails to understand that the maintenance and service sector are self-supplied by ports or by third party specialist maintenance providers.
- 5.134 The Parties stated that there is limited evidence that local engagement is important. They submitted that this was the case given:
- (a) GTOs make purchasing decisions at their global overseas headquarters. Therefore local relationships are not a determining factor in decision making.

¹⁴⁸ The Parties' [Response to Issues Statement](#), paragraph 2.5.

¹⁴⁹ The Parties' [Response to Issues Statement](#), paragraph 2.7.

¹⁵⁰ The Parties' [Response to Issues Statement](#), paragraphs 2.9 to 2.13.

- (b) There are examples of UK ports using Chinese suppliers (for example, Sany is used by Peel Ports and ZPMC by HPH) for the first-time despite 'lack of local relationship or track record'.
- (c) Once a supplier has been introduced at HPH Felixstowe, other suppliers will follow its example.
- (d) Distributors can build relationships and track records effectively.

5.135 The Parties stated that they submitted evidence which indicates that there are at least 90 distributors with Mobile Equipment experience in the UK in contrast to the CMA's statement that there are few available distributors in the UK. They also submit that there are examples of very successful distributor relationships and of OEMs switching distributors (for example, Sany/Cooper).

5.136 The Parties also submitted that transport costs are low as a proportion of overall equipment price and these costs are outweighed by the benefits of centralised production and economies of scale. The Parties also noted that 'Sany assembles mobile equipment in Germany, Hyster has manufacturing capacity in Netherlands and Liebherr has manufacturing capacity in the UK.¹⁵¹ The Parties claimed that they do not have any inherent advantage in the UK market compared to their competitors as they assemble Mobile Equipment outside of the UK.

5.137 The Parties also stated that the internal documents cited in the working papers do not substantiate the CMA's proposition that the market is narrower than global.

Past decisional practice

5.138 In *Konecranes/Terex*, the EC considered that that the geographic markets for CHE, including for some types of Mobile Equipment such as reach stackers may be EEA wide or global, but it ultimately left the exact geographic definition open.

Our assessment

5.139 We have assessed the appropriate geographic market for our assessment of the effects of the Merger in the supply of each of reach stackers, HDFLT and ECH by first considering:

¹⁵¹ We note, however, that Hyster and Sany are considered as part of the European market and Liebherr has a small presence in Mobile Equipment.

- (a) Whether the market structure, including the positions of the different suppliers, varies between different geographic areas (ie differences in market structure);
- (b) the role and local presence of the distributors;
- (c) any factors that may affect the ability of OEMs active in other areas of the world to supply Europe; and
- (d) the importance of a local sales and after-sales presence and local customer relationships preferences (eg customer relationship).

Differences in market structure

- 5.140 The market positions of suppliers in Europe are distinct from their positions in other regions in the world. This different structure of supply points to different conditions of competition in Europe. Shares of supply (presented in Chapter 9) indicate that some Mobile Equipment suppliers are less strong in certain regions compared with others, suggesting that conditions of competition vary across regions.
- 5.141 In relation to reach stackers, there are some suppliers that are not present in Europe, but supply reach stackers in other regions of the world, including: Taylor (USA), ZPMC (China), XCMG (China), Load Star (India), Toyota/Hoist (USA) Mitsubishi (Japan), Hyundai / Doosan (S. Korea). The market positions of the Parties and their competitors also seem to be different in different regions, as illustrated in one monitoring and reporting document of Cargotec, which includes estimate of regional reach stackers market shares. Cargotec's market shares in 2017 ranges from [REDACTED]¹⁵² [REDACTED].
- 5.142 In relation to ECH, there are also some suppliers that are not present in Europe, but supply ECH in other regions of the world, including: Taylor (USA), ZPMC (China), Heli (China), Dalian Forklift (China), Clark (Australia), Komatsu (Japan), Mitsubishi (Japan), Hyundai, (South Korea), Doosan (South Korea). The market positions of the Parties and their competitors also seem to be different in different regions, as illustrated in the same Cargotec internal document. Cargotec's market share in 2017 ranges [REDACTED].¹⁵³
- 5.143 In relation to HDFLT, there are also some suppliers that are not present in Europe, but supply HDFLT in other regions of the world, including: Taylor (USA), ZPMC (China), XCMG (China), Heli (China), Dalian Forklift (China),

¹⁵² This document distinguishes four regions within Europe.

¹⁵³ European Commission, RFI 17 CAR-PRA-00060446, ID: 3667-54102, 'Contents – Fact Pack', slide 42.

Hangzhou-Hangcha Forklift (China), Toyota (Japan) LiuGong (China), Lonking (China). The market positions of the Parties and their competitors also seem to be different in different regions, as illustrated in the same Cargotec internal document. According to this document, Cargotec's market share ranges [REDACTED].

5.144 Several other internal documents produced by the Parties also suggest that their market positions, and those of their competitors, vary from region to region.

(a) A Cargotec market analysis document [REDACTED].

(b) In a Cargotec strategy document [REDACTED].

(c) In a strategic internal document, [REDACTED].

(d) An internal document of Cargotec also considers that the market for FLT is regional: [REDACTED].

(e) A Konecranes internal document [REDACTED].

5.145 The evidence above indicates that the competitive landscape in Europe is different from other regions of the world and suggests that conditions of competition vary between regions.

Factors that may affect the ability of OEMs active in other areas of the world to supply customers in Europe

5.146 We have considered whether different factors may affect the ability of Mobile Equipment suppliers active in other areas of the world to supply customers in Europe, including: i) transport costs; ii) the regulatory environment; iii), risks associated to tariff escalation and trade tensions; and iv) the importance of a EU track-record.

5.147 Views from third parties highlight some factors that may affect the ability of OEMs active in other areas of the world to supply customers in Europe:

(a) Some third parties expressed the view that it can be difficult for an OEM without a local presence to effectively supply UK customers:

(i) One distributor told us that 'shipping costs' for products shipped from outside Europe puts non-European OEMs at a pricing disadvantage.

- (ii) One non-European OEM told us that ‘shipment costs’ together with the requirement for quick delivery times and local services puts non-European OEMs at a disadvantage.
- (b) The views expressed by some third parties also suggest that regulatory differences, in particular in relation to safety and environmental considerations, appear to affect the ability of OEMs to supply in Europe:
- (i) One distributor told us that ‘safety compliance’ is a key component of its service proposition. It explained that initially, ‘companies would make equipment to sell in the unregulated markets. Once the products have been proven, the company would move to try to supply the regulated markets such as the UK and Europe’;
 - (ii) One supplier of Mobile Equipment identified as a slight obstacle to entry in the UK (as part of Europe) the need to comply with UK law and validate products / contracts / documentation to ensure they are compliant;
 - (iii) One supplier of FLT stated that ‘European emission regulations regarding diesel engines deter them from entering the European market’; and
 - (iv) One customer noted that: ‘as part of the overall running-cost and price component consideration, and – per regulatory / sector developments – environmental considerations and targets, consumption, efficiencies and environmental credentials are a key consideration’.

5.148 For the same reasons discussed in paragraph 5.49 the risks associated with tariff escalation and trade tensions may also affect the trade of Mobile Equipment between Europe and the other regions of the world.

5.149 In relation to spare parts, customers told us that they stock some spare parts, especially consumables, but that for complex and expensive parts (such as the gearbox) they rely on the OEM or its distributor for prompt delivery. One customer told us that when sourcing spare parts, it typically requires the parts to be delivered within a 24-hour period, which can be fulfilled from mainland Europe. Another customer highlighted that for a new entrant to be successful it would need to have warehouse that is stocked with the critical spare parts that are needed for the machines for delivery according with the agreed servicing level (in addition to the ability to provide high-quality and prompt servicing).

5.150 As explained in more detail in Chapter 12, the importance of having a strong track record and reputation in Europe can make it difficult for a non-European supplier to start supplying Mobile Equipment in Europe.

5.151 Overall, the evidence above points towards markets for the supply of Mobile Equipment being no wider than Europe, rather than global. In summary:

- (a) The market structure and competition conditions in Europe are different as compared with other regions.
- (b) Some factors such as transport costs, regulatory requirements, and the need for a track record in Europe can make it difficult for a non-European supplier of Mobile Equipment in Europe.
- (c) While some customers stock some of the spare parts that they require (eg mainly consumables or parts that need regular replacement), customers rely on the OEM or its distributor for the prompt delivery of more complex and expensive parts, and timely delivery (for UK customers) requires at least a European presence.

The role and local presence of the distributors

5.152 While the main Mobile Equipment suppliers compete both in the UK and in other countries in Europe, the shares of supply of some suppliers differ to some extent between UK and Europe (as a whole, including the UK), as explained in more detail in Chapter 9. We consider that the competitive position of the main suppliers in the UK is influenced, to some extent, by the different distributors that OEMs use in the UK as compared to other countries in Europe and the strength of their distributor in the UK, given the important role of the distributor in the supply of after sales services establishing local customer relationships for some customers.¹⁵⁴ The distributors have an important role in establishing the necessary customer relationships, building business opportunities, providing after-sales services (including stocking spare parts), and, sometimes, facilitating financing. As explained below, these are important factors factor in the competition dynamics and are amongst the main factors that influence customer choice.

5.153 Both Parties have a sales and after-sales presence in the UK. Cargotec has a direct presence, whereas Konecranes operates primarily through its distributor, Impact Handling. Other major suppliers of Mobile Equipment in the UK also have a UK sales and after sales presence through distributors. Sany

¹⁵⁴ This is consistent with Konecranes' statement at the Main Parties Hearing, explaining that the reason for its weaker position in the UK compared to Europe is, [REDACTED].

(reach stackers and ECH) and Svetruck (HDFLT) products are distributed by Cooper Handling; Hyster products are distributed by Briggs. Impact and Cooper both operate only in the UK, while Briggs operates in the UK via an independent subsidiary. This means that all the main Mobile Equipment suppliers in the UK have sales and after-sales service networks in the UK and some of them use distributors to that effect.

5.154 The distributors used by OEMs (except for Cargotec) in the UK are different from those used by the OEMs in other regions in Europe. For example, Briggs told us that Briggs Equipment UK Ltd only distributes Hyster products within the UK and the Republic of Ireland.¹⁵⁵

5.155 Contrary to the Parties' contention, as explained in Chapter 12, there are very few distributors available in the UK with the necessary coverage and expertise for the effective distribution of reach stackers, HDFLT and ECH.

The importance of a local sales and after-sales presence and local customer relationships preferences

5.156 Some third parties submitted that it is important for OEMs to have a servicing presence (either directly or through a distributor), at least in Europe but ideally in the UK, particularly for routine servicing and/or emergency breakdown assistance so that unscheduled downtime can be kept to a minimum:

(a) One customer noted that there are no significant differences in quality and reliability between the various brands of Mobile Equipment, as different OEMs tend to use similar components; hence, the quality of the service network is an important differentiator.

(b) Another customer submitted that 'after-sales service levels are a key criterion when selecting suppliers [...] which makes suppliers without an EEA+UK presence and after-sales network simply not a credible option'.

(c) Several third parties mentioned that a standard expectation in relation to Mobile Equipment is a response time of no more than four hours in response to a breakdown, with some noting that it would be difficult for suppliers without engineers based in the UK to meet this requirement.

(i) One competitor stated that its 'customers look for a typical response time of under four hours' and considered that suppliers 'would

¹⁵⁵ Within the Briggs Group there are sister companies that distribute the Hyster and Yale products in North America and Mexico. All these companies are independent subsidiaries of Sammons Enterprises Inc.

struggle to match this response time' if its engineers were not 'based around the UK'.

- (ii) One distributor noted that four working hours is the industry norm that it adheres to. It said that it did not believe a company would be able to deliver this service level unless engineers were based in the UK.
- (iii) Another distributor said that 'in the service level agreement, the response time is typically about three hours, although customers will try to negotiate a faster response time'. It noted that a significant number of engineers is needed in the UK 'in order to offer customers UK-wide coverage'.
- (iv) A third distributor told us that 'the industry practice is that customers want to see somebody within 4 hours'. It said that its average response time is around 2.5 hours because it has got 'quite a big coverage'. This distributor added that 'the bigger the machine, the more important it is for preventative and planned maintenance to take place'.

5.157 A few UK customers noted that a national servicing presence (either directly or through a distributor) was less important as a tender criterion because they had an in-house team to provide maintenance support.¹⁵⁶ However, evidence indicates that even customers with in-house servicing capabilities require prompt servicing from manufacturers in at least some circumstances:

- (a) Some third parties indicated that, during the warranty period, they rely on spare parts and servicing provided by the OEM or its distributor. Consistent with this, data from Cargotec shows that, during the warranty period, Cargotec services a material proportion of the ECH, HDFLT and RS that it sells in the UK .
- (b) On GTO noted that the distributor/agent of the OEM is 'called upon to intervene when there are warranty issues with the equipment' and that 'it will sometimes need to call on the OEM's agent to have engineers carry out servicing on site during peak periods'.
- (c) Some customers hire Mobile Equipment, which typically includes servicing provided by the OEM or its distributor.

¹⁵⁶ One customer noted that, following a pre-qualification round, it selected the successful supplier in a tender based almost exclusively on price. Another customer told us [REDACTED] that the 'ability to supply the maintenance services was a less important tender criterion than other criteria' and that it aims to be 'self-sufficient in servicing'.

5.158 This third-party evidence indicates that access to timely after-sales support is important, even (to some extent) for large customers (eg GTOs) that may have in-house teams. This is consistent with the importance that Parties attribute to after-sales servicing in its internal documents:

(a) [REDACTED]. In the same document, [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

5.159 As noted by the Parties, there are other factors that are important (or even more important) in tenders than after-sales services. It is notable, however, that most customers of Mobile Equipment have given a score of 4 or 5 to 'strength of local after-sales' as a purchasing criteria (in a scoring from 1-6, in which 6 is the highest in importance).¹⁵⁷ The importance of after-sales services for many customers points towards the importance of a national presence (whether directly or through a distributor) as a material dimension of competition.

5.160 Evidence from third parties also emphasises the importance of having a national sales presence to establish a customer relationship. OEM seem to establish that customer relationship through direct local presence or through distributors

(a) One distributor considered that it is better 'to have a local engagement with the customer [in the UK] because that relationship is quite important [and] the retention of the customer is important'.

(b) Another distributor told us that the customer relationship is the 'core of this industry'.

(c) Another customer told us that 'an incumbent will put a great deal of effort into retaining customers and a new supplier would need to be very aggressive to oust an incumbent'. It further noted that 'openings tend to be created when a supplier / customer relationship breaks down'.

5.161 The third-party evidence summarised above indicates that it would be difficult for OEMs without a local presence in the UK (either directly or through a distributor), and the ability to promptly supply spare parts in the UK to be an effective option for UK customers.

¹⁵⁷ See Chapter 9 for further information.

- 5.162 As discussed in Chapter 12, the evidence suggests that establishing a direct local presence and setting up such a network can be challenging, even when using a distributor.
- 5.163 The Parties' submitted in response to the CMA's Mobile Equipment working paper (see paragraph 5.134), that GTOs make purchasing decisions at their global overseas headquarters, therefore any local relationships or track record is not a determining factor for the ultimate decision makers. The evidence that we have received does not seem to support the Parties' submission that GTOs make their purchasing decisions solely in overseas headquarters with little or no input from local terminals, such as in the UK¹⁵⁸. Purchasing decisions seem to be the result of a combination of both central and local considerations. Evidence from third parties indicates that local engagement is relevant for at least some customers
- 5.164 The fact that non-European competitors, such as Sany, have succeeded in establishing a track record and gaining some business in the Europe does not contradict the position that having a European track-record and European or UK after-sales presence is important. The obstacles set out above do not mean that a non-European supplier cannot compete in Europe, including in the UK, but that it will not be able to quickly and easily do so, without establishing directly or indirectly a national sales and after sales presence. Sany is the only Chinese Mobile Equipment supplier that has gained a material presence in the UK in the Mobile Equipment markets that we are considering.
- 5.165 We note that there are differences in the position of some suppliers in the UK compared with their position in Europe, which are, to some extent, a reflection of the strength of the national distributors and of the UK-specific aspects of competition highlighted above. This is not inconsistent with defining a European market, because there are important similarities between Europe and the UK, in terms of transport cost, regulatory environment and importance of a European track record. These are similarities not present when comparing Europe with the rest of the world and point toward.

Provisional conclusion on the relevant geographic market definition

- 5.166 We provisionally conclude, on the basis of the evidence above, that all product markets identified in relation to Mobile Equipment are no wider than European, with some important UK specific aspects of competition which affect the strength of competitors for some UK customers. In Chapter 9, in

¹⁵⁸ For example, HPH's tender committee [REDACTED].

assessing the effects of the merger for UK customers, we therefore consider competition at a European level and take into account UK aspects of competition. Irrespective of our views on the scope of the geographic market, we have carefully taken into account and assessed the competitive constraints on the Parties, both within and outside the relevant geographical market.

Automated Terminal Tractors

Product market definition

Parties' views

- 5.167 The Parties considered that TT may constitute a distinct product market. Whilst their functionality is very similar to ShCs and automated guided vehicles (AGVs), they tend to be cheaper than these equipment types, and have a wider scope of use than AGVs (which are seldom deployed outside container terminals). The Parties submitted, however, that there may be some cross-competition between road trucks and TT in port/terminal applications.
- 5.168 The Parties further submitted that ATT may constitute a separate market, highlighting the differences between AGV and ATT.¹⁵⁹

Our assessment

- 5.169 TT are vehicles for horizontal transport in container terminals and other environments (e.g. distribution centres). They pull a trailer upon which containers and other heavy loads can be placed. TT are not able to pick up and drop containers themselves (unlike, for example, SCs) but need to be loaded/unloaded using other equipment that is capable of vertically moving containers, such as cranes or RS. TT are not only used in container terminals: they are also widely deployed in warehouses, distribution centres and various industrial fields of application.
- 5.170 ATT are essentially driverless TT that use advanced autonomous driving technology. There are no fully functioning ATT available in the market yet, but larger scale marketability is imminent.

¹⁵⁹ Parties considered that ATT differ from automated guided vehicles (AGVs).

Demand-side and supply substitution between ATT and other CHE

5.171 In line with the Parties' submissions, we provisionally found that there is a separate product market for ATT from other CHE equipment (including AGV), given their different features and functions. In particular, views expressed by third parties support the Parties' submissions that there is limited demand-side substitutability between ATT and AGVs (ie because of pricing and scope of use). We also provisionally found that ATT should not be aggregated with other CHE given the limited degree of supply-side substitution, because the evidence considered in Chapter 11, indicates that suppliers of TT need to make material investments in the development of ECS and ECS integration with its TT and/or establish partnerships to do so.

Demand-side substitution between TT and ATT

5.172 The evidence we have reviewed suggests that there may be limited demand-side substitutability between ATT and TT.

5.173 First, there are important differences in functionality between ATT and TT. Whereas TT are wholly controlled by a human operator, ATT have a higher level of software intervention provided by equipment control systems (ECS) which allows some or all of their functions to be automated¹⁶⁰

- (a) The Parties submitted that automation 'is an industry trend driven by...customers' need to conduct their operations more profitably (with a view to managing labour cost, better visibility on business processes and equipment performance) and more safely (with a view to reducing accidents)'.
 - (b) ATT fit within this broader trend and are likely to share the same perceived advantages for customers as other automated equipment. Konecranes' internal documents suggest that offering an ATT will be an important part in the automation process. For example, a Product Strategy [REDACTED] document states [REDACTED]. Another Konecranes internal document states, [REDACTED].
 - (c) Once automation has been implemented in a given terminal, it makes limited sense from a cost perspective to switch back to non-automated operations. This means demand-side substitutability between ATT and

¹⁶⁰ As explained in Chapter 4, '[t]he term "automation is used to refer to a wide spectrum of functions, ranging from remote operation by a human operator to fully self-driving.'

manual TT is likely to be limited once a terminal has undergone a shift to automation.

5.174 Second, evidence reviewed by the CMA suggests there is likely to be a significant cost difference between TT and ATT. For example [✂].

5.175 While the Parties have suggested that there is ‘currently no market’ for ATT, as explained in Chapters 4 and 10, evidence from internal documents and third parties indicates that ATT are being developed by a number of players, that ATT with some level of automation will be offered to customers in the near future and that ATT are likely to be an important part of suppliers’ product offering in future. We have also seen no evidence to suggest that UK customers do not form part of the expected global demand for ATT that the Parties, and others, are preparing to address. Indeed, we understand that one UK port seems to be considering the possible adoption of ATT in the future, as part of its planned expansion.

Supply-side substitution between ATT and TT

5.176 We have seen evidence which suggests that there may be some degree of supply-side substitutability between ATT and TT. As discussed below, existing suppliers of TT, including Cargotec and Terberg, are developing ATT or are part of partnerships that are doing so. However, TT suppliers have to develop their own automation software or partner with a company that has the necessary automation software in order to develop an ATT offer. As such we do not consider that supply side substitution is likely to be sufficient to mean that ATT and TT are in the same market.

Provisional conclusion on the relevant product markets

5.177 We provisionally conclude that there is a separate product market for ATT and that it is appropriate to assess the effects of the Merger in relation to ATT.

Geographic market definition

Parties’ views

5.178 The Parties submitted that terminal tractors and ATT share many of the characteristics of other CHE which point towards global markets. The Parties noted, in particular that the market for TT differs from other horizontal transport equipment markets (and is more similar to Mobile Equipment markets) in that TT are relatively commoditized, high-volume products. In addition, while distributors and sales agents play a more prominent role in the supply of TT than for other heavy CHE, a local sales and service presence is

by no means a prerequisite to successfully compete, be it in a given region such as Europe or on a global basis.

Our assessment

5.179 Suppliers of TT appear to have different shares of supply on different regional bases. For example, Terberg's share on a UK and EU basis is [50–60]% and [60–70]%, respectively, whereas its share is [20–30]% on a worldwide basis. Mafi is only present in the UK/EU, and not the rest of the world, whereas Capacity, TICO, Autocar and Shaanxi are only present outside of Europe. This suggests that the conditions of competition are not homogenous across all regions.

5.180 As acknowledged by the Parties, although ATT are classified as horizontal equipment, there are some similarities to Mobile Equipment, including the more prominent role of distributors, which points towards a market that is at most European. Furthermore, [✂].

Provisional conclusion on the relevant geographic markets

5.181 Overall, we provisionally conclude that the appropriate geographic frame of reference for the assessment of the effects of the Merger in ATT is no wider than Europe (including the UK) in scope.

6. Horizontal unilateral effects theories of harm

Approach to unilateral effects

6.1 We focused our investigation on whether the Merger may be expected to result in an SLC within a market or markets in the United Kingdom, as a result of the following horizontal unilateral effects theories of harm:

- (a) in the supply of RTG;
- (b) in the supply of ASC;
- (c) in the supply of SC and ShC;
- (d) in the supply of RS;
- (e) in the supply of HDFLT;
- (f) in the supply of ECH; and
- (g) in the future supply of ATT (potential competition).

- 6.2 The Parties also overlap in the supply of STS and RMG. Konecranes also produce MHC¹⁶¹.
- 6.3 As set out in the Issues Statement,¹⁶² the evidence available to us in relation to RMG¹⁶³ and STS¹⁶⁴, at the start of the phase 2 investigation, indicated that no horizontal competition concerns should arise within those product markets. We have not actively investigated further at phase 2 the horizontal effects of the Merger in these markets and we have not received any additional evidence suggesting potential concerns in these markets during the phase 2 inquiry. Our provisional conclusion is, therefore, that the Merger is not likely to result in an SLC in relation to the supply of this equipment to UK customers.
- 6.4 Horizontal unilateral effects can arise in a merger where one firm merges with a competitor that provides and/or is expected to provide a competitive constraint. Through the merger, removing one party as a competitor might allow the merged entity profitably to increase prices, lower the quality of its products or customer service, reduce the range of their products/services, and/or reduce innovation.¹⁶⁵
- 6.5 In order to assess the likelihood of the Merger resulting in horizontal unilateral effects, we considered the closeness of competition between the Parties and the (present and future) competitive constraints provided by competing suppliers. As set out in the CMA's guidance, we took a forward-looking approach to the assessment of any theories of harm, considering the effects of the Merger both now, and in the future.¹⁶⁶

Approach to evidence

- 6.6 We have gathered and taken into account a range of evidence in our assessment. In particular, we have considered: a) the Parties' submissions; b) evidence from internal documents; c) share of supply estimates; d) quantitative analysis of the Parties' bidding data and qualitative analysis of some UK tenders ('case studies'); and e) evidence received from third parties (including customers, competitors, and distributors).¹⁶⁷

¹⁶¹ There is no overlap in relation to MHC. We consider the vertical effects of the Merger in relation to the supply of spreaders to MHC in Chapter 11.

¹⁶² The Parties' Parties' Response to the Issues statement, paragraph 17.

¹⁶³ For RMG, the Parties' shares are low (worldwide their combined share is [10-20]%, in Europe it is [10-20]%. ZPMC is the largest supplier and there are seven other competitors active in the supply of RMG. No RMG have been delivered to the UK since 2015.

¹⁶⁴ For STS cranes, the Parties' shares of supply are low (worldwide their combined market share is [0-5]%, in Europe it is [0-5]%). ZPMC is the leading supplier (its share is [60-70]%) and there are nine other competitors active in the supply of STS cranes in Europe.

¹⁶⁵ CMA129, paragraph 4.1.

¹⁶⁶ CMA129, paragraph 2.14.

¹⁶⁷ Third-party evidence includes sales and tender data where available.

- 6.7 In considering the weight to be placed on each piece of evidence, we have taken into account factors such as the robustness of the data/methodology adopted, the interests of the party providing the information or view, the age of the information or document, the context, author and recipient of a document, and the purpose for which it was produced. We have not relied on any one specific piece of evidence in isolation to inform our decision; rather, we have assessed all of the evidence together and in the round, including giving due regard to the extent to which our view on the interpretation of a piece of evidence is corroborated (or not) by other evidence available to us.¹⁶⁸
- 6.8 We set out briefly below the different types of evidence we have considered and the weight that can be given to it. The Parties have made a number of submissions on specific factors that they consider should affect the weight given to certain categories of evidence. We include our assessment of these submissions in the discussion below.

Evidence from the Parties

- 6.9 We considered evidence from the Parties submitted during the phase 1 inquiry, responses to our requests for information and documents during phase 2, virtual 'site visits', formal hearings, and other phase 2 submissions. As in any inquiry, in assessing views of the Parties, we have given due regard to a range of factors including the extent to which the views were corroborated by evidence they submitted and/or by other evidence available to us.

Evidence from internal documents

- 6.10 Internal documents provide a useful source of evidence as they reflect how the Parties assess the market in the ordinary course of business, and when making commercial and strategic decisions. They provide insights into issues including the Parties' perceptions of the competitive threat posed by each other and by third-party competitors.
- 6.11 We have received and reviewed a significant number of internal documents produced by or for the Parties' senior leadership and/or Board. As explained in the working papers, the Parties submitted approximately 3,000 documents as responsive to questions about the Parties' performance in the UK or European tenders for CHE and monitoring or benchmarking of their competitive positioning or performance of their competitors. We also included in our assessment a significant number of further documents on the same

¹⁶⁸ [CMA129](#), paragraph 2.23.

topics submitted by the Parties to the European Commission and which the Parties shared with the CMA.

- 6.12 Only a small sub-set of these documents provide useful insights in relation to the competitive positioning and performance of the Parties and their competitors in the UK or Europe in relation to each of the markets we are investigating.¹⁶⁹ Many of these documents were: i) industry reports; ii) legal tender documents and documents with technical specifications of the Parties' offer or of the customer's requirements; iii) documents that simply report the sales of each supplier within a certain period; and iv) duplicates of the same. Of the documents submitted by the Parties, only a relatively small number provide commentary on the competitive positioning or overall performance of the suppliers of a particular type of equipment in the UK or Europe.
- 6.13 In our assessment of the internal documents, we placed more weight on recent documents that refer specifically to the competitive situation in Europe and/or the UK and that were created before the Merger was in contemplation.¹⁷⁰
- 6.14 The Parties submitted that the CMA cherry-picked adverse-only inferences from internal documents. To support this assertion, the Parties noted that: i) only very few of the thousands of internal documents submitted by the Parties were cited by the CMA; and ii) the documents cited by the CMA were selectively quoted and considered out of context.
- 6.15 We have considered the Parties' comments in relation to particular documents quoted in the working papers and assessed the additional documents flagged by the Parties in their response to the working papers.
- 6.16 More generally, we note the following:
- (a) We note, in relation to the Parties' comment on the number of documents cited that the Parties only flagged to the CMA a relatively small number of documents in addition to the documents quoted in the working papers. Moreover, we note that some of the additional documents mentioned by the Parties were documents produced to the European Commission and subsequently shared with the CMA (ie not documents produced in response to the CMA's requests for internal documents). We have now taken into account these documents in these provisional findings.

¹⁶⁹ Many of these documents were industry reports or reports monitoring the sales of each supplier.

¹⁷⁰ As stated in [CMA129](#), 'Where internal documents support claims being made by merger firms or third parties that have an interest in the outcome of the CMA's investigation, the CMA may be likely to attach more evidentiary weight to such documents if they were generated prior to the period in which those firms were contemplating or aware of the merger, or if they are consistent with other evidence' (paragraph 2.29(a)).

- (b) Overall, we consider that our assessment of the documents cited in the working papers broadly represents the overall content of these documents. We have provided additional context in relation to some of these documents where appropriate.
- (c) In our assessment of the internal documents, while we placed less weight on older documents, we placed full weight on documents from 2018 (inclusive) onward that pre-date the Merger. We also took into account the evolution of the Parties' view on their competitors, as set out in their internal documents, regarding the competitive strength and threat posed by some competitors.

Shares of supply

- 6.17 We have constructed estimates of shares of supply using data from the Parties and, where available, data provided by competing manufacturers (or their distributors).¹⁷¹ Shares of supply can be useful evidence when assessing closeness of competition, particularly when there is persuasive evidence on demand- and supply-side substitution as to which potential substitutes should be included or excluded, and when the degree of differentiation between firms is more limited. In cases such as this, a firm with a higher share of supply is more likely to be a close competitor to its rivals, and therefore a merger that removes the competitive constraint such a firm exerts on its rivals would be more likely to raise competition concerns.¹⁷²
- 6.18 In the markets that we assess, we consider that product differentiation is not so pronounced as to mean that it is not meaningful to consider shares of supply as a starting point for closeness of competition. In the case of HDFLT, evidence suggests that differentiation is more pronounced than in other markets considered (eg some suppliers only offering HDFLT with lifting capabilities towards the lower end of the >10 tonne range), and as such we place slightly less weight on shares of supply in this market.
- 6.19 Overall, we place significant weight on our main share of supply estimates, which cover five years for Mobile Equipment and ten years for cranes. We have used these time periods in order to smooth out lumpiness in the data, which means that shares of supply for individual years (or aggregated over a smaller number of years) would be sensitive to the inclusion or exclusion of a small number of tenders. We note that, even when calculated on this multi-year basis, some UK shares that we calculated (in particular ten-year shares

¹⁷¹ Where this third-party data was not available, we used the Parties' estimates of their competitors' sales. See Appendix B for further detail on our methodology.

¹⁷² [CMA129](#), paragraph 4.14.

in relation to the supply of RTG) are affected by low and lumpy sales and so require careful weighting.

- 6.20 We have also calculated certain shares of supply over shorter time frames (five-years in relation to RTG and ASC) and considered some sales data on an annual basis (in relation to the supply of Mobile Equipment). These statistics are subject to greater volatility than our main shares. We primarily use these to check for any changes over time in the data.
- 6.21 We present shares on a UK-wide, Europe-wide (including the UK), and Worldwide (excluding China) basis for each product. We excluded China from the worldwide shares because the evidence the CMA has seen indicates that demand in relation to port terminals in China does not seem to be fully accessible to non-Chinese players.¹⁷³ For example, a Konecranes document states that Konecranes has a ‘very low market share of [redacted] in large Chinese market ([redacted] of global market value) due to dominance of local players’. As a result, the positions of Chinese suppliers are very much stronger, and those of non-Chinese suppliers very much weaker, than seen in their shares elsewhere in the world.
- 6.22 While we present shares on each geographical basis for each product, the relevance of these shares differs between products depending on the nature of the competitive dynamics for the supply of each product. For example, in the case of RTG and ASC, we place most weight on European shares, as the evidence available indicates to us that these markets are Europe-wide (see paragraph 5.55). For Mobile Equipment, we consider that both UK shares and European shares provide important insights for our assessment given the evidence of some differences in the conditions of competition for UK customers.

Quantitative analysis of bidding data and qualitative tender case studies

- 6.23 We used bidding data submitted by the Parties in order to calculate loss ratios. Loss ratios identify the proportion of total opportunities that were lost by a Party that were lost to each competitor, and are an important measure of closeness of competition and third-party constraints, alongside other data.
- 6.24 For RTG, we also undertook an ‘overlap analysis’, for which we took the total opportunities that were won by a Party and used manual data matching to

¹⁷³ We note that one of the reasons for Cargotec to establish a joint venture with a Chinese company (Jiangsu Rainbow Heavy Industries Co. Ltd) was to gain ‘easier access to Chinese customers and hence an increased sales presence in China’ ([redacted]).

assess how many of these bids were won in opposition to a bid from the other Party.¹⁷⁴ This provides an additional measure of closeness of competition.

- 6.25 We recognise that the Parties' bidding data does not capture all relevant variables (including the winning bidder) for all of the opportunities bid on by the Parties (and their distributors), with Konecranes' data in particular appearing to be less complete than that of Cargotec. However, as set out at Appendix C, the bidding data covers a significant proportion of total sales volumes in the different markets, and we have not seen evidence to suggest that any omissions would bias our results (for example, by systematically over or under stating the true competitive constraint imposed by particular players).
- 6.26 As set out in Appendix C, we carried out a number of checks and adjustments in order to correct erroneous data. Overall, we consider that our quantitative bidding analysis provides useful evidence regarding the closeness of competition between the Parties and the third-party constraints that they face.
- 6.27 We also undertook a qualitative 'case study' analysis of a number of tender exercises. These case studies combine views and internal documents from customers with internal documents produced by the Parties at the time of the tender. We interpret these case studies qualitatively. They provide useful insights into how competition operated for these tenders and how the Parties themselves viewed the competitive threat posed by different suppliers and customers' views on the relative strengths and weaknesses of bidders.
- 6.28 While the RTG and ASC case studies relate to a small number of tenders in absolute terms, they are significant in the context of the total amount of RTG and ASC sales that take place in the UK.¹⁷⁵ We do not place much weight on the Mobile Equipment case studies as they are limited examples, but we take account of the insights that they provide on customer perceptions of the strengths and weaknesses of different suppliers.
- 6.29 The Parties submitted that loss ratio analysis based on the Parties' bidding data is likely to be flawed because the Parties do not record all of their lost opportunities. They said this was particularly the case for Konecranes' Mobile Equipment bidding data, as Konecranes' Mobile Equipment sales 'are made

¹⁷⁴ We also examined overlaps between the Parties in ASC, although this analysis was more limited than for RTG, in light of the small number of ASC bidding opportunities in the data. We did not undertake an overlap analysis for mobile equipment, due to difficulties associated with matching these larger datasets. See Appendix C for further detail on our methodology.

¹⁷⁵ Our ASC case studies cover three customers and past or on-going sales of 90 units from 2011-present day. By comparison, [§<] units were sold in the UK by all players combined over 2011 to 2020; ii) RTG case studies cover two customers and past or on-going sales of [around] 40 units from 2018-present day. By comparison, [§<] units were sold in the UK by all players combined over 2011 to 2020.

entirely via a distributor in the UK [as are] a large proportion of sales in the rest of Europe’.

- 6.30 We do not agree that the Parties not recording the winning bidder for all lost opportunities means that our loss ratios are likely to be flawed. First, as discussed in Appendix C, the Parties did submit bidding data (including the identity of the winning bidder) for a significant number of opportunities, both in absolute terms and relative to the total units supplied in the UK and Europe as a whole (as captured in our shares of supply data). Second, to the extent that not all lost opportunities are recorded, the Parties have not provided evidence to support their contention that this likely leads to biased results, and we have no reason to believe that such a bias would exist.
- 6.31 We note that Konecranes’ bidding data for Mobile Equipment contains significantly fewer opportunities where the winner was identified, as compared to the Cargotec dataset. We consider that, at least in part, this is likely to reflect less-complete record keeping by Konecranes and its distributors, as compared to Cargotec.¹⁷⁶ However, we have not seen evidence to suggest that this would bias the results of our analysis of Konecranes’ Mobile Equipment bidding data. In addition, we note that Konecranes’ Mobile Equipment bidding data nonetheless covers a substantial number of opportunities in most cases.¹⁷⁷ Where the lost opportunity sample size is small (in particular, Konecranes’ data contains [REDACTED] in the UK over 2016 to 2021), we do not place significant weight on the precise level of losses to particular competitors.
- 6.32 We consider the results of our quantitative analysis of the Parties’ bidding data in the round with other evidence.

Third party evidence

Evidence from customers

- 6.33 We have gathered information from the Parties’ CHE customers. This was primarily in the form of written questionnaires, supplemented by clarificatory calls. Our phase 2 questionnaire received 20 customer responses in total. Consistent with our approach in other cases where we have obtained

¹⁷⁶ Konecranes confirmed to us that its bidding data for Mobile Equipment includes data sourced from Impact. We also directly requested bidding data from, Impact, as a cross-check on the data we got from Konecranes. However, Impact’s response was very limited and hence we have based our loss analysis on the bidding data that we obtained directly from Konecranes.

¹⁷⁷ In Chapter 9, we present loss ratios for Konecranes based on the following number of lost opportunities: [REDACTED] for RS in Europe, [REDACTED] for RS in the UK; [REDACTED] for HDFLT in Europe, [REDACTED] for HDFLT in the UK, [REDACTED] for ECH in Europe, [REDACTED] for ECH in the UK.

comparable sample sizes, we have interpreted this evidence qualitatively, rather than drawing firm quantitative conclusions, and have assessed it alongside other evidence. We provide more details in Appendix D about the customers that we contacted and that provided their views in our investigation.

- 6.34 Overall, we consider that the evidence we have obtained is, in the round, robust, and of probative value.¹⁷⁸

Evidence from competitors and other third parties

- 6.35 We have gathered evidence and views on the competitive conditions faced by the Parties from a range of competitors and other third parties. We also gathered evidence about the entry and expansion plans of competitors. Our evidence comes mostly from written questionnaire responses and supplementary calls.
- 6.36 In total, we gathered evidence from 13 competitors, two distributors, and one further third party (Impact, the UK distributor for Konecranes). As explained further in Appendix D, we received responses from the Parties' main crane and Mobile Equipment competitors in the UK and Europe.
- 6.37 As in any merger investigation, we recognise that some third parties may have an interest in the outcome of our inquiry. Therefore, when using third-party views as evidence, we have given due regard to a range of factors including: a) the incentives of the party giving that view; b) the extent to which the party had knowledge that was relevant to the subject areas being explored as part of our assessment; and c) the extent to which the view was corroborated by other evidence available to us.

Parties' submissions on third party evidence

- 6.38 The Parties submitted that the third-party evidence considered by the CMA is based on a small sample of responses and that any conclusions drawn from it are unlikely to be representative. In particular, the Parties note that: a) the CMA has only surveyed the UK customers of the Parties; and that b) despite the Parties having provided the CMA with a list of at least 90 distributors active in the UK, it is not clear whether the CMA reached out to any of these.
- 6.39 We note that it is for the CMA to decide upon the reasonable steps that should be pursued in any investigation and, in so doing, it has a wide margin

¹⁷⁸ Such that the CMA can rationally reach a conclusion on the basis of that evidence, in accordance with [BAA Ltd v Competition Commission](#) [2012] CAT 3, paragraph 20(4).

of appreciation.¹⁷⁹ We are satisfied that that the lines of inquiry pursued are reasonable and appropriate in the circumstances of the case.

- 6.40 Our customer evidence was primarily gathered through written questionnaires, supplemented by clarificatory calls. Our phase 2 questionnaire received 20 customer responses in total. As explained further in Appendix D, these customer responses account for a substantial proportion of the Parties' recent UK sales in relevant product categories. We note that there was some variation in response rates between different products (for example, response rates were higher for cranes, where the customer base is more concentrated, and lower for HDFLT, where the customer base is more fragmented). We also received more responses from ports and intermodal terminal operators (13) than from industrial customers (7). Overall, we are satisfied that the responses received in each product category are sufficiently representative for us to draw inferences from them on a qualitative basis, in the round with other evidence.
- 6.41 We also gathered evidence from 13 competitors, two distributors, and one further third party (Impact, the UK distributor for Konecranes). As explained further in Appendix D, we received responses from the Parties' main crane and Mobile Equipment competitors in the UK and Europe. Again, we have interpreted this evidence qualitatively, rather than drawing firm quantitative conclusions, and have assessed it alongside other evidence.
- 6.42 In relation to the Parties' submissions about the sample of distributors contacted by the CMA, we contacted and received responses from Konecranes' UK distributor (Impact) and the UK distributors of the main competing Mobile Equipment OEMs (Cooper in relation to Sany and Briggs in relation to Hyster), and we held conference calls with each of these distributors. We also sent questionnaires to a small sample of the other distributors listed by the Parties, but these distributors have either not responded to the questionnaires or noted that the questionnaire was not applicable to them (suggesting that at least some of these distributors are not focused on the distribution of CHE). We assess in detail in Chapters 5 and 8, the evidence indicating that there are few distributors available with the necessary capabilities and network to support the entry and expansion of another Mobile Equipment OEM in the UK.
- 6.43 On 15 November 2021, Cargotec provided the CMA with a number of extracts, which it asserted were taken from submissions made by third parties

¹⁷⁹ In *BAA Limited v Competition Commission*, [2012] CAT 3, paragraph 20(3), the CAT confirmed that '[t]he extent to which it is necessary to carry out investigations to [answer each statutory question] will require evaluative assessments to be made by the CC, as to which it has a wide margin of appreciation'.

to the European Commission (Commission) in the course of the Commission's investigation of the Merger. We understand that the information provided was obtained by the Parties by way of the Commission's confidential access to file process. In its submission to the CMA, Cargotec commented that "[...] the Parties are struggling to reconcile the CMA's interpretations of the comments made by third parties [as part of the CMA's inquiry] with the significant amount of feedback received which supports the Parties' submissions during the Commission's market investigation" and submitted that the information provided is "[...] fully relevant to the CMA's assessment of the case".

- 6.44 The Inquiry Group notes that the Commission and the CMA are conducting independent reviews of the Merger. The CMA inquiry has gathered third-party evidence entirely separately from the Commission and does not have, and would not expect to have, access to the third-party materials on the Commission's file. The provisional findings of the Inquiry Group are based on the evidence before it. The CMA is unable to rely on isolated quotes from minutes of meetings between the Commission and third parties or from responses provided by third parties to Commission questionnaires without full access to the underlying documents because it is unable to verify, assess the context and meaningfully interrogate the information provided. As a result, the Inquiry Group cannot at this stage attach meaningful weight to this information. The Inquiry Group notes, more broadly, that its provisional findings are based on assessing the extensive amount of information that it has gathered in the course of its investigation in the round, a process that already involves considering to what extent the views submitted by third parties are supported, or not, by the other evidence on the CMA's file.
- 6.45 For the reasons set out above, we are satisfied that that the lines of inquiry pursued are reasonable and appropriate in the circumstances of the case.

Competitive dynamics in the supply of CHE products

- 6.46 As in any merger investigation, we primarily consider the impact of the merger within specific markets. The Parties have, however, made a number of submissions that are relevant to the assessment of several different theories of harm we are investigating.
- 6.47 Accordingly, before setting out our analysis of whether the merger gives rise to competition concerns within the markets set out in paragraph 6.1, we set out our analysis of these cross-cutting submissions, provided in relation to:
- (a) The role of Chinese suppliers within the supply of CHE and the extent to which the Parties are able to compete against Chinese suppliers.

(b) The role of tender processes in producing competitive outcomes.

The role of Chinese suppliers within the supply of CHE and the extent to which the Parties are able to compete against Chinese suppliers

Parties' submissions

- 6.48 The Parties submitted that '[t]he container handling equipment (CHE) industry [...] is characterised by strong competitive forces from Chinese (and other) competitors'; and that '[th]e entry and expansion of Chinese competitors has significantly altered the competitive landscape in the UK and Europe'.¹⁸⁰
- 6.49 The Parties told us that, 'there has been an expansion of state-owned Chinese competitors as part of China's "Belt and Road" initiative which is driving long-term, structural change to the competitive landscape in maritime transport, port terminals and container handling equipment industries'. The Parties noted that Chinese suppliers: a) benefit from subsidised manufacturing resources, including key raw materials such as steel and low-cost labour'; b) are strongly supported by their favourable access to financing by Chinese state-controlled banks'; c) are supported by cash funding, grants and tax incentives provided by the Chinese government.
- 6.50 The Parties further submitted that Chinese CHE manufacturers such as 'ZPMC, [SANY], and XCMG, have in the last years rapidly developed innovative and high-quality products and aggressively expanded globally' and that Chinese players can not only undercut the prices of their non-Chinese competitors - due to lower production costs and vast cost-effective transport networks – but also 'participate in large flagship projects using automated solutions and advanced technologies'.
- 6.51 In their response to the Issues Statement, the Parties submitted that '[t]he maritime sector has undergone significant structural changes as a result of China's industrial policies, which have caused a significant shift in demand' and that 'as a result of the "Belt and Road" initiative, China has, in recent years, increasingly focused its efforts on expansionist construction, development, and operation of international ports and container terminals', including in Europe, 'along with the global expansion of its container handling equipment industry'.¹⁸¹ The Parties claimed that this leads to an '[i]ncreased

¹⁸⁰ The Parties' Response to the Issues Statement, 19 August 2021, paragraphs 1.1 and 1.2.

¹⁸¹ The Parties' Response to the Issues Statement, 19 August 2021, paragraphs 3.4 and 3.6.

use by Chinese GTOs [global terminal operators] of equipment manufactured by Chinese OEMs'.¹⁸²

- 6.52 In addition to the advantages listed above, the Parties also noted that Chinese suppliers benefit from economies of scale and that Chinese container terminals (which are often State-owned) are amongst the largest container terminals in the world and 'often purchase equipment from Chinese suppliers'.
- 6.53 Cargotec told us that it [redacted].
- 6.54 In response to the CMA's working papers, the Parties reiterated that Chinese suppliers benefit from cost advantages in access to cheaper inputs that State-sponsorship affords to Chinese rivals and that the Parties are unable to compete on the merits against state-sponsored Chinese OEMs.
- 6.55 The Parties consider that the CMA's 'static' analysis of competition in the CHE industry in the working papers disregards the rapid expansion of state-sponsored Chinese OEMs. The Parties consider that the CMA should 'ascribe a "plus"' to the Chinese competitors in competitor set.
- 6.56 The Parties also reiterated that they are not currently able to be competitive on price [redacted]. They also noted that ZPMC has announced a long-term strategic alliance with APM Terminals (APM), a GTO that operates ports in different regions in the world, including in Europe (but not in the UK).
- 6.57 The Parties further stated that they experience an unequal playing field when facing competition from Chinese suppliers. The consequence is that – while the Parties face a range of tough and successful competitors driven by 'standard' commercial imperatives – the entry of Chinese competitors has had a disproportionately greater impact on the relevant markets and the ability of the Parties to compete.

Our assessment

Forward-looking assessment of the competitive constraints posed by Chinese suppliers

- 6.58 As is usual in a CMA merger investigation,¹⁸³ we conducted a forward-looking assessment of the competitive constraints that the Parties will face in the foreseeable future. While some evidence is historical, much of the evidence considered provides insight into how suppliers will compete in future. In

¹⁸² The Parties' Response to the Issues Statement, 19 August 2021, paragraph 3.7.

¹⁸³ CMA129, paragraph 2.14.

particular, we have: i) assessed if any trends emerge when shares of supply and/or sales data are considered on a more granular basis than our main multi-year share of supply statistics; ii) questioned customers about the suppliers they expect to consider in future tenders; iii) questioned competitors about whether they expected the main competitors faced to change over the next two years, and iv) assessed the likelihood, timeliness and sufficiency of entry. We, therefore, do not agree that we conducted a static analysis of competition in the CHE industry, thus disregarding the rapid expansion of State-sponsored Chinese OEMs.

- 6.59 The constraint posed by the Chinese suppliers is taken into account in our forward-looking competitive assessment of each theory of harm, based on evidence of the competitive constraint posed by specific Chinese suppliers in each market ie, mainly ZPMC in relation to RTG and ASC, and Sany in relation to Mobile Equipment. In particular, we looked at the competitive strengths and capabilities of these suppliers, in view of the relative importance of the purchasing criteria for most customers.
- 6.60 It is not appropriate to assume that other Chinese suppliers that are not yet present, or that have a very small presence in a particular market in Europe, are likely to enter or significantly expand into that market, unless clearly supported by robust evidence.¹⁸⁴

Any cost advantages that Chinese suppliers may have do not leave the Parties unable to compete against Chinese suppliers

- 6.61 In relation to the submission from the Parties that they experience an unequal playing field when facing competition from Chinese suppliers, we note that some internal documents of the Parties discuss the advantages of Chinese suppliers, in particular ZPMC and Sany, including cost advantages resulting from State-ownership and government support. We summarise below some of these internal documents:

(a) [REDACTED].

(b) Another Cargotec internal document, [REDACTED]:

(i) [REDACTED].

¹⁸⁴ As set out in paragraph 8.30 of [CMA129](#), 'The CMA will seek to ensure that the evidence is robust when confronted with claims of entry or expansion being timely, likely and sufficient to prevent an SLC from arising. It is likely to place greater weight on detailed consideration of entry or expansion and previous experience of entry and expansion (including how frequent and recent it has been)'.

(ii) [REDACTED].

(iii) [REDACTED].

(iv) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

6.62 [REDACTED].¹⁸⁵

6.63 Similarly, an investigation of Konecranes' internal documents reveals a growing concern with regard to Chinese OEMs, in particular ZPMC and Sany, with increasing frequency in the last couple of years. For example:

(a) An internal document from Konecranes, entitled 'Ports Risk Assessment' and dated 16 February 2018, assesses, and ranks various competition risks. In this document, Konecranes assesses the likelihood of the risk of 'ZPMC & Chinese terminal operators utilizing national advantage; risk of going "full Chinese"' at the same level as Cargotec's terminal offer, but with a higher impact. Konecranes assessed that the prospect of this risk was increasing.

(b) Konecranes' internal document, 'Port Solutions: Market and trends', dated November 2018, identifies five 'trends' where it considers ZPMC to have the 'edge'; [REDACTED]; and [REDACTED].

6.64 Some other internal documents of Konecranes also note that ZPMC and Sany are increasing their presence in Europe and investing in improving their offering.¹⁸⁶

6.65 Although these internal documents show that the Parties believe that Chinese suppliers benefit from cost advantages resulting from State-ownership and that the Parties perceive that this poses a risk to their market position, the evidence considered below clearly shows that the Parties are able to effectively compete against Chinese suppliers. In particular,

(a) Chinese suppliers face barriers to entry and expansion (see Chapter 12) and, while some Chinese suppliers have had some success to date in certain markets covered by our review, this has not been across all types of CHE. Any potential cost advantages would have existed for some time

¹⁸⁵ [REDACTED].

¹⁸⁶ See, for instance, [REDACTED], which sets out the perceived 'change in our competitors' as [REDACTED]. In the related presentation [REDACTED] Konecranes also notes that the Chinese firms [REDACTED].

and we do not expect that these would result, in themselves, in further material expansion of Chinese suppliers.

- (b) We have not seen evidence to support the Parties' claim that ZPMC's market penetration in STS means that the displacement of the Parties is inevitable in other CHE, including RTG and ASC, as discussed below. There is also limited evidence that the developments raised by the parties (eg ZPMC's partnership with APM and ZPMC winning contracts with GTOs such as HPH) will have a material influence on other customers purchasing decisions, leading to the Parties' displacement.
- (c) The Parties believe that they can compete against Chinese suppliers, especially based on parameters of competition other than price, and have successfully done so.

6.66 In relation to the first point above ((a)), we note that ZPMC and Sany have been present in Europe in relevant products since 2010 or earlier¹⁸⁷ and that the factors that the Parties listed as creating an unequal playing field with Chinese suppliers are not recent.¹⁸⁸ As such, we consider that any such advantages are, at least to a large extent, reflected in their current market positions.

6.67 As discussed in Chapter 7, ZPMC's share of supply in RTG in Europe was not materially different in 2016-20 as compared to 2011-15 (and ZPMC's share of supply in RTG was lower in the UK in 2016-20 than in 2011-15, although we place limited weight on these UK shares). However, ZPMC's share of supply in ASC was significantly higher in 2016-20 as compared to 2011-15, both in the UK and Europe as a whole. Therefore, we do not see a material upward growth trend in ZPMC's RTG share in UK or Europe over the last ten years, whereas we do see an upward trend in ZPMC's ASC share. However, bidding analysis and third-party evidence shows that ZPMC is not similarly competitive across all order volumes. Evidence does not support the Parties' submission that they cannot be competitive on price which, for instance, led to Cargotec's decisions not to bid in certain tenders against ZPMC¹⁸⁹. The evidence available to us consistently indicates that the Parties can compete

¹⁸⁷ Data submitted by the Parties (which goes back as far as 2010) shows that Sany has made RS deliveries in Europe at least as early as 2010 and that ZPMC has made RTG deliveries in the UK at least as early as 2010. [REDACTED].

¹⁸⁸ We note that one of the documents [REDACTED] is dated 2017 and that the 'One Belt One Road' initiative has been in place since 2013.

¹⁸⁹ We note that Cargotec has not submitted evidence in relation to the reasons for Cargotec's recent non-bid decisions or to which customers these tenders referred to.

against ZPMC, including based on parameters of competition other than price (see paragraphs 6.71 and 6.72).¹⁹⁰

- 6.68 Furthermore, as explained in the competitive assessment of each theory of harm, there are significant barriers to expansion, and the evidence does not support that ZPMC has specific plans to materially expand its position in Gantry Cranes (or other type of CHE) beyond what it already achieved in Europe in the last ten years. As explained below, the evidence does not support the Parties' assertion that HPH or other GTO are 'showroom windows' for the industry with material influence of other customers purchasing decisions, leading to the Parties' displacement. Overall, the evidence shows that ZPMC is a material competitor, but does not show that the competitive constraint posed by ZPMC is likely to materially increase further in the foreseeable future in yard cranes or Mobile Equipment.
- 6.69 As discussed in Chapter 9, we note Sany has been more successful in the UK (where in 2015 it announced a partnership with the distributor Cooper, a former Konecranes' distributor with experience in the UK CHE sector) than in the rest of Europe. Over 2016-20, Sany has grown its RS sales in the UK, whereas we see no clear trend in Sany's ECH sales. Overall, the evidence shows that Sany is now a material competitor in RS and ECH in the UK, however third-party evidence suggests that, despite Sany being a competitor on price, some customers may not be prepared to use Sany, given its perceived weaknesses and for being a 'Chinese' brand. The evidence that we have reviewed does not show that the competitive constraint posed by Sany is likely to materially increase further in the foreseeable future.
- 6.70 In relation to the second point above ((b)):
- (a) The Parties have submitted that ZPMC has displaced the Parties for the most part in the supply of STS and that this is happening across yard cranes and Mobile Equipment. We note that ZPMC has supplied RTG and ASC for some years and has gained a material market share in the supply of STS, but the Parties still have a significant share in the supply of both RTG and ASC.¹⁹¹ ZPMC is the only example of a Chinese supplier gaining a material position in RTG and ASC in Europe after gaining a very substantial share of supply in STS. Evidence from internal documents and third parties¹⁹² indicates that STS have some distinct features compared with RTG and ASC (STS has a higher steel content, smaller proportion of

¹⁹⁰ See, for instance, recent award of the HPHUK tender for 17 electric RTG to the Felistowe port.

¹⁹¹ We also note that Liebherr continues to compete with ZPMC in STS.

¹⁹² This finding is drawn from an internal Konecranes document ([REDACTED]) which states: 'Chinese competitors are on the rise, and in the ports business ZPMC already has a very strong position in some equipment types, [REDACTED] (eg large Ship-To-Shore cranes).' and third-party evidence.

technology and demand for higher volumes) which means that ZPMC is particularly competitive in STS and that the Parties are better placed to face the competitive constraint from ZPMC in RTG and ASC than in STS. ZPMC's years of success in STS has not translated to ZPMC's material expansion into the supply of Mobile Equipment or SC and SCH.

- (b) We consider that the developments raised by the Parties about contracts won by ZPMC and recent partnerships with a GTO (APM) provide further evidence of the competitiveness of ZPMC in relation to some customers. We took into account ZPMC's successes over recent years and this recent partnership in our competitive assessment.¹⁹³ In relation to the contracts that ZPMC won with HPH in the UK, as explained above, although ZPMC has started supplying RTG to HPH in 2010, we have not seen an upward trend in ZPMC's market position in the UK, as we would expect if many other customers were following the lead of HPH. Evidence from third parties indicate that, while generally port operators are aware of what is happening in the industry and what port operators are doing, not all ports are the same and they can have very different operating models. We also note HPH seems to be one of the few (if not the only) customers whose purchasing decisions are mainly determined by price (subject to suppliers crossing a hurdle of technical suitability). Furthermore, the Parties submit that the Merger will not make them more competitive on price alone.

6.71 In relation to the third point above ((c)), the evidence does not support the Parties' submission that they do not have the ability to compete with Chinese suppliers:

- (a) Even if the Parties cannot be competitive on price (ie leading to Cargotec's non-bid decisions and low gross-margins in yard cranes), most customers place significant weight on other purchasing criteria. The evidence considered in the assessment of each theory of harm indicates that customers place significant weight on other purchasing criteria.
- (b) The Parties' internal documents indicate that they have clear plans to continue to compete against Chinese suppliers based on parameters of competition other than price. For example:

¹⁹³ We consider that the APM partnership is consistent with our assessment of ZPMC's competitiveness. We note that the partnership between ZPMC and APM establish the framework for mutual collaboration, including in relation to automation, [REDACTED] in which we are already considering ZPMC as a competitor, [REDACTED]. The Memorandum of understanding includes an order for STS and yard cranes across 6 terminals and the reservation of production slots for additional STS cranes and yard cranes in the future.

(i) [REDACTED].

(ii) [REDACTED].

(iii) A Konecranes internal document, 'Consolidated Onboarding Q&A' for the 'Konecranes Leadership Team Members' set out the following views: 'The Chinese players can compete [REDACTED] "I think that our advantage is the [REDACTED]...Then we have the Chinese competition (e.g. ZPMC in Port) where we should have competitive advantage in areas where they are not yet strong - [REDACTED]. They are improving a lot in the quality and in some leadership product, thus a differentiator is important.'

(c) Some internal documents produced have also suggest that the 'Made in China' label has negative connotations, [REDACTED]:

(i) A 2019 presentation, prepared by Konecranes, notes as one of Sany's 'weaknesses' in the European region: [REDACTED].

(ii) [REDACTED]. This point is developed further, [REDACTED].

6.72 As set out in detail in in Chapters 7 and 9, certain customers expressed a preference for non-Chinese suppliers, linking Chinese suppliers with a perception of lower quality and standards. Notably, a third party told us that 'there is also the broader reflection about increased reliance on suppliers of key equipment for the UK's largest gateways who are based in locations with whom the UK does not always have the easiest of strategic relationships'.

6.73 Therefore, notwithstanding that Chinese suppliers might benefit from cost advantages,¹⁹⁴ the evidence considered clearly shows that the Parties are able to effectively compete against Chinese suppliers, and does not support that Chinese suppliers have a 'disproportionately greater impact' on the relevant markets or that we should 'ascribe a "plus" to the Chinese competitors' in the competitive mix. The evidence¹⁹⁵ indicates that the Parties have been vigorously competing against the Chinese suppliers for some years and can be expected to continue to do so absent the Merger, based on their strong offers as further elaborated below.

¹⁹⁴ We cannot exclude that Chinese suppliers, as ZPMC, may have access to comparably cheap raw materials (especially steel) and may receive subsidies and other forms of governmental support from China. As mentioned above (paragraph 6.61) some of the Parties' internal documents refer to the 'One Belt, One Road' and to the "Made in China 2025" Industrial Policy' initiative [REDACTED].

¹⁹⁵ See, for example, 6.67 to 6.69 and the evidence in Chapters 7, 8 and 9.

The Parties have strong offerings and will continue to vigorously compete against Chinese suppliers

- 6.74 We recognise that some Chinese suppliers (ZPMC and Sany) are credible competitors in specific markets. However, the evidence available to the CMA is consistent in showing that the Parties have strong offerings and will continue to vigorously compete against Chinese suppliers, including based on parameters of competition other than price and especially in the context of increased automation of CHE, proven track record and their broad portfolios.
- 6.75 We set out below evidence, mainly from the Parties' internal documents, on some cross-cutting aspects of the Parties' offerings that make them strong competitors in each of the CHE they provide. The main strengths of the Parties include their proven track records, strong sales and after sales networks, wide portfolios and automation offerings.¹⁹⁶
- 6.76 First, in relation yard cranes, while the Parties submit that Konecranes 'cannot be considered as a "main" supplier of RTGs in the UK'¹⁹⁷ and that 'Konecranes has a very limited presence in ASCs',¹⁹⁸ the evidence considered in Chapter 7 supports that both Konecranes and Cargotec are strong and close strong competitors in RTG and ASC.
- 6.77 Cargotec, through Kalmar, has supplied RTG, ASC and RMG in Europe since 1987.^{199,200} Konecranes also supplies RTG, RMG and ASC with a strong position in Europe²⁰¹ and has had a business division focused on cranes since 1988.²⁰² Both Parties have a proven record in relation to the quality of their products and ZPMC is perceived by some third parties, [REDACTED], to offer a lower quality product. See for example the following internal documents, which are broadly consistent with the other evidence considered in Chapter 7:
- (a) [REDACTED].

¹⁹⁶ This evidence should be considered together with all the other evidence about the competitive strength of the Parties' and of their competitors that we present in relevant Chapters when assessing each theory of harm

¹⁹⁷ The Parties' Response to the Issues Statement, 6.25.

¹⁹⁸ The Parties' Response to the Issues Statement, 6.38.

¹⁹⁹ [REDACTED]. Although this document is from 2017, we note that Cargotec considers itself to be: 'One of the leading suppliers in the world', with 'Well established market position'.

²⁰⁰ As referred in paragraph Cargotec assembles all of its Gantry Cranes at one location in China from where it supplies its customer base. [REDACTED].

²⁰¹ Konecranes assembles Gantry Cranes in China and Europe (Croatia, Finland, and Poland) Merger Notice, paragraph 1062.

²⁰² Konecranes, History [online], available at <https://www.konecranes.com/about/history> [accessed 23/11/2021]

(b) An internal document of Konecranes prepared for the onboarding of the leadership team states that Konecranes' port solution business 'should have the advantage' in areas in which [X].²⁰³

6.78 We have seen evidence that shows that both Parties have continued to successfully win business in Europe in relation to RTG and ASC, in the last three years.

(a) In Europe, Kalmar announced that it has concluded an agreement with Dublin Ferryport Terminals (DFT) to extend the Kalmar AutoRTG system at the terminal with five new AutoRTG cranes over the next 2 years, with the delivery of the first machines scheduled to be completed during the first quarter of 2022.²⁰⁴

(b) In January 2020, Konecranes signed contracts with Yilport for the delivery of Automated RTG systems to three of Yilport's European container terminals, two in Portugal and one in Sweden. The announcement of this contract states: 'Automated RTG operation is coming of age in Europe, driven by Konecranes'.²⁰⁵

(c) In January 2021, it was announced that DP World Antwerp Gateway has ordered a fleet of 34 ASC to Konecranes for its container terminal in Antwerp, Belgium. The order was booked in December 2020: the first batch will be delivered in Q2 2022, the last batch by 2026. This announcement also states that 'As part of the project, TBA will extend the existing Equipment Control System (ECS) used at the terminal'.²⁰⁶

(d) In November 2021, HPH informed Konecranes that Konecranes had been awarded the contract for the supply of 17 remotely controlled eRTG to Felixstowe port in the UK.

6.79 Second, in relation to Mobile Equipment, in particular, the Parties both supply European demand at least in part, from their factories in Poland (Cargotec) and Sweden (Konecranes) and have strong European credentials. As shown below, the Parties also consider themselves to be market leaders based on their wide product range, brand and engineering capability that allows them to

²⁰³ The Parties' self-assessment in the documents above is broadly in line with third-party evidence considered in Chapters 7.

²⁰⁴ Cargotec (August 2021), Kalmar receives repeat order of five AutoRTGs [online], available at https://www.kalmarglobal.com/news--insights/press_releases/2021/kalmar-receives-repeat-order-of2/ [accessed 23/11/2021].

²⁰⁵ Konecranes (January 2020), [Konecranes Automated RTGs to three European container terminals](https://www.konecranes.com/press/releases/2020/konecranes-automated-rtgs-to-three-european-container-terminals) [online], available at <https://www.konecranes.com/press/releases/2020/konecranes-automated-rtgs-to-three-european-container-terminals> [accessed 23/11/2021].

²⁰⁶ Sea Wanderer (January 2021), DP World Antwerp Gateway orders fleet of Automated Stacking Cranes from Konecranes, available at <https://seawanderer.org/dp-world-antwerp-gateway-orders-fleet-of-automated-stacking-cranes-from-konecranes>, [accessed 23/11/2021].

offer high level of customisation. Based on these factors, the Parties are well placed to compete against Chinese suppliers, especially on parameters other than price.

6.80 Cargotec's internal documents show that it considers itself to have [REDACTED].

(a) [REDACTED].

(b) [REDACTED].

6.81 Konecranes' internal documents show that it considers itself to be 'one of the leaders'²⁰⁷ in the lift trucks industry and to have a 'premium product with high customization and brand awareness'. A Konecranes presentation about its market and the position of its competitors in the 'lift truck' industry (meaning Mobile Equipment) states that although Konecranes is not yet the biggest 'Konecranes is the best, in the things that matter the most' in being a 'leader' in lift trucks.

6.82 The Parties' internal documents also indicate that they both consider that an important differentiating factor of their offer is having strong after-sales and distribution network.

(a) Konecranes' internal documents in relation to Europe (not specific to the UK) show that it considers itself to have a 'Strong Dealer Network' and '[g]ood spread over many countries and dealers' and '[s]trong dealers with [REDACTED] and solid reputation, [that] [REDACTED]. Konecranes also notes as one of its advantages that they are 'Strong National Dealers [REDACTED] with the whole line-up of services. [REDACTED]' With respect to Cargotec, Konecranes assesses internally that it has [REDACTED], whereas Sany is seen to have [REDACTED] and Hyster is given the comment [REDACTED].

(b) [REDACTED].

6.83 The Parties' self-assessment is broadly in line with the other evidence considered in Chapter 9.

6.84 Various internal documents from the Parties show that they have growth plans to increase their market positions in Mobile Equipment in the foreseeable future. This evidence is difficult to reconcile with the Parties' submissions that the Parties are not able to compete on the 'merits' with Chinese suppliers.

(a) A strategic internal document of Konecranes of August 2018 sets out its plans to grow its market position in Mobile Equipment in the coming

²⁰⁷ Emphasis in original. [REDACTED].

years, stating that Konecranes has the ambition to grow from its current position of '[redacted] in the Lift Trucks Business' to becoming 'The Big Global Leader in Lift Trucks by market share and revenue' in the timeframe 2021-2030, including based on its [redacted].

- (b) A commercial internal document about the so-called Konecranes '[redacted]', sets out the aim for Konecranes' Mobile Equipment business of becoming: 'First in [lift] trucks. First in service. First in customer satisfaction'. Specifically, the aim was to grow the global market share to [redacted], generate [redacted] of revenue from services and to accomplish these aims by 2023. In particular, the following objectives vis-à-vis competitors are listed: 'Global market share gains against [redacted]; regional gains against [redacted]'. This clearly shows that Konecranes wants to take away market share from Cargotec (Kalmar) and Hyster globally, ie also in Europe. Competitors Sany and Taylor are only seen as relevant targets in non-EEA regions like China and the USA. Its '3023' plan also puts an emphasis on innovation and formulates the plan to '[b]e one of the leaders in coming industry shifts to semi-automation and electrification'.
- (c) Konecranes' Lift Trucks business unit leadership continued with its [redacted] strategy efforts also after the announcement of Merger. An internal presentation titled [redacted] from April 2021, Konecranes continues to consider its growth strategy for lift trucks (of which reach stackers are a part). Specifically, the document discusses a number of assumptions from 'where growth will come', including: [redacted]. This document indicates that this is Konecranes' path to [redacted].
- (d) [redacted].
- (e) [redacted].
- (f) [redacted].
- (g) [redacted] again a strategy similar to one of Konecranes'.

6.85 The growth plans, especially in relation to Mobile Equipment, also include the Parties' projections on future competition, in particular the trend towards electrification.²⁰⁸

²⁰⁸ The documents considered in Chapter 9 demonstrate that both Parties have long anticipated this trend and are taking active steps towards electrification of their product lines. These clear plans for, and steps taken towards, electrification illustrate the Parties' plans for growth and emphasise that future competition will not only be fought on price but on technical innovations.

- 6.86 In relation to CHE in general, but Gantry Cranes, SC and ShC in particular, both Cargotec and Konecranes have a competitive advantage vis-à-vis many of their OEM competitors when it comes to terminal container automation. Cargotec and Kalmar appear to provide ‘automated equipment systems and software’ to the [REDACTED] of the ‘highly automated’ container terminals worldwide.²⁰⁹ Unlike the majority of their competitors, Cargotec and Konecranes not only offer different types of automated equipment but also the software that enables a seamless coordination between them. This software, ECS, monitors and guides the automated equipment fleet to operate in safe and efficient manner. It controls all events and processes at the equipment level and implements all necessary actions based on the job orders created by the Terminal Operating System (TOS).²¹⁰ The ECS is therefore connected to the on-board control software system of the automated equipment²¹¹ and to the TOS. Cargotec offers an ECS called Kalmar One (a replacement of its previous software system called Kalmar TLS) while Konecranes offers TEAMS, an ECS developed by its subsidiary TBA. The only other CHE OEM that currently offers its own ECS is ZPMC and Mitsui. The Parties submit that ECS is also offered by equipment suppliers, including ABB, TMEIC and Siemens.
- 6.87 We note that ECS enables the interoperability between existing and new equipment, giving the Parties the opportunity to expand their footprint with the same customer. We note that one strategic internal document of Konecranes identifies [REDACTED] as one of the [REDACTED] areas of strategic focus for the ‘Port Solutions’ division and shows that Konecranes is considering selling a [REDACTED]; offering ‘best-in-class software covering [REDACTED]’. Furthermore, the evidence shows that some customers have concerns about the difficulty of integrating different types of automated equipment and software from different suppliers. These concerns combined with their broad automated portfolios play even more to the Parties’ advantage as customers seek to avoid interoperability issues (see more details in the Chapter 12).
- 6.88 Furthermore, as explained in Chapter 12, for both Gantry Cranes and Mobile Equipment, some customers tend to prefer to purchase CHE with

²⁰⁹ We note that one comment in a Konecranes’ presentation – ‘[REDACTED]’ - notes that: ‘Globally there are +30 highly automated container terminals’ and that ‘Konecranes has supplied automated equipment systems and software to [REDACTED] of these highly automated sites’ while ‘Kalmar has [REDACTED] sites’. [REDACTED] is amongst the ‘highly automated’ container terminals supplied by Kalmar.

²¹⁰ The TOS is a software solution that controls the logistics in a terminal. For example, it manages the flows of containers, plans the optimal yard positioning/stacking, schedules inbound and outbound ship and rail traffic and creates job orders.

²¹¹ Automated equipment uses certain features that are built in the machine and are a prerequisite for automated operations. While these features vary between equipment types, they regularly encompass sensors, cameras, on-board control software systems (also known as Programmable Logic Controller or PLC) to implement commands from the Equipment Control System (ECS; see below), equipment management information systems, etc.

characteristics which they are already familiar with and consider it important to choose a supplier which ensures interoperability across the existing range of CHE which they operate and any new additions.

The role of tender processes in producing competitive outcomes

6.89 The Parties submitted that ‘broadly speaking, the Parties operate in traditional bidding markets with formal tendering the norm for many CHE product types’ and that ‘the nature of bidding markets guarantees intense competition’.²¹² The Parties also submitted that:

- (a) The supply of cranes and straddle and shuttle carriers²¹³ is a classic bidding market and that competition in markets such as this, where price is determined through a bidding process, can be expected to result in competitive outcomes even with only a few bidders.²¹⁴
- (b) Structured tender processes – such as the ones used in the sales for cranes and HTE – are utilised for larger MEQ projects or projects where public port operators acquire MEQ.²¹⁵

6.90 We do not agree that the nature of bidding markets guarantees intense competition. As set out in an economic discussion paper commissioned by the CMA’s predecessor, ‘there is no reason to assume that because a bidding process is being used, competition is likely to be more intense and competition concerns less relevant’. Although there is a ‘rough distinction between the forms of “conventional” competition and bidding processes’, in both cases if a supplier raises its price or deteriorates the quality of its offering, it may lose a customer who switches to an alternative supplier. In both cases what matters is that the customer has a number of possible suppliers.²¹⁶

6.91 We note that, if certain conditions hold, where competitive bidding processes are akin to a second price auction, only the marginal bid (ie the bid of the supplier that was the runner-up) in a tender process would be expected to impose a constraint on the winning bidder, with any additional bidders not playing a role in constraining the winning bidder. However, where bidders face some uncertainty regarding the terms of the bids of their rivals (for example, in relation to price or quality) and/or in relation to how these will be scored by the

²¹² The Parties’ Response to the Issues Statement, 3.7.

²¹³ The Parties’ Response to the Issues Statement, 8.15.

²¹⁴ The Parties’ Response to the Issues Statement, 6.26 and 6.37.

²¹⁵ The Parties’ Response to the Issues Statement, 7.6.

²¹⁶ Economic discussion paper commissioned by the OFT, Markets with bidding processes, May 2007, paragraph 1.8.

customer, then bidders would be expected to account for the risk of losing to a wider set of bidders when setting the terms of their bids.

- 6.92 The evidence that we have reviewed confirms that the Parties' UK customers typically buy RTG and ASC cranes through competitive tender processes,²¹⁷ whereas purchasing practices for Mobile Equipment are more varied.²¹⁸ In any event, the evidence that we have reviewed does not support that purchasing processes in cranes, Mobile Equipment and straddle and shuttle carriers are generally akin to second price auctions (for example, the tenders involved are typically sealed bids so the participants are uncertain about the offers of their rivals), or that only two bidders play a role in the competitive process.²¹⁹
- 6.93 In addition, although tenders may be infrequent in relation to the supply of RTG, ASC, SC and ShC, which can in principle create a strong incentive to compete, this may not result in effective competition with a small number of bidders in practice where there are factors such as incumbency advantages or the requirements of customers and the offers of competitors are differentiated.²²⁰
- 6.94 Finally, while the the highly structured nature of the bidding process, mandated by the Utilities Contracts Regulations 2016 may, to some extent, lower some barriers by applying the principles of transparency, equal treatment, and non-discrimination, Chinese bidders do not get the full benefits of the utilities rules, as utilities do not have to consider their offers.²²¹

7. Horizontal effects: RTG and ASC

Horizontal unilateral effects in the supply of RTG

Framework and approach

- 7.1 In this Chapter, we assess horizontal unilateral effects of the Merger in the supply of RTG and ASC, following the approach set out in paragraphs 6.5 to 6.8.

²¹⁷ For example, we discuss a number of case studies covering UK tenders in RTG and ASC in Chapter 7.

²¹⁸ For example, Konecranes [REDACTED]. Cargotec estimated [REDACTED].

²¹⁹ We note that, [REDACTED], it appears that more than two bidders typically influence outcomes in HPH's tenders.

²²⁰ See Economic discussion paper commissioned by the OFT, Markets with bidding processes, May 2007, paragraphs 3.24 to 3.51.

²²¹ See Utilities Contracts Regulations 2016/274, Regulation 85 (in place until 31 December 2021 in accordance with Public Procurement (Amendment Etc.) (EU Exit) Regulations 2020).

- 7.2 In order to assess the likelihood of the Merger resulting in horizontal unilateral effects in the supply of RTG, we considered the closeness of competition between the Parties and the (present and future) competitive constraints provided by competing suppliers. We then considered whether there are any possible constraints on the Merged Entity arising from entry or expansion that would have occurred irrespective of the Merger.
- 7.3 We have gathered, and taken account of, a range of evidence in our assessment. In particular, we have considered:
- (a) the Parties' views;
 - (b) the shares in the supply of RTG and ASC in the UK, Europe and worldwide (excluding China);
 - (c) evidence from quantitative and qualitative bidding analysis;
 - (d) third-party evidence; and
 - (e) evidence from the Parties' internal documents.

Closeness of competition between the Parties and competitive constraints from alternative suppliers

Parties' views

- 7.4 The Parties submitted that the Merger does not raise competition concerns in the supply of RTG, mainly because:
- (a) after the Merger, the Merged Entity will continue to face several competitors including ZPMC and Liebherr;
 - (b) the Parties cannot be considered as close alternatives for UK customers and are not 'two of the main four suppliers of RTG' in the UK; and
 - (c) the tendering sales process drives competitive outcomes.²²²
- 7.5 The Parties submitted that they have a modest position in the supply of RTG on a global basis, with a combined share of approximately [30 – 40]% for 2018-2020. They noted that they compete with a number of well-established global suppliers, including ZPMC (the market leader), Mitsui, Liebherr, Sany, Kuenz and Baltkran, the latter two of which are newer entrants. In the Parties'

²²² The Parties' Response to Issues Statement, paragraphs 6.17 to 6.26.

view, these RTG suppliers are all credible alternatives to the Parties, and all are capable of bidding for UK sales opportunities.

7.6 In response to our working paper on horizontal unilateral effects in the supply of RTG and ASC, the Parties made a number of additional submissions in relation to RTG.

- (a) The Parties claimed that the long time period used by the CMA in its shares of supply conceals more dynamic recent entry and expansion, with further expansion anticipated from suppliers such as Mitsui and Sany. They submitted that the Parties' historic shares of supply are not, therefore, indicative of future market power. The Parties submitted that shares of supply ought not to be considered a useful measure in relation to the RTG market because the Gantry Crane market is project-driven and sales are conducted through global tenders.
- (b) The Parties also stated that the CMA failed to appropriately take into account Konecranes' [REDACTED].²²³ The Parties submitted that this suggests that Konecranes is a weak competitive constraint insofar as sales to UK customers are concerned. They also submitted that, to the extent that the CMA considers that a lack of sales to customers in the UK should not be taken into account, this should be equally applied in considering the position of competitors such as Mitsui.
- (c) The Parties further submitted that our use of tender data is selective, and that this data shows a wider set of competitors than the Parties. They submit that there will be a number of credible alternatives to the Parties post-Merger. The Parties state that ZPMC, Liebherr and Sany are active to a material extent and that describing ZPMC, Liebherr and Sany as active to 'some extent' materially underplays the market position of these players.²²⁴
- (d) The Parties submitted that the contention from a customer that ZPMC did not bid on a certain UK tender because "Chinese suppliers do not typically submit bids for smaller tenders" is not consistent with the Parties' experience. They said that, based on global deliveries for the 2010-2020

²²³ The Parties submitted that this 2021 order was from [REDACTED], an intermodal rail terminal.

²²⁴ [REDACTED]. In particular, the Parties noted that: i) ZPMC has had recent successes in Europe, with deliveries to APMT (Spain), Genoa, and the Port of Piraeus and the fact that ZPMC has "only" supplied UK customer (Felixstowe) does not change the fact that it is a significant competitor and ZPMC has had recent successes in Europe; ii) Liebherr has won three out of the eight RTG tenders in the UK since 2014 [REDACTED]; iii) Kuenz will have an increasingly significant role as the industry moves towards increased automation; iv) Mitsui recently competed in tenders for ARTG (and STS) in other countries in Europe; and (v) Sany and Baltkran (with one sale in Brest) are recent new entrants that have each had successful tenders for their equipment.

period, ZPMC supplied as many RTG to small customers²²⁵ as both of the Parties did combined, and that ZPMC recently won a delivery for just 5 RTG to the Port of Piraeus.

- 7.7 We take these comments into account in our overall assessment below. Some other submissions made by the Parties in relation to RTG are addressed in Chapter 6.

Shares of supply

- 7.8 Chapter 6 provides an overview of our approach to shares of supply and the weight that we place on this evidence. We have constructed our estimates of the shares of supply using data provided by the manufacturers themselves and, where this is not available, the Parties' estimates of their competitors' sales.²²⁶
- 7.9 Table 6 shows our estimates of the shares of supply based on delivery volumes for RTG over the period 2011 to 2020 for three different geographic areas: UK, Europe, and worldwide (excluding China).
- (a) Within Europe, the Parties were the two largest suppliers over the last ten years, such that the Merged Entity would have a combined share of supply of [70-80] %. The only other supplier with a share of supply greater than 10% was ZPMC ([10-20]%). Liebherr and Mitsui have much smaller shares of supply ([0-5]% each), while Kuenz and Paceco Espana have even smaller shares ([0-5]%).
 - (b) Within the UK, the Merged Entity would have a combined share of supply of [30-40]%. This is slightly below the share of ZPMC ([40-50]%), which is the market leader in the UK. Only one other supplier made any deliveries in the UK during the relevant period: Liebherr ([10-20]%).
 - (c) On a worldwide basis (excluding China), the Merged Entity would have a combined share of supply of [40-50]%. The next largest suppliers would be ZPMC (the market leader absent the Merger, with a share of [30-40]%) and Mitsui ([10-20]%).

²²⁵ Small customers are defined by the Parties as customers with an annual throughput of less than 500 TEUs.

²²⁶ See Appendix B for further detail on our methodology.

Table 6: Shares of supply of RTG based on number of deliveries, 2011–20

Volume in Units

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[x]	[30-40]%	[x]	[30-40] %	[x]	[10-20]%
Konecranes	[x]	[5-10]%	[x]	[40-50]%	[x]	[20-30]%
Combined	[x]	[30-40]%	[x]	[70-80]%	[x]	[40-50]%
ZPMC	[x]	[40-50]%	[x]	[10-20]%	[x]	[30-40]%
Liebherr	[x]	[10-20]%	[x]	[0-5]%	[x]	[5-10]%
Mitsui	-	-	[x]	[0-5]%	[x]	[10-20]%
Paceco Espana	-	-	[x]	[0-5]%	[x]	[0-5]%
Sany	-	-	[x]	[0-5]%	[x]	[0-5]%
Kuenz	-	-	[x]	[0-5]%	[x]	[0-5]%
Others	-	-	-	-	[x]	[0-5]%
Total	[x]	100%	[x]	100%	[x]	100%

Source: Parties and competitors' sales data.

7.10 Table 7 shows the same shares of supply based on revenue rather than delivery volumes. The shares are similar to those in Table 6 - the Merged Entity would have [70-80]% share of supply in Europe and [40-50]% worldwide (excl. China).

Table 7: Shares of supply of RTG based on revenue, 2011–20

Revenue in €m

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Revenue	Share	Revenue	Share	Revenue	Share
Cargotec	[x]	[30-40]%	[x]	[20-30]%	[x]	[10-20]%
Konecranes	[x]	[10-20]%	[x]	[40-50]%	[x]	[20-30]%
Combined	[x]	[40-50]%	[x]	[70-80]%	[x]	[40-50]%
ZPMC	[x]	[30-40]%	[x]	[10-20]%	[x]	[20-30]%
Liebherr	[x]	[20-30]%	[x]	[0-5]%	[x]	[5-10]%
Mitsui	-	-	[x]	[0-5]%	[x]	[10-20]%
Paceco Espana	-	-	[x]	[0-5]%	[x]	[0-5]%
Sany	-	-	[x]	[0-5]%	[x]	[0-5]%
Kuenz	-	-	[x]	[0-5]%	[x]	[0-5]%
Others	-	-	-	-	[x]	[5-10]%
Total	[x]	100%	[x]	100%	[x]	100%

Source: Parties and competitors' sales data.

7.11 Overall, the shares of supply indicate that the Parties are close competitors in the supply of RTG in Europe, given that they were by far the two largest suppliers over 2011 to 2020 (with a combined share of supply of [70 – 80]%). Shares of supply in Europe suggest that, post-Merger, the remaining competitive constraints will primarily come from ZPMC, Liebherr and Mitsui.

7.12 While Cargotec has nearly identical shares of supply in the UK and Europe, we note that Konecranes has a significantly lower share in the UK than it does in Europe (where it is the market leader). We also note that Liebherr and ZPMC have significantly higher shares in the UK than in Europe, and that Mitsui has a higher share worldwide (excl. China) than it does in Europe or in

the UK. Despite the variations in shares between the UK and Europe as a whole, the market is highly concentrated on both geographic bases.

- 7.13 We place limited weight on UK shares of supply in RTG for two reasons. First, even on a ten-year basis, UK sales are small and lumpy so can be heavily influenced by a small number of orders. Second, our assessment is that RTG is a European market (see Chapter 5). In the case of ZPMC, the difference between its share in the UK compared with its share in Europe seems to be largely a reflection of the volatility of shares and of large orders by one UK port in the last three years, rather than as a result of any significant difference in competitive conditions.
- 7.14 As noted above, the Parties submitted that Konecranes has had limited success in RTG in the UK, which suggests that it is a weak competitive constraint insofar as sales to UK customers are concerned. They also submitted that, to the extent that we consider that a lack of sales to customers in the UK should not be taken into account, this should be equally applied in considering the position of competitors such as Mitsui.
- 7.15 We do not agree that a lack of sales by Konecranes to UK customers during 2011 to 2020 indicates that it is a weak competitive constraint in relation to sales to UK customers. As noted above at paragraph 7.13, we put limited weight on UK shares of supply in RTG, and the other evidence that we review below (including bidding analysis and third-party evidence) indicates that Konecranes competes closely with Cargotec for UK customers. Further, we note that Konecranes won an order for 17 RTG from Felixstowe in October 2021, clearly demonstrating that Konecranes can compete effectively for UK customers, including against ZPMC ([REDACTED]). Konecranes also won an order for one electric RTG to [REDACTED] in 2021 ([REDACTED] million).
- 7.16 In relation to Mitsui, while its lack of UK sales does not preclude it from imposing a constraint on the Parties, we note that it has a very low share of supply in Europe as well. Furthermore the other evidence that we reviewed below did not support a conclusion that Mitsui imposes a material constraint in relation to UK sales.
- 7.17 As noted above, the Parties also submitted that the long time period used by the CMA conceals more dynamic market trends. They stated that limiting the shares of supply to the period 2011 to 2020 means that ZPMC's delivery of at least 22 RTG to Felixstowe in the UK in 2010 is excluded, and that this materially tempers the CMA's contention that the Parties were 'by far' the two largest suppliers in Europe. The Parties submit that the CMA provides no credible reason for choosing 2011–20 as opposed to other periods.

7.18 As set out in Chapter 6, we consider it appropriate to focus on shares calculated over a ten-year period, as this reduces the volatility that derives from infrequent and lumpy purchasing in RTG. We also note that 2011 to 2020 is the most recent, full ten-year period for which data was available, and that any period chosen would necessarily exclude sales from all players (and not only ZPMC) that pre- or post-date the period selected.

7.19 In addition to our main ten-year period for RTG shares, we have also calculated volume-based shares for RTG in five-year periods (2011–15 and 2016–20) in order to consider any trends. Table 8 below shows that calculating shares on this basis does not lead to materially different results in Europe. For example, the Parties' European share goes from [70 – 80]% to [70 – 80]% over the two periods and ZPMC's European share goes from [10 – 20]% to [10 – 20]%.

Table 8: Shares of supply of RTG based on number of deliveries, 2011–15 & 2016–20

Company	Share					
	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	2011–15	2016–20	2011–15	2016–20	2011–15	2016–20
Cargotec	[10-20]%	[40-50]%	[30-40]%	[20-30]%	[10-20]%	[10-20]%
Konecranes	[20-30]%	[0-5]%	[40-50]%	[40-50]%	[20-30]%	[20-30]%
Combined	[30-40]%	[40-50]%	[70-80]%	[60-70]%	[30-40]%	[40-50]%
ZPMC	[60-70]%	[20-30]%	[10-20]%	[10-20]%	[30-40]%	[20-30]%
Liebherr	[0-5]%	[20-30]%	[0-5]%	[0-5]%	[5-10]%	[5-10]%
Mitsui	-	-	[0-5]%	[0-5]%	[10-20]%	[10-20]%
Paceco Espana	-	-	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Sany	-	-	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Kuenz	-	-	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Others	-	-	-	-	[5-10]%	[0-5]%

Source: Parties and competitors' sales data.

Quantitative bidding analysis

7.20 Chapter 6 provides an overview of our approach to the bidding analysis and the weight that we place on this evidence.

7.21 We set out below the results of our analysis of the Parties' bidding data in relation to RTG.²²⁷ This includes loss ratios and an analysis of overlapping tender participation between the Parties. This analysis has been performed using the Parties' data on their participation in RTG bidding opportunities.²²⁸

²²⁷ Including both RTG and ARTG tenders.

²²⁸ We discuss this data further in appendix C.

Loss ratios

- 7.22 In this section we present ‘loss ratios’, which are the proportion of opportunities lost to each competitor as a percentage of all opportunities that the Party participated in and lost. As discussed in Chapter 6, these are an important measure of the closeness of competition between the Parties and their competitors.
- 7.23 We calculated loss ratios on three different measures: number of opportunities lost, total number of units lost, and total value (or revenue) lost. We note that the loss ratio analysis for Europe (the UK and the EEA) relates to [redacted] opportunities for Cargotec and [redacted] opportunities for Konecranes. The CMA uses caution when interpreting these relatively small sample sizes.
- 7.24 Table 9 below shows RTG loss ratios for Cargotec in Europe from 2016 to May 2021. This indicates that Konecranes is the competitor to which Cargotec lost most often, across all measures (loss ratios of [redacted]%). ZPMC and Kuenz were the next closest competitors to Cargotec based on the number of opportunities lost, although the [redacted] opportunities lost to ZPMC were for a larger number of units (and value) than the [redacted] opportunities lost to Kuenz. This suggests that ZPMC may be a closer competitor to Cargotec for larger tenders than for smaller tenders. Liebherr was the only other supplier to which Cargotec lost tenders in Europe during the relevant period; these were [redacted] tenders for a small number of units.

Table 9: RTG loss ratios, Europe (EEA + UK), Cargotec, 2016 to May 2021

Company	Europe (EEA + UK)					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	Number	Percentage
Konecranes	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
ZPMC	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Kuenz	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]†	[redacted]
Liebherr	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	[redacted]	100%	[redacted]	100%	[redacted]	100%

Source: CMA analysis of Parties' data.

Notes:

† [redacted].

- 7.25 Table 10 below shows RTG loss ratios for Konecranes in Europe from 2016 to April 2021. This indicates that Cargotec was the competitor to which Konecranes lost most frequently when competing in opportunities for RTG (loss ratios of [redacted]%). The loss ratio to ZPMC was [redacted]% based on the number of opportunities lost, but [redacted]% when based on the number of units or value lost. These are higher than the loss ratios to Cargotec based on the same measures ([redacted]%) and may suggest that ZPMC is a closer competitor to Konecranes for larger opportunities than for smaller opportunities. Kuenz, Liebherr and Mitsui were the other competitors to which Konecranes lost RTG

opportunities in Europe during the relevant period ([REDACTED] in total). These were all opportunities involving small volumes and values.

Table 10: RTG loss ratios, Europe (EEA + UK), Konecranes, 2016 to April 2021

Company	Europe (EEA + UK)					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	Number	Percentage
Cargotec	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ZPMC	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Kuenz	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Liebherr	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Mitsui	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%	[REDACTED]	100%

Source: CMA analysis of Parties' data.

7.26 The Parties submitted that the CMA's use of bidding data in RTG is selective and that the bidding data shows a wider set of competitors than the Parties. In particular, they submitted that loss ratios also show that Cargotec and Konecranes lost a material number of tenders to ZPMC, Kuenz and Liebherr in Europe. We do not agree that our analysis is selective. As set out above, we recognise that both Parties also lost opportunities to ZPMC, Kuenz and Liebherr in Europe, while Konecranes lost one opportunity to Mitsui.

7.27 Table 11 below shows RTG opportunities lost by Cargotec in the UK from 2016 to May 2021 and Table 12 shows similar data for Konecranes. We have not calculated loss ratios for the UK because of the very small number of opportunities. We place very limited weight on this evidence for the same reason.

Table 11: RTG lost opportunities, UK, Cargotec, 2016 to May 2021

Company	UK		
	Number of opportunities	Number of units	Value (revenue in €m)
Liebherr	[REDACTED]	[REDACTED]	[REDACTED]
ZPMC	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis of Parties' data.

Table 12: RTG lost opportunities, UK, Konecranes, 2016 to April 2021

Company	UK		
	Number of opportunities	Number of units	Value (revenue in €m)
Cargotec	[REDACTED]	[REDACTED]	[REDACTED]
ZPMC	[REDACTED]	[REDACTED]	[REDACTED]
Liebherr	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis of Parties' data.

7.28 We note that the results show that, [REDACTED]. This does not imply that Konecranes did not impose a competitive constraint on Cargotec, for two reasons. First,

competition for opportunities takes place when several credible bidders submit competing bids. Konecranes bid in [X] of the [X] UK tenders that Cargotec participated in.²²⁹ If Konecranes' presence in these tenders drove Cargotec to offer a more competitive bid, then competition has taken place and the loss of Konecranes would be the loss of a competitive constraint. Second, as noted above, we give limited weight to this evidence given that the number of UK opportunities is very small. The fact that Konecranes is the competitor to which Cargotec lost most frequently in Europe suggests that Konecranes could win opportunities in the UK in future. Indeed, as noted above, Konecranes has won two RTG orders in the UK in 2021, for 18 RTG in total.

- 7.29 The Parties submitted that, if the CMA takes this position in relation to Konecranes, 'the same must then also hold true for all other competitors' i.e. other competitors to which Cargotec did not lose any bidding opportunities between 2016 and May 2021 should not be disregarded as potential competitive constraints. We do not agree that we have been inconsistent in our assessment of Konecranes as compared with other competitors to Cargotec. Although Cargotec also lost to Kuenz in mainland Europe, but not in the UK, during the period considered, we note that these losses to Kuenz in Europe were significantly fewer and lower in value as compared with Cargotec's losses to Konecranes in Europe. Furthermore, the other evidence considered below indicates that Kuenz is not a significant competitor.

Analysis of overlaps

- 7.30 We performed a manual matching exercise between Cargotec and Konecranes' bidding data and assessed the extent to which the Parties were bidding for the same opportunities. Table 13 shows the results.²³⁰

²²⁹ Based on a comparison of Cargotec and Konecranes' bidding data.

²³⁰ We do not present results of overlaps in the UK specifically due to a small sample size of opportunities. As we only have a complete list of opportunities participated in for the Parties we are not able to perform a similar exercise for other competitors.

Table 13: Overlapping bidding participation between the Merging Parties 2016 to April 2021, Europe (EEA + UK).

	<i>Opportunities Cargotec participated in</i>		<i>Opportunities Konecranes participated in</i>		
	<i>Number of opportunities</i>	<i>Value of opportunities</i>		<i>Number of opportunities</i>	<i>Value of opportunities</i>
Cargotec opportunities, with Konecranes participation (%)	[X] [60-70]%	€[X]m [80-90]%	Konecranes opportunities, with Cargotec participation (%)	[X] [60-70%]	€[X]m [70-80%]
Cargotec opportunities, without Konecranes participation (%)	[X] [30-40]%	€[X]m [0-10]%	Konecranes opportunities, without Cargotec participation (%)	[X] [30-40]	€[X]m [20-30]
Total	[X] (100%)	€[X]m (100%)	Total	[X] (100%)	€[X]m (100%)

Source: CMA analysis of Parties' data.

7.31 Table 13 shows that, of the opportunities that Cargotec participated in, Konecranes was a competing bidder in [60-70]% (when weighted by value, this increases to [80-90]%). Similarly, for the opportunities that Konecranes participated in, Cargotec was a competing bidder in [60-70]% of bids (when weighted by value, this increases to [70-80]%). Again, these results are consistent with Cargotec and Konecranes being close competitors.

7.32 The Parties submitted that the CMA's overlap analysis shows that somewhere between [X] of tenders in which one Party participated did not involve the other Party. As stated above, we consider that the Parties competing in 60-70% of tenders in Europe is consistent with their being close competitors.

7.33 Figure 12 below shows the number of RTG opportunities that the Parties won, separated into opportunities where they faced each other and opportunities in which they did not. It shows that, in opportunities where only one Party bid, third-party bidders had limited success against the Party in question.

Figure 12: [X]

[X]

Source: [X]

7.34 Overall, the quantitative bidding analysis shows that the Parties are close competitors. They compete against each other in the majority of the opportunities that they bid in and they lose a significant proportion of opportunities to each other. This analysis suggests that ZPMC represents the most significant competitive constraint on the Parties, although primarily for the largest tenders. Liebherr, Kuenz and Mitsui impose weaker constraints.

Qualitative tender case studies

- 7.35 In addition to our quantitative bidding analysis, we have considered case studies of four recent RTG or ARTG tenders in the UK. These are:
- (a) BHC tender in 2018, won by Cargotec;
 - (b) HPH Felixstowe tender in 2018, won by ZPMC;
 - (c) ABP Immingham tender in 2019, won by Cargotec; and
 - (d) HPH Felixstowe tender in 2021, won by Konecranes.
- 7.36 As discussed in Chapter 6, while we interpret these case studies qualitatively, we note that they cover a significant proportion of UK RTG sales since 2011 (see paragraphs 6.23 to 6.32).
- 7.37 Konecranes bid in [X] of these tenders and Cargotec bid in [X] of them. These tenders cover the vast majority of the Parties' recent bidding activity in the UK (they represent [90-10]% of the opportunities that Cargotec participated in and [90-100]% of the opportunities that Konecranes participated in from 2016 to May 2021 in the UK, when weighted by value).
- 7.38 In our assessment of these case studies, we considered information and views provided by the customer that ran the tender, alongside internal documents produced by the Parties:
- (a) BHC, ABP, and HPH provided data for their respective tenders. In most cases this included the ranking of each bidder that participated in UK tenders and the main tender assessment criteria. In addition, these customers were asked about the importance of various criteria in their purchasing decisions for RTG.
 - (b) We undertook a targeted internal document review in order to obtain insight into how the Parties set the terms of their offers (including prices) and how they took into account competition from other players when doing so.²³¹

²³¹ The Parties were asked to identify staff with primary responsibility for signing off bids, to provide a chronology of the tender process and also to provide all internal documents produced or received to inform the bid. In response, Cargotec submitted 1,482 documents and Konecranes submitted 451 documents in relation to RTG and ASC tenders.

BHC tender for RTG (2018)

- 7.39 BHC tendered for up to 9 electric semi-automated²³² RTG in 2018.
- 7.40 BHC followed a tender process in line with the Utilities Contracts Regulations 2016. Before the main tender round, BHC used a prequalification round to ensure bidders were of a sufficient quality, [REDACTED].
- 7.41 Quality was the more important component of the tender and made up [REDACTED]% of the award criteria, compared to [REDACTED]% for price. Within quality, reliability, flexibility on delivery, and meeting technical specifications were all highly important.
- 7.42 Cargotec was the winning bidder. [REDACTED].
- 7.43 BHC had expected that ZPMC would participate in this tender. BHC believes that ZPMC did not bid, at least in part, because of the smaller scale of this tender compared with other tenders in which ZPMC participated.
- 7.44 BHC was asked how its ranking of suppliers may differ in the future. It noted that [REDACTED].
- 7.45 [REDACTED].
- 7.46 [REDACTED].
- 7.47 [REDACTED].
- 7.48 [REDACTED].

HPH Felixstowe tender for RTG (2018)

- 7.49 HPH Felixstowe tendered for ten electric semi-automatic²³³ RTG in 2018. The tender also included upgrading and integrating twenty-two electric RTG. The introduction of these cranes and their integration to the terminal operating system was planned to be structured in two phases.
- 7.50 This tender was run according to the standard tender procedures used [REDACTED]:
- (a) [REDACTED].
- (b) [REDACTED].

²³² BHC RTG are remotely controlled by an operator.

²³³ The eRTG units utilise a remote control system rather than operating on a fully automatic basis.

(c) [REDACTED].

(d) [REDACTED].

7.51 ZPMC was the winning bidder for this tender. [REDACTED].[REDACTED].

7.52 HPH was asked how its ranking of suppliers may differ in the future. HPH told us that it does not expect to change its process of selecting the winning bidders; it expects that the qualified supplier that offers the most competitive price will win its future tenders.

7.53 [REDACTED].

7.54 [REDACTED].

Figure 13: [REDACTED].

[REDACTED]

Source: [REDACTED]

ABP Immingham tender for RTG (2019)

7.55 In 2019, ABP tendered for the design, manufacture, delivery and commissioning of six electric RTG for the Immingham Container Terminal. ABP also tendered in separate lots for two RMG and STS, five terminal tractors, six empty container handlers and five empty container handlers (ECH).

7.56 The weight of the different evaluation criteria were the following:

(a) Essential Selection Criteria (Pass/Fail) [REDACTED]:

(i) Section A1: Eligibility – Specific Business Information

(ii) Section A2: Economic and Financial Standing

(b) Capability Selection Criteria (Pass/Fail) and Scored Criteria (Scored and Weighted):

(i) Section B: Company Policies – [REDACTED]

(ii) Section C: Ability and Technical Capacity - [REDACTED]

7.57 Cargotec was the winning bidder for this tender. [REDACTED]

7.58 ABP was asked how its ranking of suppliers may differ in the future. [REDACTED].

7.59 [REDACTED].

7.60 [REDACTED].

7.61 [REDACTED].

HPH Felixstowe tender for RTG (2021)

7.62 HPH recently concluded a tender for 17 ARTG to the Felixstowe port. It told us [REDACTED].

7.63 The Parties subsequently informed us that Konecranes was awarded this tender in October 2021. [REDACTED].

7.64 [REDACTED].²³⁴

7.65 We note that Konecranes' success in this tender demonstrates its ability to compete in the supply of RTG in the UK, including against ZPMC. [REDACTED].

7.66 [REDACTED] suggests that some of the Parties' claims about their inability to compete against Chinese suppliers, particularly on price, may be exaggerated.

Provisional conclusions from the case studies

7.67 Overall, the case studies are broadly consistent with the quantitative bidding analysis in suggesting that the Parties compete closely. Konecranes was perceived to be a threat by Cargotec for the BHC and Immingham tenders and may therefore have influenced Cargotec's pricing. Furthermore, Konecranes won the 2021 tender for HPH Felixstowe, which HPH had indicated [REDACTED].

7.68 We note that the tender that ZPMC did not bid on (BHC 2018) was for a non-GTO customer and that BHC considered that the smaller scale of the tender was the reason why ZPMC did not bid. Liebherr was a stronger competitor in these particular tenders than its overall shares of supply suggest; [REDACTED].

Third-party evidence

Customer evidence

7.69 We sent questionnaires to five of the Parties' customers in the UK and received responses from each of them [REDACTED].²³⁵

²³⁴ Cargotec's response to the Issues Statement.

²³⁵ See Appendix D for further detail on our methodology.

7.70 We asked customers of the Parties to rate the importance of various criteria in their purchasing decisions for RTG (scores out of 5, where 5 is the most important).²³⁶ We summarise the four responses to this question in Table 14 below. These indicate that differences in equipment reliability, purchase price, efficiency/environmental performance and local aftersales presence were consistently seen as important criteria.

Table 14: Customer ratings of the importance of RTG purchasing criteria

<i>Purchasing criteria</i>	<i>Customer rating of criteria importance</i>			
	<i>Customer A</i>	<i>Customer B</i>	<i>Customer C</i>	<i>Customer D</i>
Differences in equipment reliability	5	5	5	5
Differences in automation/assistive features	3	3	4	4
Differences in purchase price	5	5	5	3
Differences in running costs	4	1	4	2
Differences in strength of local aftersales presence	4	4	4	4
Differences in efficiency/ environmental performance	5	5	4	2
Degree of interoperability with other equipment	3	3	5	2†
Already having installed base of equipment from a particular supplier	3	1	2	2‡

Source: P2 questionnaire responses.

Notes:

† 2 at time of purchase, 5 for any future purchases.

‡ 2 at time of purchase, 5 for any future purchases.

7.71 The fifth respondent did not complete our phase 2 questionnaire in relation to RTG but instead referred us back to its response to our phase 1 questionnaire. In response to a question regarding the strength of RTG suppliers,²³⁷ this customer identified Cargotec as the strongest supplier of RTG, noting that it ‘has most experience with Cargotec’ and that it sees Cargotec as offering a ‘good price/quality ratio’. It rated Konecranes as having the next strongest offer, followed by Kuenz and then Liebherr. It added that Konecranes’ service and spare parts performance was ‘lacking’, but that otherwise Konecranes has a competitive offer (although with relatively high prices). It said that Kuenz was a relatively new and untested entrant, such that its viability as a supplier to this customer was uncertain. Finally, this customer stated that Liebherr offered good quality but was too expensive.

²³⁶ Question wording: *When thinking about purchasing RTG, please score the following factors according to how important they are to your choice of supplier. Please assign a score from 1-5 where 5 = very important and 1 = not important at all (more than one factor can have the same score). The factors are listed in Table 14.*

²³⁷ Question wording: *Using the table below, please list: (i) your existing suppliers of Cranes for UK Terminals and (ii) all other suppliers that you consider could be a viable alternative for the supply of Cranes for UK Terminals. For each supplier, please assign a score from 1 to 5, where 5 = strongest offer and 1 = weakest offer. Please explain the reasons for your scores.*

- 7.72 In addition to the customer evidence presented in the tender case studies above, some customers provided further evidence and views relevant to our assessment of competition in the supply of RTG.
- 7.73 In particular, [REDACTED] explained its recent RTG tender decisions and its views on the market:
- (a) [REDACTED].
 - (b) [REDACTED].
 - (c) [REDACTED].
- 7.74 As set out in the tender case studies above, ZPMC was awarded an A-RTG tender by HPH in 2018.
- 7.75 In relation to servicing, [REDACTED] told us that maintenance of equipment is, in the main, undertaken by [REDACTED] in-house teams. [REDACTED] has a full-time established team of engineering technicians and its engineering team is able to reengineer or change the design of existing products to make repairs. Taken together, the responses of [REDACTED] appear to suggest that the strength of constraint that ZPMC imposes on the Parties may vary according to the in-house servicing capability of the customer in question.
- 7.76 We note, in relation to the Parties' submission that 'Felixstowe has significant influence in the market, and this will likely influence the decision of other suppliers',²³⁸ evidence from customers does not seem to support this. One customer told us that, while generally port operators are aware of what is happening in the industry and what port operators are doing, not all ports are the same and they can have very different operating models.
- 7.77 We also note that a customer told us that under the current tender rules, it does not have to notify Chinese suppliers, such as ZPMC, of the launch of a tender, or consider their offer. This is because China is not a government procurement contract country. All tenders above the statutory thresholds are publicised and ZPMC can potentially bid. It is then free to choose whether or not to consider ZPMC as a viable supplier, unlike offers from European suppliers which it is obliged to consider.²³⁹

²³⁸ The Parties' Response to the Issues Statement, paragraph 7.27.

²³⁹ In this regard, we note that, according to the public tender regulatory framework (see the following paragraphs below) in Europe for contract utilities, ports do not have to consider the offer of Chinese suppliers, which can represent a competitive disadvantage (see Utilities Contracts Regulations 2016/274, Regulation 85 (in place until 31 December 2021 in accordance with Public Procurement (Amendment Etc.) (EU Exit) Regulations 2020).

Competitor evidence

- 7.78 We sent questionnaires to 3 RTG competitors of the Parties. Two provided written responses and the third provided its views via a virtual meeting.²⁴⁰
- 7.79 We asked these competitors to rank the suppliers that they considered their closest competitors in the supply of RTG in the UK.²⁴¹ Their responses are summarised in Table 15 below.

Table 15: Competitor views on their closest competitors

Competitor	Suppliers that are considered as closest competitors in the supply of RTG
Competitor A†	Konecranes Cargotec Liebherr ZPMC
Competitor B‡	Cargotec Konecranes ZPMC Sany Mitsui
Competitor C§	[REDACTED] [REDACTED] [REDACTED]

Source: P2 questionnaire responses.

Notes:

† Answers refer to non-UK markets since competitor A has not yet sold any RTG to the UK.

‡ Competitor B commented that there was little difference in the ranking of the top 3 competitors that it identified.

§ [REDACTED]

- 7.80 Each of the three competitors that we heard from identified Cargotec and Konecranes as being among their closest competitors, with both respondents that provided rankings identifying the Parties as their top two competitors.
- 7.81 One respondent ranked ZPMC as its third closest competitor, while another ranked Liebherr as its third closest competitor. One respondent listed Sany and Mitsui as being among its competitors, while other competitors did not mention these players.
- 7.82 In our questionnaire, we also asked competitors if they expected the rankings above to differ in two years.²⁴² Both respondents to this question indicated that, absent the Merger, they did not expect any significant changes in the rankings over the next two years.

²⁴⁰ See Appendix D for further detail on our methodology.

²⁴¹ Question wording: *Please list your main competitors in the supply of RTG to UK sites. Please rank these competitors according to how close a competitor they are to you (where 1 = closest competitor, 2 = next closest competitor, and so on).*

²⁴² Question wording: *To what extent do you expect the main competitors that you face and their strengths and weaknesses to change over the next two years? Please use the table below to list and rank the main competitors that you would expect to face in the supply of RTG to UK sites in two years' time.*

7.83 The competitors that we heard from also provided qualitative views on the strengths and weaknesses of the different players in the market:

- (a) One competitor noted that both Parties' strengths included price, sales and service network, product range, established brand, and having a market presence in manual, automatic and hybrid RTG. It identified Cargotec's standard rope system as a weakness and Konecranes' component count as a weakness. It said that automation is the future for RTGs and expected that Cargotec and Konecranes will be market leaders in automation, particularly in RTG.
- (b) The same competitor listed ZPMC's advantages as aggressive pricing, established brand, market presence in manual and automatic RTG and its large fleet in Felixstowe, and its weakness as perceived quality. It said that ZPMC is the leading supplier of RTGs on a worldwide basis, but not on a European basis.
- (c) The same competitor said that it is currently working on a remote-controlled RTG pilot project and that full automation is a strategic priority for it.
- (d) Another competitor noted that Konecranes and Cargotec offered 'standard products', that Liebherr offered 'European quality' and that ZPMC offered a 'low cost solution'. It said that its own RTG offer is a relatively new product that does not operate on a trolley basis like a typical RTG and 'might take some time to take off'. The competitor confirmed that it has not bid for any UK RTG tenders in the last ten years.

(e) The third competitor [REDACTED].

7.84 [REDACTED]. For example, a customer that purchased RTG in the UK said that it believed that ZPMC did not bid because the order was for a small number of RTG. In addition, as discussed at paragraph 7.186 below, [REDACTED] (which has bought STS cranes and ASC from ZPMC), felt that the large order size was one of the main reasons why ZPMC may have tendered for, [REDACTED], the tender. It also said that 'Chinese suppliers do not typically submit bids for smaller tenders'.

Merger impact

- 7.85 We asked third parties for their views on the impact of the Merger on the supply of RTG to UK customers.²⁴³
- 7.86 Of four responses from customers, two [X] thought that the Merger would have a negative impact on competition in the supply of RTG, while two [X] thought that the impact would be neutral.²⁴⁴ In particular:
- (a) One customer told us that the Merger would see the removal of competing brands of RTG equipment in an already narrow market which would remove competitive tension and see costs rise. The lack of competition would also remove the pressure to continually improve the RTG product.
 - (b) Another customer said that the Merger would lead to ‘reduced competition in an already small market place’ for the supply of RTG.
 - (c) A third customer told us that the outcome of the Merger is uncertain but that the Merger would not be bad for its business, as long as the current products continue to be supported and that any additional RTG it might purchase in the future from the merged company would be compatible with the installed base. It also said that this response presumes that the merged entity will consider the size of order typically placed by regional ports to still be attractive.
 - (d) A fourth customer told us that there is always the potential for there to be an increase in prices as the number of suppliers in a market decreases. However, this customer said it was comfortable that this risk would be mitigated by its competitive tendering processes. It noted that it always gets sufficient responses to tenders to ensure competitive bidding.
- 7.87 Of three responses from competitors, two [X] thought that the Merger would have a negative impact on competition in the supply of RTG, while one [X] thought that the impact would be neutral:
- (a) One competitor told us that, based on the ‘strong position of Cargotec and Konecranes for RTG in Europe’, it expects the Merger to result in ‘less choice for European customers, including UK customers’, which will mean that these customers are ‘negatively affected as a result of the Merger’.

²⁴³ Question wording: *Cargotec and Konecranes are proposing to merge. Do you expect the merger to impact competition for the supply of RTG in relation to UK customers? If ‘yes’, please describe the impact(s) on competition that you would expect as a result of the merger and explain your reasoning.*

²⁴⁴ The CMA asked this question to customers that had purchased RTG in the last ten years.

- (b) Another competitor submitted that there is ‘already a very limited number of competitors’ and that the Merged Entity would have a ‘dominant position on both manual and automatic RTG’.
- (c) The competitor that had a neutral view said that ‘it did not expect much change in its markets’.

7.88 Overall, the evidence from third parties consistently shows that the Parties are close competitors and that ZPMC and Liebherr are their main third-party competitors.

7.89 Third-party evidence, [REDACTED], indicates that ZPMC in Europe (including the UK) is a stronger competitor for larger volume tenders (where it competes strongly on price), and for non-standard/more complex products, than for smaller volume tenders. We note the Parties’ submission that ZPMC recently won a delivery for 5 RTG to the Port of Pireaus in Greece. We consider that this may reflect that this was seen as a strategically important purchase by a GTO.²⁴⁵ In any event, the fact that ZPMC has won some lower volume RTG orders does not exclude that it is overall a less strong competitor for smaller tenders.

7.90 Third-party evidence also indicates that ZPMC may be at a disadvantage in relation to some customers (in particular customers without a strong in-house maintenance team) in light of the service levels it can offer in Europe.

7.91 Aside from ZPMC and Liebherr, third-party evidence indicates that no other suppliers impose a meaningful constraint on the Parties.

Internal documents

7.92 The Parties submitted around 3,000 documents directly to the CMA in relation to the competitive positioning and performance of the Parties and their competitors in the UK or Europe. We also included in our assessment a significant number of further documents on the same topic submitted by the Parties to the European Commission and which the Parties shared with the CMA.

7.93 In our assessment of the internal documents, we placed more weight on recent documents that refer specifically to the competitive situation in Europe

²⁴⁵ The port is owned by COSCO. <https://www.porttechnology.org/news/piraeus-becomes-top-mediterranean-port/>.

and/or the UK and that were created before the Merger was in contemplation (our approach to these documents is explained in more detail in Chapter 6).²⁴⁶

- 7.94 Of the significant number of documents submitted by the Parties, only a small portion provide insight into competitive conditions in Gantry Cranes, for example because many of the documents were general industry reports or reports that simply record sales achieved by each supplier. Of that small subset of relevant documents, many related to port cranes or the impact of automation on the Parties' port business in general, while only a few documents refer specifically to RTG or ARTG.
- 7.95 We also note that the large majority of documents that were relevant to an assessment of competition in the supply of RTG and ASC assess the market either globally or on an Europe-wide basis.
- 7.96 Below, we first review documents that are mainly relevant to closeness of competition between the Parties. We then assess documents that relate to the constraints posed by other suppliers and the relative importance of purchasing criteria. Finally, we discuss documents that provide insight into the Parties' views on how competition will develop in future.

Closeness of competition between the Parties

- 7.97 The documents reviewed indicate that Cargotec and Konecranes perceive each other as strong competitors and take active steps to compete with one another. In particular, the documents summarised below show that each of the Parties closely monitor each other, produce strategy documents which focus specifically on beating the other, and produce assessments of their comparative strengths against each other. Internal documents set out in Chapter 6 show that the Parties have a strong offering overall, including in terms of quality and automation, and consider each other as leaders in the supply of RTG.
- 7.98 We set out below a relevant sample of Cargotec's internal documents that show that it competes closely with Konecranes, as explained above:

(a) [✂].

²⁴⁶ As explained in Chapter 6, in attributing probative value to specific internal documents, we have taken into account the timing, purpose and context in which they were prepared. As a general principle, we consider that internal documents prepared in the ordinary course of business, for example before the Merger was in contemplation are likely to have higher probative value than internal documents prepared once the Merger was in contemplation of the Merger. This is consistent with paragraph 2.29(a) of the Merger Assessment Guidelines). Consequently, while we have considered their relevance to our assessment, we have treated internal documents prepared since the Merger was in contemplation with a degree of caution. In particular, we are more likely to assign weight to evidence contained in such documents where it is corroborated by other evidence.

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

(e) [REDACTED].

7.99 We set out below a relevant sample of Konecranes' documents that show that it competes closely with Cargotec and has a strong offering:

(a) [REDACTED].

(b) [REDACTED].

Figure 14: [REDACTED]

[REDACTED]

Source: [REDACTED].

(c) [REDACTED].

Other competitive constraints

7.100 The Parties' internal documents indicate that their main third-party competitor in this market is ZPMC, followed by Liebherr. The documents refer to Kuenz, Mitsui, and Sany as being present in the market at a global level, but they appear to be less significant competitors. It appears to us that Konecranes, ZPMC and Liebherr are the OEMs mentioned most often in relation to RTG in Europe

7.101 Over a number of years, Cargotec produced competitor rankings which set out the perceived largest competitors to its operations. These documents indicate that, over time, Cargotec has faced its strongest competition from Konecranes and ZPMC. These rankings illustrate that, despite ZPMC's presence in the market over a number of years, it has not 'displaced' Konecranes as one of Cargotec's main competitors. The documents below also indicate that [REDACTED].

7.102 A Konecranes internal document suggests that [REDACTED].

7.103 Below we summarise some of the internal documents produced by Cargotec that relate to constraints it faces, in particular from ZPMC, Liebherr and Mitsui, at a global level:

(a) [REDACTED].

- (b) [REDACTED].
- (c) [REDACTED].
- (d) [REDACTED].²⁴⁷ [REDACTED].
- (e) [REDACTED].
- (f) [REDACTED]. No further commentary is provided in this document about these tenders. We note that recently Konecranes won a tender for RTG with [REDACTED].
- (g) [REDACTED].

7.104 Konecranes' documents suggest that Konecranes considers Cargotec, ZPMC and, to some extent, Liebherr, as its main competitors. These documents also show that Konecranes considers itself to be a strong player in the market that is able to rise to the challenges presented by other players, including ZPMC.

- (a) [REDACTED].
- (b) [REDACTED].
- (c) A [REDACTED]. This comparison is repeated in other strategic documents in 2019 (for example, the [REDACTED]).
- (d) [REDACTED]:
 - (i) [REDACTED];
 - (ii) [REDACTED];
 - (iii) [REDACTED];
 - (iv) [REDACTED].
- [REDACTED]:

Figure 15: [REDACTED]

[REDACTED]

Source: [REDACTED].

²⁴⁷ Cargotec noted these market review documents are only prepared on relevant activities of a selection of main competitors over the prior 3 months and are not reflective of Cargotec's own analytical assessment of the competitors. We note, however, that these reports are prepared for Cargotec's senior team and are indicative of the suppliers that Cargotec consider to be its main competitors. With some differences in ranking, there is consistency on the competitors identified in these reports.

7.105 [REDACTED]

(a) [REDACTED].

(b) The presentation '[REDACTED]'.

(c) [REDACTED].

(d) [REDACTED]:

(i) [REDACTED];

(ii) [REDACTED];

(iii) [REDACTED].

(e) [REDACTED].

Purchasing criteria

7.106 We have also reviewed internal documents about the main relevant purchasing criteria for RTG:

(a) [REDACTED] states that the [REDACTED] there are many factors other than price that influence customers' purchasing decisions. [REDACTED].

(b) [REDACTED].

(c) [REDACTED] – Konecranes lists as the main focus of customers [REDACTED]. Given the strengths of Konecranes in RTG identified in this document (ie Konecranes' [REDACTED]) and the technology roadmap set out in this document, including in relation to [REDACTED].

7.107 These internal documents show that price is only one of several important purchasing criteria, with the Parties continuing to be competitive across a number of criteria.

The development of competition in the foreseeable future

7.108 Both Parties anticipate that automation will be an important part of competition in RTG in the future, with Konecranes describing automation as an 'important megatrend'. There is an expectation, common to both Parties, that automation will create market opportunities, with Konecranes expecting that [REDACTED] and Cargotec anticipating that the [REDACTED].²⁴⁸ The Parties' internal documents indicate

²⁴⁸ Cargotec expects [REDACTED].

that both of the Parties have strong automated offerings in RTG and have well-developed plans to expand their shares in this area. These expansion plans strongly suggest that the Parties perceive that they will remain competitive within the market for the foreseeable future.

7.109 We summarise below some of Cargotec's internal documents that relate to automation of RTG:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

(e) [REDACTED].

7.110 We summarise below some of Konecranes' internal documents that relate to automation of RTG:

(a) In a 2019 presentation entitled 'Konecranes RTG: Automation-ready with active load control', Konecranes asserts that its automation-ready' RTG already has '[REDACTED] than conventional RTG' and has 'built-in readiness for automation, so that a terminal can move towards automation at its own pace. This presentation was followed by another to the Konecranes Board of Directors which [REDACTED].

(b) In the 2020 presentation by Konecranes, 'Port Solutions Sales – Let's grow!!', it notes that '[REDACTED] of all the world's automated container terminals run with Konecranes, indicating significant market penetration by the company. A diagram shows that Konecranes established ARTG in Europe with ports in [REDACTED], and [REDACTED].

(c) In the same [REDACTED] discussed above, Konecranes discusses its '[REDACTED] strategic focus areas' for 2020, one of which is '[REDACTED]. Konecranes lists: '[REDACTED].

7.111 Although both Parties discuss developments and successful deliveries by ZPMC in relation to automated equipment, they also note various issues with its offering. In particular, Cargotec notes that [REDACTED]. It appears from the internal documents that a crucial part of automation is the Terminal Operating System. As set out in Chapter 6, both Parties have established and effective equipment control systems. In fact, in Cargotec's [REDACTED]. We consider that these documents indicate that the Parties are particularly competitive in relation to automation.

Entry and expansion of other alternative suppliers of RTG

- 7.112 In the sections above we considered the competitive constraints currently imposed by existing suppliers of RTG in Europe. As set out in our guidance, our assessment is generally forward-looking and will seek to account for the future evolution of competitive conditions, including constraints from rival entry or expansion.²⁴⁹
- 7.113 The CMA will seek to ensure that the evidence is robust when confronted with claims of entry or expansion being timely, likely and sufficient to prevent an SLC from arising. It is likely to place greater weight on detailed consideration of entry or expansion and previous experience of entry and expansion (including how frequent and recent it has been).²⁵⁰
- 7.114 In this section, we consider the possible constraint on the Merged Entity arising from entry or expansion which would have occurred irrespective of the Merger.²⁵¹ We considered whether the main potential sources of entry identified by the Parties have the necessary capabilities and intention to enter at scale or substantially expand their operations in relation to the supply of RTG in Europe. In our assessment of the likelihood of timely and sufficient entry, we have taken into account the provisional findings on barriers to entry and expansion considered in the Chapter 12.

Parties' views

- 7.115 The Parties told us that 'new competitors have entered or innovated within the gantry crane product area in recent years. For example, Kuenz and Baltkran have entered the RTG segment in recent years.'
- 7.116 In particular, the Parties submitted that:
- (a) 'ZPMC is expected to complete two major orders in 2021, delivering 22 [RTG] to Shanghai Yidong (China), plus 21 [RTG] under a contract with SCPA in Charleston (US).
 - (b) Baltkran: 'Launched its own [RTG] in 2019'.
 - (c) Kuenz: 'In 2018, Kuenz launched an innovative RTG, styled the "Freerider" RTG, which features a unique, aerodynamic single girder and a new hoist system' 'and that [Kuenz] recently announced an order for six [RTG] for Norfolk Southern Railroad in the U.S. as well as another order

²⁴⁹ CMA129, paragraph 4.16.

²⁵⁰ CMA129, paragraph 8.30.

²⁵¹ CMA129, paragraph 4.16.

to supply its “Freerider” [automated RTG] solution for the new East West Gate intermodal terminal in Hungary’.

- (d) Mitsui: ‘[H]as emerged as a major force, and not just in its domestic Japanese market. In particular, 97 out of 151 of Mitsui’s deliveries in 2020 were spread around the globe including to repeat customers in Malaysia, the US, Turkey and Ecuador’. The Parties also noted that ‘Mitsui is also looking at significant growth, with an order of 26 [RTG] for Japan, due to be delivered in 2022.’

Assessment of the evidence on specific entry or expansion

7.117 We investigated whether any third parties have the necessary capabilities and specific intention to enter or to substantially expand their operations in relation to RTG, in Europe (including the UK), in the near future:

(a) [REDACTED].

(b) [REDACTED] told us that it has sold [REDACTED]. It explained that an entrant would not receive a ‘feasible return on investment as it’s a very competitive market with others using eastern manufacturing to reduce cost basis. Given current market and potential quantities in UK/EU it seems hard to justify such investment’.

(c) [REDACTED] told us that it is aiming to [REDACTED] did not have detailed expansion plans.

7.118 We note that ZPMC has had some successes in the past years in the supply of RTG, which is reflected in the analysis above.

7.119 Our current view is that ZPMC, Liebherr and (to a very limited extent) Sany are already active in the relevant market, have an ambition to expand, and intend to respond to invitations to tender, but we have not seen evidence of any specific plans to expand, nor anything to indicate that there will be a material change in the level of competitive constraint which they pose in the near future.

7.120 We did not find evidence that any of the existing alternative suppliers identified above, or any other third parties, have the necessary capabilities and intention to enter at scale or to substantially expand their RTG operations in Europe, including the UK, in the near future. No specific and timely entry or expansion plans appear to exist that would be sufficient in scope and magnitude to sufficiently constraint the merged entity to offset the potential loss of competition from the Merger.

7.121 We consider that future entry is made difficult by some of the barriers to entry in the relevant markets, including the importance of having established customer relationships and a broad interoperable product portfolio. No entry on significant scale has occurred recently in Europe in RTG, after ZPMC's entry more than ten years ago. Even if the Parties' submissions on barriers to entry and expansion being low were correct (which we do not consider to be the case), the share of supply data does not show evidence of recent entry or expansion at scale.

7.122 We consider entry and expansion, as result of the Merger, in Chapter 12.

Our provisional conclusion on the effect of the Merger on the supply of RTG

7.123 The Parties compete closely in the supply of RTG, with both having a strong offering (including on automation) and a proven track-record (see Chapter 6), and face only two material competitors, ZPMC and Liebherr. Therefore, a significant competitor would be removed by the Merger and only two material competitors (other than the Merged Entity) will remain in the market after the Merger.²⁵² Further, the positioning of the remaining competitors means that some customers may have even fewer than three competitive offers after the Merger: while ZPMC is a strong competitor for larger volume RTG tenders (where it competes strongly on price), it is less competitive for smaller volume tenders, while Liebherr is seen as having a relatively high end, expensive offer. Our provisional conclusion is therefore that the Merger is likely to result in a SLC in the supply of RTG.

7.124 The following evidence in particular, demonstrates that the Parties compete closely in the supply of RTG:

- (a) The Parties have very high shares of supply on a European basis, with a significant increment - the Parties are by far the largest two suppliers in Europe with a combined share of supply in excess of 70% over 2011 to 2020. Although Konecranes' share of supply in the UK is lower, we do not interpret this as evidence of significant differences in competitive conditions between Europe and the UK. There are very few sales in the UK, so shares of supply can be heavily influenced by the inclusion or exclusion of particular orders. Konecranes' win of a large RTG order in

²⁵² We note that, although each merger is considered on its merits, one of the scenarios described in the CMA's guidance, in which the CMA may be more likely to find an SLC, refers to a merger involving 'the market leader and [where] the number of significant competitors is reduced from four to three' (CMA129, paragraph 2.18). Based on the evidence that we have reviewed, we consider that the Merger involves the market leader in RTG (Konecranes); that there are fewer than four significant competitors in the market pre-Merger; and that a significant competitor would be removed by the Merger

the UK in 2021 confirms that it is competitive in the UK, as well as in Europe more widely.

- (b) Bidding analysis shows that, in Europe, the Parties face each other in the majority of the opportunities in which they participate, and frequently lose to each other.
- (c) Evidence from third parties consistently shows that the Parties are close competitors, and most third parties raised concerns about the loss of competition that would result from the Merger.
- (d) Evidence from internal documents indicates that the Parties' perceive each other as strong competitors. Documents also indicate that both Cargotec and Konecranes have a strong RTG offer, including in terms of quality and automation. The Parties closely monitor each other and produce strategy documents which focus specifically on competing with each other.

7.125 We consider that the Parties would face few significant competitive constraints following the Merger:

- (a) ZPMC provides the strongest of the remaining constraints on the Parties. It has the next largest share of supply in Europe after the Parties ([10-20]% by revenue, [10-20]% by volume over 2011-20). Its share of supply is larger in the UK, although this results mainly from the supply of RTG to a single customer (HPH). Bidding analysis and third-party evidence indicate that ZPMC is a stronger competitor for larger volume tenders (where it competes strongly on price), than for smaller volume tenders. Third-party evidence also indicates that ZPMC may be at a disadvantage in relation to some customers (in particular customers without a strong in-house maintenance team) in light of the service levels it can offer in Europe. Internal documents are consistent with ZPMC being a material competitor that is improving but remains behind on certain parameters.
- (b) Liebherr imposes some competitive constraint on the Parties, albeit less than that imposed by ZPMC. Liebherr has the joint fourth highest share of supply in Europe (around [0-5]% by both volume and value over 2011-20). Its share in the UK is higher (around [20-30]% over 2011-20) although this derives from sales to two customers only. The Parties lost a small number of tenders to Liebherr in Europe and these all involved small volumes and values. Third-party evidence suggests that Liebherr's offer is generally seen as being high quality but relatively expensive.
- (c) No other suppliers impose a material constraint on the Parties. Mitsui has a relatively small share in Europe and bidding data shows only one tender

win in Europe against a Party. Further, Mitsui has not made sales in the UK and we have seen no evidence that it has bid for UK tenders.²⁵³ Kuenz was identified as winning a handful of tenders in mainland Europe, but these were small and we have a concern about the accuracy of this data. It has not bid in UK RTG tenders in the last ten years. Sany was [REDACTED] and was mentioned in some of the Parties' internal documents (mainly at global level) and by some third parties, but, overall, the evidence does not indicate that Sany imposes a material constraint in relation to UK customers.

7.126 The evidence that we reviewed in relation to entry and expansion does not suggest that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of automatic stacking cranes (ASC)

7.127 As mentioned above in paragraphs 7.1 and 7.2, in order to assess the likelihood of the Merger resulting in unilateral effects in the supply of ASC, we have considered closeness of competition between the Parties and the (present and future) competitive constraints provided by competing suppliers. We then considered whether there are any possible constraints on the Merged Entity arising from entry or expansion that would have occurred irrespective of the Merger.

7.128 We have gathered, and taken account of, a range of evidence in our assessment, in particular the type of evidence listed in paragraph 7.3.

Closeness of competition between the Parties and competitive constraints from alternative suppliers

Parties' views

7.129 The Parties submitted that the Merger does not raise competition concerns in the supply of ASC, mainly because the Merged Entity will continue to face several competitors, including ZPMC and Kuenz.²⁵⁴ The Parties submitted that, in relation to Europe, the bidding data clearly identifies Kuenz to be the most successful competitor in ASC. The Parties stated that four out of the five

²⁵³ This based on the Parties' bidding data for 2016-21, which records 'bidders faced' in relation to some tenders but not others.

²⁵⁴ The Parties' Response to Issues Statement, p 21.

tenders that Kuenz has won were in Europe and that it has delivered a number of ASC.²⁵⁵

7.130 In relation to the UK, the Parties noted the following.

- (a) Whilst Cargotec has had some historical wins in ASC tenders, Konecranes has [REDACTED] within the UK.²⁵⁶
- (b) ZPMC has participated in all tenders for ASC, it won the tender for Liverpool2 (Peel Ports) and was also recently directly awarded a contract for the supply of two ASC by Salford Rail Port.
- (c) Kuenz is a significant supplier in Europe and participated in the 2011 tender for London Gateway (DP World) alongside Cargotec and Konecranes and the Parties expect it to be a bidder in the ongoing tender at London Gateway.
- (d) There are other competitors that are well-placed to supply UK customers, including Sany, HPMC (owned by CSSC) and Liebherr, all of which have participated in ASC tenders or have delivered ASC worldwide.²⁵⁷

7.131 The Parties also submitted that the supply of ASC occurs through highly competitive tendering, which is expected to result in competitive outcomes even with only a few bidders.

7.132 In response to the working paper on horizontal unilateral effects in the supply of RTG and ASC, the Parties made a number of submissions in relation to ASC.

- (a) The Parties submitted that shares of supply alone do not denote closeness of competition. They further submitted that the CMA's reliance on historical ten-year shares of supply fails to take into account underlying market trends and dynamic market conditions resulting from strong competition from Chinese competitors. The Parties argued that the bidding data for ASC cannot be used as the basis to conclude that the Parties are close competitors, because the CMA's data shows that in Europe, the Parties competed in [REDACTED] between 2016 and 2020.
- (b) The Parties submitted that the small pool of four UK tender case studies cannot be representative of the European market and, in any event, that the case studies do not support the proposition that the Parties are close

²⁵⁵ The Parties' Response to Issues Statement, paragraph 6.30.

²⁵⁶ The Parties' submission applies specifically to the UK. Konecranes has won tenders in Europe.

²⁵⁷ The Parties' Response to Issues Statement, paragraphs 6.30 to 6.34.

competitors. In addition, the Parties submitted that any conclusion on incumbency advantage is not supported by the evidence resulting from these case studies (or other evidence) and further, that this cannot be applied to Konecranes [✂].

- (c) The Parties submitted that the third-party evidence cited by the CMA shows that ZPMC is viewed by third parties as a strong competitor and is able to effectively compete for orders of any size, as demonstrated by the fact that it has supplied ASC to many small customers and has similar delivery sizes to the Parties.²⁵⁸
- (d) The Parties submitted that market feedback does not support the contention that there are no specific plans by suppliers to enter ASC. The Parties also submitted that they expect ASC demand in Europe will remain healthy and that such demand will be met by many well-established competitors, such as ZPMC and Kuenz, and will help drive expansion by other suppliers such as Sany and Mitsui.

7.133 We take these comments into account in our overall assessment below. Some other submissions made by the Parties in relation to ASC are addressed in Chapter 6.

Shares of supply

7.134 Chapter 6 provides an overview of our approach to shares of supply and the weight that we place on this evidence. We have constructed our estimates of the shares of supply using data provided by the manufacturers (or their distributors) themselves and, where this is not available, the Parties' estimates of their competitors' sales.²⁵⁹

7.135 Table 16 shows our estimates of the shares of supply based on delivery volumes for ASC over the period 2011–20 for three different geographic areas: UK, Europe, and worldwide (excluding China).

- (a) Within Europe, the Parties were the two largest suppliers over the last ten years, such that the Merged Entity would have a combined share of supply of [60-70]%. This is almost equally split between Cargotec and Konecranes. Kuenz ([20-30]%) and ZPMC ([10-20]%) were the only other suppliers to make deliveries of ASC in Europe during this time.

²⁵⁸ Small customers are defined by the Parties as customers with an annual throughput of less than 500 TEUs.

²⁵⁹ See Appendix B for further detail on our methodology.

- (b) Within the UK, there were only two suppliers that made deliveries of ASC during the past ten years: Cargotec and ZPMC. Cargotec accounted for [80-90]% of the total number of deliveries in the UK.
- (c) On a worldwide basis (excluding China), the Merged Entity would have a combined share of supply of [40-50]%. ZPMC would be the second largest supplier with a share of [30-40]% (much larger than its shares in the UK and Europe) and Kuenz had a share of supply of [10-20]%. Two smaller Chinese competitors, CSSC and HDHM, had a combined share of supply of [0-5]%.

Table 16: Shares of supply of ASC based on number of deliveries, 2011–20

Volume in Units

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[x]	[80-90]%	[x]	[30-40]%	[x]	[10-20]%
Konecranes	-	-	[x]	[30-40]%	[x]	[30-40]%
Combined	[x]	[80-90]%	[x]	[60-70]%	[x]	[40-50] %
ZPMC	[x]	[10-20]%	[x]	[10-20]%	[x]	[30-40]%
Kuenz	-	-	[x]	[20-30]%	[x]	[10-20]%
CSSC	-	-	-	-	[x]	[0-5]%
HDHM	-	-	-	-	[x]	[0-5]%
Total	[x]	100%	[x]	100%	[x]	100%

Source: Parties and competitors' data.

7.136 Table 17 shows the same shares of supply based on revenue rather than delivery volumes. The shares are broadly similar to those in Table 16 - the Merged Entity would have [60-70]% share of supply in Europe and [40-50]% worldwide (excl. China). In the UK, Cargotec had a [60-70]% share of supply based on revenue, compared with [80-90]% based on delivery volumes.

Table 17: Shares of supply of ASC based on revenue, 2011–20

Revenue €m

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Revenue	Share	Revenue	Share	Revenue	Share
Cargotec	[x]	[60-70]%	[x]	[20-30]%	[x]	[10-20]%
Konecranes	-	-	[x]	[30-40]%	[x]	[30-40]%
Combined	[x]	[60-70]%	[x]	[60-70]%	[x]	[40-50]%
ZPMC	[x]	[30-40]%	[x]	[10-20]%	[x]	[40-50]%
Kuenz	-	-	[x]	[20-30]%	[x]	[5-10]%
CSSC	-	-	-	-	[x]	0-5%
HDHM	-	-	-	-	[x]	[0-5]%
Total	[x]	100%	[x]	100%	[x]	100%

Source: Parties and competitors' data.

7.137 Overall, the shares of supply indicate that the Parties are close competitors in the supply of ASC in Europe, given that they were the two largest suppliers over the period 2011 to 2020. Although Konecranes did not deliver any ASC

in the UK during the relevant period, this does not mean that it is not a competitive constraint on Cargotec in the UK, as shown by the bidding analysis below.

- 7.138 The shares of supply also indicate that there would be limited remaining competitive constraints. There are only two other suppliers in Europe, Kuenz and ZPMC, and only the latter has made sales in the UK. The higher share of ZPMC in the UK (based on revenue) and lower share of Kuenz in Europe seems to be largely a reflection of the volatility of shares, rather than as a result of any significant difference in competitive conditions.
- 7.139 As noted above, the Parties submitted that the long time period used by the CMA conceals dynamic market trends. Although we consider it appropriate to focus on shares calculated over a ten-year period, in order to reduce the volatility that derives from infrequent and lumpy purchasing in ASC (see Chapter 6), we have also calculated volume-based shares for ASC in five-year periods (2011-15 and 2016-20) in order to consider any trends.
- 7.140 Table 18 below shows that the Parties' combined share was significantly lower in the most recent period ([40 – 50]% in 2016-20, down from [70 – 80]% in 2011-15) while ZPMC's share was significantly higher ([20 – 30]% in 2016-20, up from [0 – 5]% in 2011-15). However, even for the most recent five-year period, shares of supply indicate that the market is concentrated pre-Merger. While the Parties' shares are lower in Europe for the most recent five-year period, we note that Cargotec still has a significant share ([20 – 30]%) over 2016 to 2020, while Konecranes has a lower, but still material, share ([10 – 20]%) in the same period.

Table 18: Shares of supply of ASC based on number of deliveries, 2011–15 & 2016–20

Share

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	2011–15	2016–20	2011–15	2016–20	2011–15	2016–20
Cargotec	[90-100]%	[60-70]%	[30-40]%	[20-30]%	[20-30]%	[5-10] %
Konecranes	-	-	[40-50]%	[10-20]%	[40-50]%	[20-30] %
Combined	[90-100]%	[60-70]%	[70-80]%	[40-50]%	[60-70]%	[30-40]%
ZPMC	[0-5]%	[30-40]%	[0-5]%	[20-30]%	[20-30]%	[40-50]%
Kuenz	-	-	[20-30]%	[20-30]%	[10-20]%	[10-20]%
CSSC	-	-	-	-	[0-5]%	[0-5]%
HDHM	-	-	-	-	[0-5]%	[0-5]%
Total	100%	100%	100%	100%	100%	100%

Source: Parties and competitors' sales data.

Quantitative bidding analysis

7.141 Chapter 6 provides an overview of our approach to the bidding analysis and the weight that we place on this evidence.²⁶⁰

7.142 For ASC, only very limited analysis of the Parties' data was possible, given that the number of European bidding opportunities that the Parties have participated in is very small due to infrequent sales. We therefore present some qualitative analysis on the Parties' bidding participation and losses.

7.143 Konecranes participated in [REDACTED] ASC opportunities in Europe between 2016 and 2020 and won [REDACTED]. Cargotec bid in [REDACTED] of these [REDACTED]. The opportunity in which both Parties participated was much larger (as shown in Table 19 below, €[REDACTED] million) than the opportunity in which Konecranes did not bid (€[REDACTED] million). As [REDACTED], we are unable to calculate loss ratios for Konecranes.²⁶¹

7.144 Cargotec participated in [REDACTED] ASC opportunities in Europe between 2016 and May 2021, of which it won [REDACTED] and lost [REDACTED]. Table 19 below shows details of the [REDACTED] ASC opportunities that Cargotec lost. This shows that Konecranes and Kuenz are the only competitors to which Cargotec lost. While Cargotec lost a greater number of opportunities to Kuenz ([REDACTED]), the volumes involved were small. The [REDACTED] lost to Konecranes [REDACTED]; this accounts for the majority of Cargotec's total losses in terms of volume and value.²⁶²

²⁶⁰ As discussed further in Appendix D, We note that these case studies cover a significant proportion of UK sales of ASC since 2011.

²⁶¹ Whereas our analysis of the Parties' bidding data covered the period since 2016, in the following section we also consider several case studies for ASC tenders in the UK that pre-date this period. Two of these case studies relate to [REDACTED].

²⁶² [REDACTED].

Table 19: Cargotec's lost ASC opportunities in Europe (EEA + UK), 2016 to May 2021

Company	Number of opportunities	Number of units	Value (revenue in €m)
Konecranes	[REDACTED]	[REDACTED]	[REDACTED]
Kuenz	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis of Parties' data.

7.145 Overall, the bidding analysis above shows that the Parties have both been active bidders to supply ASC and have competed against each other in recent bidding opportunities. Cargotec lost a greater number of opportunities to Kuenz than to Konecranes between 2016 and May 2021, [REDACTED]. [REDACTED] (although, as below, the Parties did lose an opportunity to ZPMC in 2013).

Qualitative tender case studies

7.146 In addition to the quantitative analysis, we have considered case studies in relation to four ASC tenders:

- (a) DP World London Gateway (2011-2012), won by Cargotec;
- (b) Peel Ports Mersey Docks (2013),²⁶³ won by ZPMC;
- (c) DP World London Gateway (2014), won by Cargotec; and
- (d) DP World London Gateway (started in 2019 and is yet to complete).

7.147 As discussed in Chapter 6, while we interpret these case studies qualitatively, we note that they cover a significant proportion of UK ASC sales since 2011.²⁶⁴

7.148 [REDACTED].²⁶⁵

7.149 As with the RTG case studies, the ASC case studies are based on information and views provided by customers (DP World and Peel Ports), as well as internal documents produced by the Parties. In particular, customers were asked for the ranking of each bidder that participated and about the importance of various criteria in their ASC purchasing decisions.

DP World London Gateway tender for ASC (2011)

7.150 Our first ASC case study is DP World's 2011 tender for 40 ASC.

²⁶³ This tender was for Automatic Cantilevered Rail Mounted Gantry cranes, a type of ASC.

²⁶⁴ Chapter 6, paragraph 6.27.

²⁶⁵ Whereas our analysis of the Parties' bidding data covered the period since 2016, three of these case studies pre-date that period. Hence, whereas [REDACTED].

7.151 [REDACTED].

7.152 DP World submitted that, in this tender, Cargotec was the winning bidder [REDACTED]. We do not have views from DP World explaining why Cargotec was chosen over its competitors, or on what the relative strengths and weaknesses of the different bidders for this tender were. [REDACTED].

7.153 [REDACTED].

7.154 We have not identified any other relevant documents about this tender.

Peel Ports Mersey Dock tender for ASC (2013)

7.155 We also considered a tender run by Peel Ports in 2013 for ten ASC and five STS.²⁶⁶

7.156 The following weightings were attributed to each section of the Request for Quotation: Quality [REDACTED], Environmental [REDACTED], Price [REDACTED], Life Cycle Cost [REDACTED], Funding [REDACTED]. Peel Ports told us that, as a collective of Statutory Harbour Authorities, it must follow the Utilities Contracts Regulations and award on a most economically advantageous tender basis, which is in effect a balance of time, cost, quality and safety. It said that all of the above criteria are important to Peel Ports to ensure long term value for money.

7.157 The winner of this tender was ZPMC [REDACTED].

7.158 Peel Ports explained that the [REDACTED].

7.159 Peel Ports explained that as part of the tender, ZPMC offered to set up a base in Liverpool from which it could provide prompt responses to maintenance requests and storage of spare parts. Peel Ports stated that:

- (a) It would be 'concerned about purchasing equipment' from a supplier without a presence, or the intention to create a presence, in the UK or Europe, unless an alternative solution was proposed which could ensure the prompt delivery of the people and parts necessary to ensure the ongoing operation of assets.
- (b) A wide variety of maintenance tasks are supported through Peel Ports' in-house engineers. However, where specialised knowledge is required, or when warranties are in place, third party (including ZPMC) support is

²⁶⁶ Peel Ports said that these were tendered for separately i.e. suppliers could bid for one or both lots.

requested. Currently, ZPMC addresses ‘minor issues’ in a ‘few days’ and often ‘brings in labour/parts from other sites’.

7.160 Peel Ports stated that the reason that Konecranes was unsuccessful was that [REDACTED].

7.161 An internal document from [REDACTED],²⁶⁷ [REDACTED].

7.162 Peel Ports said that [REDACTED] ZPMC’s [REDACTED] specialised knowledge and parts are located in China. Peel Ports said it understood that ZPMC’s intention may be to use its base in Liverpool to serve other UK customers, but did not know if ZPMC is currently doing so.

7.163 We consider that, while Peel Ports ran separate tenders for its ASC and STS requirements, ZPMC’s strength in STS may also have contributed to its interest in the ASC tender and its ability to compete for it effectively.²⁶⁸

DP World London Gateway tender for ASC (2014)

7.164 We also considered a tender run by DP World in 2014 for 20 ASC. Cargotec (the incumbent) won the tender. [REDACTED].

7.165 [REDACTED].

7.166 DP World explained that, if it had awarded a contract to [REDACTED], it would have resulted in it running a mixed fleet, which would have been very complicated. For example, each of the different elements of the mixed fleet would need to interface with each other, which is more difficult for vehicles from different companies. DP World also noted that [REDACTED] ASC offer had slightly worse service levels than the offer made by Kalmar (Cargotec).

7.167 DP World told us that Konecranes [REDACTED]. DP World believes that [REDACTED].

7.168 Konecranes confirmed that [REDACTED]. As [REDACTED].

7.169 [REDACTED].

DP World London Gateway tender for ASC (2019)

7.170 Finally, we considered a tender for 20 ASC which was started by DP World in 2019. The tender related to additional units to be provided to London

²⁶⁷ The tender was for cantilevered RMG (CRMG), an automatic RMG that is a type of ASC.

²⁶⁸ See Chapter 6, paragraph 6.70. We also note that the partnership between ZPMC and APM [REDACTED].

Gateway, which are linked to its expansion. DP World placed the tender on hold in 2020 but plans to resume it after the Coronavirus (COVID-19) crisis.

7.171 [REDACTED].

7.172 [REDACTED].

7.173 [REDACTED].

7.174 [REDACTED].

7.175 [REDACTED].

Provisional conclusion from tender case studies

7.176 DP World has run three ASC tenders in the UK since 2011. The case studies show that the Parties are two of only three suppliers (along with ZPMC) who have previously bid for DP World tenders for ASC. Although Konecranes did not win (or place second) in these tenders, its presence is seen as a substantial competitive threat by Cargotec. The DP World case studies also show the importance of interoperability with existing equipment of the incumbent supplier, which contributes to repeat orders.

7.177 The Peel Ports tender was won by ZPMC, in opposition to bids from Liebherr and Konecranes. The customer mainly attributed [REDACTED]. [REDACTED].²⁶⁹

Third-party evidence

Customer evidence

7.178 Relatively few customers have recently made ASC purchases in the UK. We sent questionnaires to two ASC customers in the UK [REDACTED] and received responses from each of them. One of these customers purchased ASC from Cargotec and the other purchased ASC from ZPMC.²⁷⁰

7.179 We asked these customers to rate the importance of various criteria in their purchasing decisions for ASC (scores out of 5, where 5 is the most important).²⁷¹ Their responses to this question are summarised in Table 20 below. These indicate that criteria related to cost and reliability were seen as important by both customers. Having an installed base of equipment from a

²⁶⁹ [REDACTED].

²⁷⁰ See Appendix D for further detail on our methodology.

²⁷¹ Question wording: *When thinking about purchasing ASC, please score the following factors according to how important they are to your choice of supplier. Please assign a score from 1-5 where 5 = very important and 1 = not important at all (more than one factor can have the same score).* The factors are listed in Table 20.

particular supplier was scored slightly lower. The customers differed in their views on the importance of the strength of a supplier’s local aftersales presence (one scoring it 5, the other scoring it 3). The ASC customer that considered aftersales to be more important [redacted] said that even though it does most of the maintenance on ASC in-house, it still relies on support from the OEM. It said that, the higher the level of automation, the more likely it is that it will need support from the OEM when there is an issue with the interfaces between the equipment and the software or between different pieces of software.

Table 20: Customer ratings of the importance of ASC purchasing criteria

<i>Purchasing criteria</i>	<i>Customer A</i>	<i>Customer B</i>
Differences in equipment reliability	4	5
Differences in automation/assistive features	5	3
Differences in purchase price	4	5
Differences in running costs	5	5
Differences in strength of local aftersales presence	5	3
Differences in efficiency/ environmental performance	4	5
Degree of interoperability with other equipment	5	4
Already having installed base of equipment from a particular supplier	4	3

Source: P2 questionnaire responses.

7.180 We asked both customers to list the suppliers that they expected to participate in a hypothetical purchase of ASC within the next year.²⁷² Both customers responded that they expected to consider ZPMC and Konecranes. One customer would also consider Liebherr while the other would also consider Cargotec. We note that the [redacted] (see paragraph 7.160).

7.181 We have incorporated the views of these customers on the strengths of different suppliers in the case studies above.

Competitor evidence

7.182 We sent questionnaires to 4 ASC competitors of the Parties. Two provided written responses [redacted] and a third provided its views in a virtual meeting [redacted]. One competitor [redacted] did not respond.²⁷³

²⁷² Question wording: *Suppose that you were planning to purchase ASC in the UK within the next year. What suppliers would you expect to consider? Please list the full set of suppliers that you would expect to consider (including [Party] if applicable) and provide your expected ranking of the suppliers (where 1 = the winner, 2 = the best alternative and so on).*

²⁷³ See Appendix D for further detail on our methodology.

7.183 We asked the three competitors that responded to rank the suppliers that they considered their closest competitors in the supply of ASC in the UK.²⁷⁴ Their responses are summarised in Table 21 below.

Table 21: Competitor views on their closest competitors

<i>Competitor</i>	<i>Suppliers that are considered as closest competitors in the supply of ASC</i>
Competitor A†	1. Konecranes 2. ZPMC 3. Cargotec
Competitor B‡	1. Cargotec 2. Konecranes 3. ZPMC 4. Kuenz
Competitor C§	1. [REDACTED] 2. [REDACTED] 3. [REDACTED]

Source: P2 questionnaire responses.

Notes:

† Answers refer to non-UK markets since competitor A has not yet sold any ASC to the UK.

‡ Competitor B has not sold any ASC to date but has made attempts to sell ASC; in particular, it was an active bidder in the Peel Ports 2013 tender.

§ Competitor C did not provide a ranking of the suppliers that it considered its closest competitors.

7.184 None of the respondents mentioned Liebherr, or any competitors other than those that have made sales in Europe, as being one of their close competitors in ASC.

7.185 In our questionnaire, we also asked competitors if they expected the rankings above to differ in two years.²⁷⁵ Both respondents indicated that, absent the Merger, they did not expect any significant changes in the rankings above over the next two years.

7.186 The competitors that we heard from also provided qualitative views on the strengths and weaknesses of the different players in the market:

- (a) One competitor listed Cargotec's strengths as being able to provide UK references, being able to offer a package of Equipment Control Software and horizontal transport equipment, having an established brand, and its after sales service. It said that Konecranes had the same strengths, except that its references were said to be for the EEA rather than UK. This competitor noted that the supply of ASC is not a major focus for it and it tends to be excluded from tenders because it does not have references ([REDACTED]).

²⁷⁴ Question wording: *Please list your main competitors in the supply of ASC to UK sites. Please rank these competitors according to how close a competitor they are to you (where 1 = closest competitor, 2 = next closest competitor, and so on).*

²⁷⁵ Question wording: *To what extent do you expect the main competitors that you face and their strengths and weaknesses to change over the next two years? Please use the table below to list and rank the main competitors that you would expect to face in the supply of ASC to UK sites in two years' time.*

(b) Another competitor noted that Konecranes' strength in the supply of ASC was its 'solid product', Cargotec's strength was its 'well-known brand' and that ZPMC's strength was its 'low cost solution'. This competitor also noted that it competes on the basis of a combination of Western technology and components and a competitive price, and [REDACTED] on the basis of price alone. In addition, this competitor said that 'it is unusual that any supplier other than the winning bidder gets a follow-up order' and that it plans to participate in future ASC tenders where it feels its offer 'can bring value added to a project'.

(c) The third competitor [REDACTED] submitted that [REDACTED]

7.187 [REDACTED] assessment of how its competitiveness varies according to order volume is supported by other third-party views. In particular, [REDACTED] (which has [REDACTED]), noted that the large order size was one of the main reasons for ZPMC's success [REDACTED]. It also said that 'Chinese suppliers do not typically submit bids for smaller tenders'.

Merger impact

7.188 We asked third parties²⁷⁶ for their views on the impact of the Merger on the supply of ASC.²⁷⁷

7.189 Of two responses from customers, one thought that the Merger would have a negative impact on competition in the supply of ASC, while one thought that the impact would be neutral.

(a) The customer that submitted that the Merger would have a negative impact on competition in the supply of ASC told us that: i) the Merger would result in one competitor less, not only at the equipment level but also for Equipment Control Software (ECS) ii) it would expect prices for equipment, spare parts and services to rise; and iii) it would expect Terms and Conditions and Warranty clauses to get stricter, a trend which it is already observing. The same customer also noted that potential positive impacts of the Merger are an expanded service network, and pooling of Konecranes and Cargotec's automation competence.

²⁷⁶ The CMA asked this question to customers that had purchased ASC in the last ten years.

²⁷⁷ Question wording for customers: *Cargotec and Konecranes are proposing to merge. What positive impacts (if any) would you expect the merger to have in relation to ASC? What negative impacts (if any) would you expect the merger to have in relation to ASC?*

Question wording for competitors: *Cargotec and Konecranes are proposing to merge. Do you expect the merger to impact competition for the supply of ASC in relation to UK customers? If 'yes', please describe the impact(s) on competition that you would expect as a result of the merger and explain your reasoning.*

(b) The other customer submitted that the Merger would lead to less competition but could bring potential innovation through combining expertise and experience to bring new products to market.

7.190 Of three responses from competitors, two [redacted] thought that the Merger would have a negative impact on competition in the supply of ASC, while one [redacted] thought that the impact would be neutral.

(a) One competitor expected that, based on the strong position of Cargotec and Konecranes for ASC in Europe, the Merger would result in less choice for European customers (including UK customers) and that these ASC customers would be negatively affected as a result of the Merger.

(b) Another competitor stated that the Merger would reduce the number of competitors in the market and that the merged entity would have a dominant position in terms of market sales and existing fleets of ASC cranes. It noted that the merged entity would have the strongest package in terms of offering a full range of port equipment, ECS and software, and that it could also offer a large number of UK/EEA references.

(c) The competitor that had a neutral view said that 'it did not expect much change in its markets'.

7.191 Overall, we provisionally conclude that the evidence from third parties shows that the Parties are close competitors and that ZPMC is their main competitor.

7.192 Third party evidence, [redacted], indicates that ZPMC in Europe (including the UK) is a stronger competitor for larger volume tenders (where it competes strongly on price), and for non-standard/more complex products, than for smaller volume tenders.

7.193 We note the Parties' submission that, based on the Parties' estimates, for the period 2010-2020, ZPMC has supplied almost three times as many ASCs to small customers as both Parties combined, and that averaging the delivery data of ZPMC, Konecranes and Cargotec suggests that delivery sizes are similar. We note that the Parties' measure of a small customer (which is based on annual throughput) does not directly relate to tender size in terms of number of units. We also recognise that the limited number of recent ASC tenders in the UK have been for a relatively high number of ASC units (i.e. 10 or more units) and that the Parties (and not only ZPMC) have won large ASC orders in Europe. However this does not exclude that ZPMC is overall a less strong competitor for smaller tenders.

- 7.194 Third-party evidence also indicates that ZPMC may be at a disadvantage in relation to some customers (in particular customers without a strong in-house maintenance team) in light of the service levels it can offer in Europe.
- 7.195 Third-party evidence suggests that Kuenz may impose a limited constraint on the Parties; it was identified as a competitor by some suppliers, but the two UK customers that we heard from did not identify it as an option that they would consider. Liebherr was mentioned as an option by one customer, but the third-party evidence that we reviewed does not suggest that it imposes a material constraint.

Internal documents

- 7.196 As explained in paragraph 7.92, of the significant number of documents submitted by the Parties, only a small portion provide insight into competitive conditions of Gantry Cranes, for example because many of the documents were general industry reports or reports that simply record sales achieved by each supplier. Of the documents that are relevant to the assessment of competition, many relate to port cranes or the impact of automation of the Parties' port business in general. Only a few documents refer specifically to ASC. The documents set out below in relation to ASC should be read together with and are consistent with the internal documents described in Chapter 6 and in paragraphs 7.96 to 7.110 about Gantry Cranes in general.
- 7.197 In our assessment of the internal documents, we placed more weight on recent documents that refer specifically to the competitive situation in Europe and/or the UK and that were generated before the Merger was in contemplation.²⁷⁸
- 7.198 We start with documents that are mainly relevant to closeness of competition between the Parties. We then assess documents that relate to the constraints posed by other suppliers and the relative importance of purchasing criteria. Finally, we discuss documents that provide insight into the Parties' views on how competition will develop in future.

²⁷⁸ As explained in Chapter 6, in attributing probative value to specific internal documents, we have taken into account the timing, purpose and context in which they were prepared. As a general principle, we consider that internal documents prepared in the ordinary course of business, for example before the Merger was in contemplation are likely to have higher probative value than internal documents prepared once the Merger was in contemplation of the Merger. This is consistent with paragraph 2.29(a) of the CMA129). Consequently, while we have considered their relevance to our assessment, we have treated internal documents prepared since the Merger was in contemplation with a degree of caution. In particular, we are more likely to assign weight to evidence contained in such documents where it is corroborated by other evidence.

Closeness of competition and strength of the Parties' offer

- 7.199 The documents described above in Chapter 6 and at paragraphs 7.98 to 7.100, indicating how the Parties compete closely in relation to Gantry Cranes and port equipment in general, are also relevant to understand how the Parties compete closely in ASC specifically.
- 7.200 More generally, internal documents of both Parties show that the Parties consider themselves to be leaders in the ASC market (with ZPMC and Kuenz as their only main competitors as discussed below), with broadly similar strengths.
- (a) The [REDACTED] sets out sales argumentations against Konecranes, illustrating the closeness of competition between the Parties. [REDACTED]. In particular, [REDACTED].
 - (b) [REDACTED] 'Automatic Stacking Crane Application' - produced in 2021, when the Merger was already in contemplation, describes the qualities of Cargotec's ASC offering, including that its ASC are [REDACTED].
 - (c) A Cargotec internal document of 2018 states that [REDACTED].
 - (d) [REDACTED]. A separate customer sets out that 'ZPMC price is very competitive, their after-sale service can be very good as well. Their willingness to work customers is very high compared to Kalmar and KCI. ZMPC's ability to customize is also high.' [REDACTED].
 - (e) [REDACTED].'
 - (f) [REDACTED] Port Solutions: Product and Technology Roadmap (which is mentioned above and was prepared when the Merger was already in contemplation - [REDACTED].

Other competitive constraints

- 7.201 The Parties' internal documents indicate that their main competitor in this market is ZPMC and, to a lesser extent, Kuenz. These documents refer to a couple of other Asian competitors, but in a global context; there is no indication that these suppliers of ASC compete with the Parties to any extent in Europe.
- 7.202 In relation to ASC, Cargotec produced competitor rankings which set out the perceived next largest competitors to its operations. These documents indicate that, over a number of years, Cargotec has faced its strongest competition from Konecranes and ZPMC. These rankings also show that ZPMC has not consistently 'displaced' Konecranes as Cargotec's main

competitor. The documents below also indicate that both Cargotec and Konecranes have a strong ASC offer. These documents should be read together with the Parties' internal documents described in paragraph 7.101, [REDACTED].

7.203 We summarise below some of these internal documents produced by Cargotec:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED], when the Merger was already in contemplation, [REDACTED].

(e) [REDACTED], also produced when the Merger was already in contemplation, [REDACTED].

(f) [REDACTED].

7.204 We summarise below some of the internal documents produced by Konecranes in relation to its competitors:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED], when the Merger has started to be in contemplation, [REDACTED].

(d) [REDACTED] 'Port Solutions: Product and Technology Roadmap' mentioned above states [REDACTED].

7.205 We also note that a third-party analyst report (DS Research) points to the different positions of the main suppliers of ASC in different regions when it states that 'ZPMC holds a dominant position in the Asian and Chinese market and is therefore the leading manufacturer for ASC', while 'outside of Asia & China the track record of Konecranes is nearly equal to that of ZPMC'.²⁷⁹

Purchasing criteria

7.206 We have also reviewed internal documents about the main relevant purchasing criteria for ASC, which provide insight on how the strengths and weaknesses of each competitor relate to these criteria.

²⁷⁹ DS Research, 'Global Market share Review', page 7.

7.207 In a 2019 - 2024 market analysis document, Cargotec set out that the [REDACTED] there are many factors other than price that influence customers' purchasing decisions. [REDACTED].

The development of competition in the foreseeable future

7.208 The Parties' internal documents indicate that both have clear plans to continue to improve their products, which suggests that the Parties will remain competitive within the market for the foreseeable future.

(a) [REDACTED]. We note that this document was produced when the Merger was already in contemplation.

(b) [REDACTED].

Evidence on future demand for ASC in the UK

7.209 Given the small number of sales of ASC in Europe and in the UK, we considered whether the demand for ASC is expected to grow.

7.210 Third-party evidence indicates that the demand for ASC in the UK is not materially different from ASC demand in the rest of Europe, and is likely to increase.

(a) One competitor does not believe that there is less demand for ASC in the UK than in Europe. While there are years when there are no ASC tenders, when they are tendered, the number required tends to be higher than for other cranes (a double-digit number). It also noted that ASC tenders typically include an option for additional units in later phases and it is unusual for any supplier other than the initial winning bidder to get a follow-up order.

(b) Another competitor considers that future port expansions will be driven by ASC and (potentially automatic) straddle or shuttle carriers. It told us that big ports using straddle carriers (ie Southampton, Tilbury, Liverpool, Grangemouth), would use ASC when looking to increase their capacity, suggesting that Antwerp and ports in Germany demonstrate that this is an efficient way of doing so. This competitor considers that labour (lack of drivers) could become an issue for future port expansions. It said that, at the moment, there are not many RTG projects being launched in Europe as ports have recognised that it will be difficult to retrofit RTG with automation technology so most newly opened terminals will look to purchase automatic systems (ASC or ARMG) instead.

7.211 Internal documents produced by the Parties also indicate that the ASC market is likely to grow.

(a) [REDACTED].

Figure 16: [REDACTED]

[REDACTED]

Source: [REDACTED]

(b) [REDACTED].

(c) [REDACTED].

7.212 Given the expected future demand for ASC, the evidence considered above indicates that a reduction in competition for ASC in Europe would harm UK customers purchasing ASC in the future.

Entry and expansion of other alternative suppliers of ASC

7.213 In the sections above we considered the competitive constraints currently imposed by existing suppliers of ASC in Europe. As noted in paragraph 7.111 above, our assessment seeks to account for the future evolution of competitive conditions, including constraints from rival entry or expansion.²⁸⁰

7.214 In this section, we consider the possible constraint on the Merged Entity arising from entry or expansion which would have occurred irrespective of the Merger,²⁸¹ following the approach set out in paragraph 7.112.

7.215 We considered whether the main potential sources of entry identified by the Parties have the necessary capabilities and intention to enter at scale or to substantially expand their operations in the supply of ASC in Europe, in the near future. In our assessment of the likelihood of timely and sufficient entry, we have taken into account the provisional findings on barriers to entry and expansion considered in Chapter 12.

Parties' views

7.216 As noted in paragraph 7.114 above, the Parties told us that 'new competitors have entered or innovated within the gantry crane product area in recent years'. The Parties submitted that 'Sany and CSSC have both entered the ASC segment in recent years'.

²⁸⁰ CMA129, paragraph 4.16.

²⁸¹ CMA129, paragraph 4.16.

7.217 In particular, the Parties told us that:

- (a) ZPMC has recently launched an ‘automation breakthrough’ and ‘global first’ technology to be delivered to Beibu Gulf Port Qinzhou (China)’.
- (b) ‘CSSC has delivered [ASC] to the Busan New Port Container Terminal (South Korea)’.
- (c) Sany has developed an ASC described as overcoming ‘many obstacles in key automation technologies, and achieved the targets of remote control, intelligent identification, precise alignment, automatic loading and unloading, which greatly improved port operation efficiency and reduced operating costs’. Sany is scheduled to deliver 16 [ASC] in 2020 and ten in 2021’.²⁸²

Assessment of the evidence on specific entry or expansion

7.218 We investigated whether any third parties have the necessary capabilities and specific intention to enter or to substantially expand their operations in relation to ASC, in Europe (including the UK), in the near future.

7.219 We set out below the evidence that we received from third parties in relation to specific entry or expansion:

- a) ZPMC told us that its [REDACTED].
- b) As noted at paragraph 7.185 above, [REDACTED] told us that it has plans to expand into the supply of ASC, however, ‘it is not a major focus for [REDACTED]. [REDACTED] said that it tends to be excluded from tenders because it cannot show customer references.
- c) [REDACTED] told us that it intends ‘to participate in tenders for [...] ASCs in the UK, if any’, if it feels that its offer can bring value added to a project.

7.220 We note that ZPMC and Kuenz have had some successes in the past years in the supply of ASC, which is reflected in the analysis above.

7.221 Our current view is that existing alternative suppliers of ASC have an ambition to expand, and intend to respond to invitations to tender, but we have not seen evidence of any specific plans to expand, nor anything to indicate that

²⁸² World Cargo News (1 November 2019), Yard crane market on the rise [online], available at <https://www.worldcargonews.com/in-depth/yard-crane-market-on-the-rise> [accessed 23/11/2021].

there will be a material change in the level of competitive constraint which they pose in the near future.

7.222 We did not find evidence that any of the existing alternative suppliers identified above, or any other third parties, have the necessary capabilities and intention to enter at scale or to substantially expand their ASC operations into Europe, including the UK, in the near future. No specific and timely entry or expansion plans appear to exist that would be sufficient in scope and magnitude to sufficiently constraint the merged entity to offset the potential loss of competition from the Merger.

7.223 We consider that future entry is made difficult by some of the barriers to entry in the relevant markets, including the importance of having established customer relationships and a broad interoperable product portfolio. No entry on significant scale has occurred recently in Europe in ASC, after ZPMC's and Kuenz's entry more than ten years ago. Even if the Parties' submissions on barriers to entry and expansion being low were correct (which we do not consider to be the case), the share of supply data does not show evidence of recent entry or expansion at scale.

7.224 We consider barriers to entry, as result of the Merger, in Chapter 12.

Our provisional conclusion on the effect of the Merger on the supply of ASC

7.225 The Parties compete closely in the supply of ASC, with both having a strong offering (including on automation) and a proven track-record (see Chapter 6), and face only two material competitors, ZPMC and Kuenz. Therefore, a significant competitor would be removed by the Merger and only two material competitors (other than the Merged Entity) will remain in the market after the Merger.²⁸³ Further, the positioning of the remaining competitors means that some customers may have even fewer than three competitive offers after the Merger: ZPMC appears to be a stronger competitor for larger volume ASC tenders (where it competes strongly on price), than for smaller volume tenders. Our provisional conclusion is therefore that the Merger is likely to result in a SLC in the supply of ASC.

7.226 The following evidence, in particular, demonstrates that the Parties compete closely in the supply of ASC:

²⁸³ We note that, although each merger is considered on its merits, one of the scenarios described in the CMA's guidance, in which the CMA may be more likely to find an SLC, refers to a merger involving 'the market leader and [where] the number of significant competitors is reduced from four to three' (CMA129, paragraph 2.18). Based on the evidence that we have reviewed, we consider that the Merger involves the market leader in ASC; that there are fewer than four significant competitors in the market pre-Merger; and that a significant competitor would be removed by the Merger

- (a) The Merged Entity would have a high combined share of supply (around [60-70]%) on a European basis over 2011-20, with a significant increment. Although Konecranes has not made sales in the UK in recent years, it has been consistently competing in UK tenders (see below). The Parties' combined share of supply in Europe was significantly lower in the most recent five-year period ([40 – 50]%), however both Parties still have material shares of supply on this basis and the evidence below shows that they continue to be significant players in the ASC market.
- (b) In the limited number of ASC tenders in the UK, the Parties have competed against each other and Konecranes' presence was perceived as a substantial competitive threat by Cargotec. In addition, bidding data shows that Konecranes has recently won a significant ASC tender in mainland Europe in opposition to Cargotec.
- (c) Responses from third parties also suggest that the Parties are close competitors and that ZPMC is their main competitor.
- (d) Evidence from internal documents indicates that the Parties' perceive each other as being among the main competitors in the supply of ASC. These documents also indicate that they closely monitor each other and produce strategy documents which focus specifically on competing with each other. These documents also indicate that both Cargotec and Konecranes have a strong ASC offer.

7.227 We consider that the Parties would face few significant competitive constraints following the Merger:

- (a) ZPMC has the fourth largest share of supply in Europe over 2011 to 2020 and the second largest share in the UK (where it is the only supplier other than Cargotec to have sold ASC over the period). ZPMC has become a stronger competitor over recent years (it did not make any sales in Europe over 2011 to 2015 but had a [20-30]% share over 2016 to 2020). Nonetheless, even pre-Merger, the market remains concentrated. ZPMC [redacted], winning the Peel Ports tender in 2013. Third-party evidence indicates that ZPMC is a stronger competitor for larger volume ASC tenders (where it competes strongly on price), than for smaller volume tenders. We note that most recent UK ASC tenders that we identified have been relatively large i.e. 10 or more ASC units). Third-party evidence also indicates that ZPMC may be at a disadvantage in relation to some customers (in particular customers without a strong in-house maintenance team) in light of the service levels it can offer in Europe Internal documents are consistent with ZPMC being a material competitor that is improving but remains behind in certain parameters.

- (b) Kuenz has the third largest share of supply in Europe (and in mainland Europe it has won some opportunities in opposition to Cargotec) but did not make any sales in the UK over 2011 to 2020. It participated in [redacted], but has not participated in any UK ASC tenders in the last five years, which appears to reflect its view that the incumbent ASC supplier has an advantage when it comes to further ASC tenders run by the same customer. Some suppliers said that they saw Kuenz as a competitor, however the UK customers that we heard from did not identify Kuenz as an option that they would consider when buying ASC.
- (c) No other suppliers appear to impose a material constraint on the Parties. Liebherr has attempted to enter the market but has not been identified as an effective competitor by third parties. Internal documents do not support that it imposes a material constraint.

7.228 The evidence that we reviewed in relation to entry and expansion does not suggest that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

8. Horizontal effects: SC and ShC

Framework and approach

- 8.1 In this Chapter, we assess horizontal unilateral effects of the Merger in the supply of SC and ShC, following the approach set out in paragraphs 6.5 to 6.8.
- 8.2 In order to assess the likelihood of the Merger resulting in horizontal unilateral effects in the supply of SC and ShC, we considered the closeness of competition between the Parties and the (present and future) competitive constraints provided by competing suppliers. We then considered whether there are any possible constraints on the Merged Entity arising from entry or expansion that would have occurred irrespective of the Merger.
- 8.3 We have gathered, and taken account of, a range of evidence in our assessment. In particular, we have considered:
 - (a) the Parties' views;
 - (b) the shares in the supply of SC and ShC in the UK, Europe and worldwide (excluding China);
 - (c) evidence from quantitative and qualitative bidding analysis;
 - (d) third-party evidence; and

(e) evidence from the Parties' internal documents.

Closeness of competition between the Parties and competitive constraints from alternative suppliers

Parties' views

- 8.4 The Parties submitted that the shares of supply indicate the historical successes of the Parties and do not reflect the dynamic competition provided by Chinese competitors (such as ZPMC) that are rapidly expanding.²⁸⁴
- 8.5 The Parties submitted that ZPMC has won multiple tenders for SC and ShC around the world, including some in Europe, demonstrating that ZPMC is already a constraint on the Parties and that it could develop into a major supplier (including in the UK) in the near future.²⁸⁵ The Parties further submitted that ZPMC has built up production capacity of between 100 and 200 SC per year, which covers a substantial proportion of global demand.²⁸⁶ The Parties submitted that ZPMC has rapidly expanded to become the market leader in the supply of cranes in the UK, and that it is 'not plausible' to assume that ZPMC will not achieve similar scale in the supply of SC and ShC in the UK.²⁸⁷ The Parties also considered that ZPMC's growth may be faster as a result of the Merger because customers will seek alternative suppliers.²⁸⁸
- 8.6 The Parties submitted that the historical market structure, comprising two major suppliers that constrained each other in competitive bidding processes, led to competitive outcomes in the supply of SC and that this structure will be maintained post-Merger due to the constraint provided by ZPMC.²⁸⁹
- 8.7 In response to the CMA's working paper on horizontal unilateral effects in the supply of SC and ShC, the Parties made a number of submissions:
- (a) The working paper fails to acknowledge their submissions that there are other credible players that are active in the market. For instance, ZPMC is a significant competitor and not a weak competitive constraint. In addition, Liebherr is said to be an actual or potential competitor of the Parties in SC.

²⁸⁴ The Parties' response to Issues Statement, paragraph 8.15.

²⁸⁵ The Parties' response to Issues Statement, paragraphs 8.16–8.17.

²⁸⁶ The Parties' response to Issues Statement, paragraph 8.20.

²⁸⁷ The Parties' response to Issues Statement, paragraph 8.19.

²⁸⁸ The Parties' response to Issues Statement, paragraph 8.22.

²⁸⁹ The Parties' response to Issues Statement, paragraph 8.22.

- (b) The working paper does not recognise the significance of [X] as a customer (both globally, and in the UK). [X] is said to act as an effective ‘shop window’ for suppliers seeking orders in the UK and large customers procure on a global basis.
- (c) The working paper inaccurately characterises and fails to acknowledge information in the Parties’ internal documents; for example, evidence that the Parties consider it worthwhile to invest time in monitoring numerous competitors.

Shares of supply

- 8.8 Chapter 6 provides an overview of our approach to shares of supply and the weight that we place on this evidence.
- 8.9 Table 22 below shows the Parties’ estimates of the shares of supply based on delivery volumes for SC and ShC over the period 2017 to 2020 for three different geographic areas: UK, Europe, and worldwide (excluding China).²⁹⁰
- 8.10 Within Europe, the Parties were by far the two largest suppliers over the relevant period such that the Merged Entity would have a combined share of supply of [90–100%]. ZPMC and Liebherr were the only other suppliers to make deliveries during 2017 to 2020, with ZPMC accounting for the majority of the remaining share of supply ([X] out of [X] deliveries). As discussed in more detail below, [X].
- 8.11 Within the UK, the Merged Entity would have a combined share of supply of [90–100%]. On a worldwide (excluding China) basis, the Merged Entity would have a combined share of supply of [90–100%]. ZPMC, Liebherr and Mobicon were the only other suppliers to make deliveries during 2017–20.

²⁹⁰ See Appendix B for further detail on the Parties’ methodology.

Table 22: Shares of supply of SC and ShC based on number of deliveries, 2017 to 2020

Volume in units

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[REDACTED]	[80–90%]	[REDACTED]	[50–60%]	[REDACTED]	[50–60%]
Konecranes	[REDACTED]	[10–20%]	[REDACTED]	[40–50%]	[REDACTED]	[30–40%]
Combined	[REDACTED]	[90–100%]	[REDACTED]	[90–100%]	[REDACTED]	[90–100%]
ZPMC	[REDACTED]	[0–5%]	[REDACTED]	[0–5%]	[REDACTED]	[0–5%]
Liebherr	[REDACTED]	[0–5%]	[REDACTED]	[0–5%]	[REDACTED]	[0–5%]
Mobicon	[REDACTED]	[0–5%]	[REDACTED]	[0–5%]	[REDACTED]	[0–5%]
Total	[REDACTED]	100%	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED]

Note: [REDACTED].

8.12 Overall, the shares of supply indicate that the Parties are close competitors in the supply of SC and ShC on any geographic basis, accounting for almost the whole market between them. There appear to be no other material competitors. ZPMC is [REDACTED], but only accounts for [0–5%] of the market.

Bidding analysis

8.13 The Parties provided data that detailed bidding opportunities for SC and ShC in the UK that they had competed in since 2017. This included completed opportunities that had been delivered, completed opportunities that had not been delivered, and ongoing opportunities that had not completed as of 31 July 2021. This data was extracted from the Parties’ respective CRM systems. One of the main limitations of this data is that, whilst the Parties observe whom they lose to, they do not observe the rankings of the suppliers.

8.14 We have supplemented the Parties’ bidding data with data from customers, which has been used to fill in missing information regarding the suppliers that were involved in SC and ShC opportunities. Thus, we believe that the bidding data for SC and ShC in the UK provides a reliable and comprehensive overview of UK bidding opportunities over this period.

8.15 Table 23 shows that there have been seven opportunities for SC in the UK since 2017, and one opportunity for ShC. [REDACTED] was the only participant in three of these opportunities, and in another three the only participants were [REDACTED]. In the most recent opportunity, in 2021, [REDACTED] was a third participant.

Table 23: UK bidding opportunities for SC and ShC since 2017

<i>Customer</i>	<i>Year closed</i>	<i>Number of units</i>	<i>Winning bidder</i>	<i>Second bidder</i>	<i>Third bidder</i>
SC					
DPW (Southampton)	2018	[REDACTED]†	[REDACTED]	[REDACTED]	
Maritime (Tilbury)	2018	[REDACTED]	[REDACTED]		
Peel Ports	2019	[REDACTED]‡	[REDACTED]	[REDACTED]	
Forth Ports	2019	[REDACTED]	[REDACTED]		
Maritime (Tamworth)	2019	[REDACTED]	[REDACTED]	[REDACTED]	
Maritime (Tamworth)	2020	[REDACTED]	[REDACTED]	[REDACTED]	
DPW (Southampton)	2021	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ShC					
DPW (London Gateway)	2017	[REDACTED]	[REDACTED]		

Source: CMA RFI 3, Annex 34.1 & Annex 35.1; DP World questionnaire response; Peel Ports questionnaire response.

Notes:

† Original tender was for [REDACTED] units with an option for an additional [REDACTED] units the following year; this option was exercised.

‡ [REDACTED]

8.16 Konecranes said that, to the best of its knowledge, it did not participate in the [REDACTED] opportunities in the table above in which it is not listed as a bidder and was not invited to participate by the customers in question.²⁹¹ It also said that it did not find reference to these opportunities in its CRM system and does not hold documents discussing a decision by Konecranes not to participate in these opportunities.

8.17 Two customers provided additional detail on recent SC tenders.

(a) In relation to Maritime’s 2020 tender for Tamworth, [REDACTED].

(b) In relation to DP World’s 2021 tender, [REDACTED].

8.18 Overall, the evidence above indicates that the Parties are close competitors in the supply of SC and ShC in the UK – they are often the only competitors in SC and ShC bidding opportunities in the UK, and in the single opportunity with a third participant, the [REDACTED].

8.19 The Parties submitted that ZPMC has won tenders for SC and ShC outside of the UK in recent years, some of which are not captured in the shares of supply due to not yet being delivered:²⁹²

(a) one ShC in China in 2017 (Xiamen Songyu Terminal);

(b) eight SC in Sweden in 2018 (for a port operated by HPH);

²⁹¹ These are [REDACTED].

²⁹² The Parties’ Response to Issues Statement, paragraph 8.16.

- (c) two ShC in Spain in 2019 (HPH);
- (d) four SC in Ghana in 2019 (Port of Tema);
- (e) 22 SC, with an option for 66 more, in South Africa in 2020 (TPT);
- (f) five SC in the Bahamas (HPH) in 2021;²⁹³ and
- (g) two ShC in South Korea (Busan Port Authority).

8.20 The Parties also indicated that, in 2020, Combilift won two tenders in the Americas for four ShC. These are yet to be delivered and thus do not appear in the shares of supply.

8.21 We note that only two of the awards to ZPMC were in Europe and both of these were to ports operated by HPH.²⁹⁴ We understand that [REDACTED]. As noted above, the Parties submitted that [REDACTED] acts as a ‘shop window’ for suppliers seeking orders in the UK. However, HPH does not use SC or ShC at any of its UK ports and, as explained in Chapter 6, there is no evidence that HPH has material influence on other customers’ purchasing decisions.

8.22 Therefore, at this stage, we consider that the bidding evidence indicates that there are no strong competitors to the Parties in the supply of SC and ShC in the UK and Europe.

Third-party evidence

Customers

8.23 We engaged with four customers identified by the Parties as using SC in the UK [REDACTED], one of which [REDACTED] also uses ShC.²⁹⁵ We asked these customers to list all suppliers that they considered viable alternatives in the supply of SC and ShC, and, for each supplier, to score its offering from one to five, where five is the strongest offer.²⁹⁶

- (a) The first customer uses, or has used, both Cargotec and Konecranes SC and scored both Parties’ offerings five. This customer noted that it had recently started using Cargotec SC due to its ‘new range of equipment for eco efficient operation’. This customer did not provide a score for any

²⁹³ [REDACTED].

²⁹⁴ The CMA understands a test unit has also been delivered to Aarhus Port in Denmark.

²⁹⁵ See Appendix D for more detail on our methodology.

²⁹⁶ The exact question wording was: ‘Please list: (i) your existing suppliers of Horizontal Transport Equipment for UK Terminals and (ii) all other suppliers that you consider could be a viable alternative for the supply of Horizontal Transport Equipment for UK Terminals. For each supplier, please assign a score from 1 to 5, where 5 = strongest offer and 1 = weakest offer.’

other suppliers but noted Liebherr as a supplier that may enter or expand in the future.

- (b) The second customer only uses Konecranes SC and scored Konecranes five. This customer did not provide a score for any other supplier.
- (c) The third customer only uses Cargotec SC and scored Cargotec five. This customer also identified Konecranes as a viable alternative and scored it four.
- (d) The fourth customer uses, or has used, SC and ShC from both Parties and scored Konecranes four and Cargotec five. This customer also mentioned ZPMC as a viable alternative and scored it two, noting that it is 'new to market' and 'will have to be analysed'.

8.24 These responses indicate that UK customers consider the Parties as close competitors, and mostly do not consider ZPMC (or any other suppliers) as viable alternatives to the Parties.

8.25 In relation to the above evidence, the Parties submitted that the CMA is not entitled to draw inferences from blank entries or omissions. We note that the question asked customers to list *all* suppliers that they considered viable alternatives; as such, we consider it reasonable to interpret an omission of a supplier (such as ZPMC) as evidence that the customer does not consider that supplier a viable alternative.

8.26 We also received qualitative comments from customers relating to the closeness of competition between the Parties and the strength of other suppliers in the supply of SC and ShC in the UK.

- (a) One customer told us that it would only expect the Parties to participate in future tenders for SC and ShC. This customer considered that ZPMC has the 'technical capability' to compete in a future tender for SC and ShC and might have the incentive to bid [redacted]. However, it did not expect ZPMC to 'provide much competition' in such a tender because of ZPMC's 'lack of track record in Europe'.
- (b) Another customer considered that 'ZPMC is still behind' the Parties because they 'are experienced in straddle and shuttle carriers as they have built around 10,000 carriers combined'.
- (c) A third customer 'is not aware of whether Chinese straddle carriers are marketed in Europe'.

8.27 These comments further suggest that UK customers consider the Parties to be close competitors and do not consider ZPMC as a viable competitor to the Parties now or in the near future.

Competitors

8.28 We also received evidence from Liebherr and ZPMC as competitors to the Parties in the supply of SC and ShC.

(a) Liebherr told us that [REDACTED].

(b) ZPMC told us that [REDACTED].

8.29 Overall, this evidence further suggests that the Parties compete closely. It also indicates that Liebherr is no longer a competitor to the Parties and that ZPMC does not expect to be a strong competitor to the Parties in the supply of SC and ShC in the UK and Europe in the near future.

Merger impact

8.30 We received views from several third parties indicating that they expect the Merger to have a negative impact on the supply of SC and ShC, largely due to the existing strong positions of the Parties.

(a) One customer stated that the Parties would 'have dominance and be very strong' in the supply of SC post-Merger and that 'the reduction in competition' resulting from the Merger 'may be an issue in any future tender.'

(b) Another customer told us that the Merged Entity would 'have a monopoly in the supply of [SC and ShC] for many years' and, more generally, that the Merger could lead to worse terms and conditions (such as shorter warranties) and increased prices for spare parts and services.

(c) One of the competitors in the supply of SC and ShC [REDACTED] considered that the Merger would have a negative impact on competition as it would result in less choice for SC and ShC customers.

(d) One competitor that is not active in the supply of SC and ShC, but competes with the Parties in the supply of other CHE, noted that a 'problem with the merger is the elimination of a straddle carrier manufacturer'.

8.31 On the other hand, one customer noted a potential benefit of the Merger: 'Konecranes has good features in straddle carriers' and the Merged Entity

‘could combine the technologies of both companies to develop better products’.

- 8.32 Overall, most third parties expected the Merger to have a negative impact on the supply of SC and ShC.

Internal documents

- 8.33 As discussed in Chapter 7, the Parties submitted approximately 3,000 documents directly to the CMA in relation to the competitive positioning and performance of the Parties and their competitors in the UK or Europe. We also included in our assessment a significant number of further documents on the same topic submitted by the Parties to the European Commission and which the Parties shared with the CMA.

- 8.34 In our assessment of the internal documents, we placed more weight on recent documents that refer specifically to the competitive situation in Europe and/or the UK and that were created before the Merger was in contemplation (our approach to these documents is explained in more detail in Chapter 6).²⁹⁷

- 8.35 Of the significant number of documents submitted by the Parties, only a small portion provide insight into competitive conditions in the CHE industry. Of the documents that were relevant to the competitive assessment, relatively few related to SC or ShC, and even fewer to each of those products in isolation.

- 8.36 In our assessment of the relevant documents below, we start with the documents that are mainly relevant to understanding whether the Parties are close competitors in the supply of SC and ShC and then assess the documents that are also relevant to understanding the constraints posed by other suppliers and the relative importance of purchasing criteria. We then touch briefly upon the emerging trends within the market which the Parties see as affecting how competition will develop in the future.

Closeness of competition between the Parties

- 8.37 Overall, the documents that we reviewed in relation to SC and ShC indicate that the Parties perceive each other as their closest competitor. The internal

²⁹⁷ As explained in Chapter 6, in attributing probative value to specific internal documents, we have taken into account the timing, purpose and context in which they were prepared. As a general principle, we consider that internal documents prepared in the ordinary course of business, for example before the Merger was in contemplation, are likely to have higher probative value than internal documents prepared once the Merger was in contemplation. This is consistent with paragraph 2.29(a) of the Guidelines. Consequently, while we have considered their relevance to our assessment, we have treated internal documents prepared since the Merger was in contemplation with a degree of caution. In particular, we are more likely to assign weight to evidence contained in such documents where it is corroborated by other evidence.

documents also indicate that both Parties actively participate in competition with the other, tracking the other's success and analysing both global and regional shares of supply.

- (a) The Cargotec presentation entitled '[REDACTED]', produced in February 2018, notes that Cargotec should '[REDACTED]', and that this can be done by '[REDACTED]'. This document compares '[REDACTED]'.
- (b) A Cargotec market analysis document produced in December 2019 shows that it considered itself to be the market leader for SC. Konecranes is ranked second, '[REDACTED]' and ZPMC ranked last '[REDACTED]'. Under 'competitive advantage' Cargotec states that its '[REDACTED]'. The same rankings and observations are made under the ShC analysis. We note that these appear to be global analyses.
- (c) A presentation, prepared in May 2020 relating to the 'Market and Competition' for SC, compared Konecranes SC '[REDACTED]' with those of '[REDACTED]'. In its '[REDACTED]', Konecranes noted its '[REDACTED]'. Within this document, Konecranes sets out the perceived '[REDACTED]' implemented by Cargotec and itself, noting that '[REDACTED]' whereas Cargotec offers '[REDACTED]' and sometimes offers a '[REDACTED]' that is recovered '[REDACTED]'. The use of the word '[REDACTED]' indicates that Konecranes perceives its only real competitor to be Cargotec.
- (d) Another Konecranes internal document titled 'Port Cranes Competition and Market' (May 2020) positions Cargotec and Konecranes in the same higher quadrant in terms of quality/performance and relative price.
- (e) A Konecranes market update document produced in November 2018 for the Port Solutions division notes, in relation to Port Cranes (which covers SC and ShC along with other HTE and cranes), that Cargotec is '[REDACTED]', indicating that price competition between the two is strong.

8.38 A report prepared by a third-party analyst (DS Research) in January 2020 – 'Container Terminal Foresight 2024' – notes that 'the SC market is a duopoly with the two dominating manufacturers Kalmar and Konecranes (Noell) capturing close to 95% of the market'. This assessment of the market is consistent with the internal documents produced by the Parties. The report further notes that for 'new entrants it is difficult to capture a "critical mass" of the market'.²⁹⁸

²⁹⁸ DS Research (January 2020). Container Terminal Foresight 2024, p 68.

Competitive constraints

8.39 The Parties' internal documents show that ZPMC, which the Parties begin to track from 2019, appears to be the only other constraint on the Parties other than each other, but also that ZPMC is a materially weaker competitive presence than both of the Parties.²⁹⁹ In particular, whilst the Parties' documents attest to ZPMC's entry and production capacity, they also reflect that the Parties continue to be, by far, the two largest suppliers of SC and ShC, and that customers do not yet see ZPMC as an equal alternative to the Parties' SC and ShC. The documents that discuss the competitive constraint of ZPMC do not assess competition specifically in the UK or Europe.

- (a) A Konecranes internal document produced in relation to an [REDACTED] in March 2019 identifies ZPMC as one of only three active suppliers of automated SC and ShC (alongside the Parties).
- (b) Another Konecranes document, produced in March 2020 – 'BA Port Solutions Deep Dive' presentation – lists only three competitors in SC and ShC at a global level: Cargotec (first), Konecranes (second) and ZPMC (third).
- (c) A Cargotec competitor review for [REDACTED] 2020, produced in September 2020, when the Merger was in contemplation, provides commentary regarding [REDACTED]. The document also tracks ZPMC's entry into the SC market. It notes that, within two years, ZPMC had received orders for 33 units globally³⁰⁰ and now claimed [REDACTED], which accounts for more than half of the annual global market. In response to this development, Cargotec stated that '[REDACTED]', suggesting that Cargotec considered that it could be more competitive in aspects other than price. We note, however, that this internal document, which was produced when the Merger was in contemplation, does not indicate whether ZPMC's additional capacity will be used to supply the European market (and that, as described further in paragraph 8.46(a) below, ZPMC [REDACTED]).
- (d) In May 2020, when the Merger was in contemplation, Konecranes prepared the internal document titled 'Port Cranes Competition and Market' mentioned above. In it, the comparative positioning of each of Konecranes' perceived competitors is set out. Cargotec and Konecranes are ranked as [REDACTED], with the best relative performance/quality. Notes made on the diagram indicate that Liebherr [REDACTED]. ZPMC is mentioned as being

²⁹⁹ Some documents mention Liebherr as a competitor, but as noted above, Liebherr [REDACTED].

³⁰⁰ We note that 22 of these units were ordered by TPT in South Africa; this contract included the option for an additional 66 units.

'the Chinese Leader' in STS, RTG and RMG, but is positioned as having lower performance/quality, as well as lower price, than the Parties in relation to its SC offering. The positioning of these competitors is set out in, Figure 17 extracted below.

Figure 17: [REDACTED]

[REDACTED]

Source: [REDACTED]

- (e) The relative positioning of competitors is also explained in the 2020 presentation relating to the 'Market and Competition' for SC, also mentioned above. This states that ZPMC is '[r]elatively new in the market' and notes a view from two third parties that ZPMC is '[REDACTED]' in SC. The two other manufacturers in Figure 17, [REDACTED], are noted as being present only in Australia and Japan respectively.
- (f) Konecranes received at least one email from a customer [REDACTED] after the Merger as a result of the Merged Entity [REDACTED]. This customer [REDACTED].

Purchasing criteria

- 8.40 We have also reviewed internal documents regarding the main relevant purchasing criteria for SC, which provide insight on how the strengths and weaknesses of each competitor relate to these criteria.
- 8.41 Cargotec's 2019-2024 Market Analysis, discussed above, lists the 'key purchasing criteria' for both SC and ShC as 'references, sustainability, relationships, lead time, price', which indicates that there are many factors other than price that influence customers' purchasing decisions. In the same document, Cargotec considers itself to be in a strong position in this market, listing as its own competitive advantages in SC: (i) '[REDACTED]'; and ii) '[REDACTED]'. The obstacles to growth that Cargotec lists are: i) the fact that the market for manual SC '[REDACTED]'; and ii) '[REDACTED]'. In this regard, Cargotec does not identify the competition it faces as an obstacle to growth.

The development of competition in the foreseeable future

- 8.42 The Parties' internal documents indicate that both of the Parties have strong SC and ShC and expect to remain competitive within the market for the foreseeable future.
 - (a) A Cargotec internal document from [REDACTED], discusses under the heading 'top risks' in relation to 'China Inc' that '[REDACTED]'. Under the heading 'mitigation

plans' in relation to 'China Inc.', it is noted that in response Cargotec should '[REDACTED]'.

- (b) A Konecranes market update document, produced in November 2018, noted that the '[REDACTED]' and that '[REDACTED]'. The document notes that one of Konecranes' strengths is that it is [REDACTED] and was '[REDACTED]'. It noted that one of its weaknesses was that [REDACTED] but saw the connection of those lines as a business opportunity; the document noted that [REDACTED].

Entry and expansion of other suppliers of SC and ShC

- 8.43 In the sections above we considered the competitive constraints currently imposed by existing suppliers of SC and ShC in Europe. As set out in our guidance, our assessment is generally forward-looking and will seek to account for the future evolution of competitive conditions, including constraints from rival entry or expansion.³⁰¹
- 8.44 In this section, we consider the possible constraint on the Merged Entity arising from entry or expansion that would have occurred irrespective of the Merger. We considered whether the main potential sources of entry identified by the Parties have the necessary capabilities and intention to enter at scale or substantially expand their operations in relation to the supply of SC and ShC in Europe (including the UK), in the near future. In our assessment of the likelihood of timely and sufficient entry and expansion, we have taken into account the provisional findings in Chapter 12.

Parties' views

- 8.45 The Parties submitted that there are other suppliers of SC and ShC that are actual or potential competitors to the Parties, including Mobicon, TCM/Logisnext, Suzhou Dafang and Combilift. The Parties further noted that the European Commission has identified a potential new entrant in the supply of SC and ShC.³⁰²

Assessment of evidence on specific entry or expansion plans

- 8.46 We investigated whether any third parties have the necessary capabilities and specific intention to enter or to substantially expand their operations in relation to SC and ShC, in Europe (including the UK), in the near future:

³⁰¹ CMA129, paragraph 4.16.

³⁰² The Parties' response to Issues Statement, paragraph 8.23.

(a) [✂]

(b) [✂]

(c) [✂]

8.47 Our current view is that ZPMC is already active (to a very limited extent) in the supply of SC and ShC and intends to respond to invitations to tender, but we have not seen evidence of any specific plans to expand, nor anything to indicate that there will be a material change in the level of competitive constraint that it poses in the near future.

8.48 We did not find evidence that any of the existing alternative suppliers identified above, or any other third parties, have the necessary capabilities and intention to enter at scale or to substantially expand their SC or ShC operations in Europe, including the UK, in the near future. No specific and timely entry or expansion plans appear to exist that would be sufficient in scope and magnitude to sufficiently constraint the merged entity to offset the potential loss of competition from the Merger.

8.49 We consider that future entry and expansion is made difficult by material barriers to expansion in the relevant markets, including the importance of having established customer relationships and a broad interoperable product portfolio. Even if the Parties' submissions on barriers to entry and expansion being low were correct (which we do not consider to be the case), the share of supply data does not show evidence of recent entry or expansion at scale (eg, while ZPMC has entered, its position in this market is not significant).

8.50 We consider entry and expansion as a result of the Merger in Chapter 12.

Our provisional conclusion

8.51 Our provisional conclusion is that the Merger is likely to result in a SLC in the supply of SC and ShC, as the Parties are the closest competitors in this market and only one, relatively weak, competitor other than the Merged Entity (ZPMC) will remain in the market after the Merger.

8.52 The evidence clearly shows that the Parties compete closely in the supply of SC and ShC:

(a) The Parties currently have close to [90–100%] combined share of supply of SC and ShC on any geographic basis. On this basis alone, there is a

strong *prima facie* expectation that the Parties are close competitors in the supply of SC and ShC.³⁰³

- (b) Our review of SC and ShC bidding opportunities in the UK shows that the Parties were the only competitors in all but one of these opportunities; in the opportunity with a third participant, [REDACTED].
- (c) UK customers rated both Parties as having similarly strong product offerings, and comments from third parties indicated that they considered the Parties as close competitors. We also note that most third parties expected the Merger to negatively impact competition in the supply of SC and ShC.
- (d) The internal documents that we reviewed in relation to SC and ShC show that the Parties perceive each other as one another's closest competitor, with both Parties actively participating in competition with the other and tracking the other's success.

8.53 Based on the evidence that we have reviewed in the round, we provisionally conclude that there are no other competitors that would impose a material competitive constraint on the Parties post-Merger.

- (a) We consider that ZPMC only provides a limited competitive constraint on the Parties in the supply of SC and ShC. It has [0–5%] share of supply in the UK and [0–5%] share of supply in Europe over 2017 to 2020, reflecting its limited success in UK and European tenders so far. In the [REDACTED] in which ZPMC participated, [REDACTED] and HPH seems to be its only customer in Europe. UK customers did not consider ZPMC as a viable alternative to the Parties, either now or in the near future. The internal documents that we reviewed recognise that ZPMC has entered this market, but also reflect the Parties' awareness [REDACTED]. We have not received any evidence that ZPMC will expand and become a strong competitor to the Parties within the next two to three years.
- (b) We do not consider that any other suppliers act as constraints on the Parties. Liebherr [REDACTED], so we do not consider it as a competitor to the Parties, despite it being mentioned by some customers as a potential alternative and in the Parties' internal documents. All the other suppliers are either small suppliers that focus on ShC or do not operate in Europe. We have not seen any evidence indicating that any other suppliers will

³⁰³ CMA129, paragraph 4.10.

enter or materially expand in the supply of SC and ShC in Europe (including the UK).

9. Horizontal effects: Mobile Equipment

Framework and approach

- 9.1 In this Chapter, we assess horizontal unilateral effects of the Merger in the supply of RS, HDFLT and ECH, following the approach set out in paragraphs 6.5 to 6.8.
- 9.2 In order to assess the likelihood of the Merger resulting in unilateral effects, we considered the closeness of competition between the Parties and the (present and future) competitive constraints provided by competing suppliers in each of the three types of Mobile Equipment for which we are considering whether the overlap in the Parties' activities could give rise to competition concerns – RS, HDFLT and ECH. We then consider whether there are any possible constraints on the Merged Entity arising from entry or expansion that would have occurred irrespective of the Merger.
- 9.3 We have gathered, and taken account of, a range of evidence in our assessment. In particular, we have considered:
- (a) the Parties' views;
 - (b) the shares in the supply of each type of Mobile Equipment in the UK, Europe and worldwide (excluding China);
 - (c) evidence from quantitative and qualitative bidding analysis;
 - (d) third-party evidence; and
 - (e) evidence from the Parties' internal documents, in relation to Mobile Equipment in general and each of the three types of Mobile Equipment we are considering.

Parties' general views on Mobile Equipment markets

- 9.4 The Parties submitted that the markets for Mobile Equipment are characterised by intense competition, which is promoted through distributors that provide both intra- and inter-brand competition between OEMs, as well as lowering the barriers to entry for new entrants from other regions.³⁰⁴ As such,

³⁰⁴ The Parties' Response to Issues Statement, para. 7.1.

the Merged Entity would continue to compete with a large number of viable competitors, including both global CHE suppliers and smaller, specialised suppliers of particular Mobile Equipment.

- 9.5 Cargotec submitted that ‘mobile equipment is highly commoditised and often sold via external independent distribution partners and dealers’. Both Parties stated that the lack of a local direct distribution and after-sales network does not affect the ability of a supplier to compete effectively and is not a prerequisite to being a successful supplier in the UK. The Parties consider that non-UK and non-European suppliers have a number of options to enter and gain immediate market presence in the UK through a distributor relationship or dealer without any need for a local presence.
- 9.6 The Parties submitted that the vast majority of Mobile Equipment customers are sophisticated purchasers (such as GTOs and large industrial customers) that exert significant buyer power on suppliers.³⁰⁵ They also noted that the purchasing processes employed by Mobile Equipment customers, such as structured tender processes and negotiated sales processes, lead to competitive outcomes.³⁰⁶
- 9.7 The Parties further submitted that recent and expected entry by Chinese suppliers will ensure that the Merged Entity faces significant competitive constraints, highlighting several internal documents from the Parties that demonstrate the competitive threat posed by suppliers such as Sany, ZPMC, and XCMG.³⁰⁷
- 9.8 In response to the working paper on the supply of Mobile Equipment, the Parties made a number of further submissions.³⁰⁸
- 9.9 In particular, the Parties made submissions about the CMA overestimating the importance of after-sales service and track record. These are addressed in Chapter 5 and in the assessment of the evidence regarding each type of equipment below.
- 9.10 The Parties also submitted that the CMA has failed to consider the factual evidence that they provided regarding the entry and expansion of competitors, such as:
- (a) Sany’s recent growth in ECH;

³⁰⁵ The Parties’ Response to Issues Statement, paragraph 7.1.

³⁰⁶ The Parties’ Response to Issues Statement, paragraphs 7.6 to 7.8.

³⁰⁷ The Parties’ Response to Issues Statement, paragraphs 7.3 and 7.9.

³⁰⁸ Certain of the Parties’ submissions relate to the CMA’s approach to evidence and other cross-cutting topics; these are addressed in Chapter 6.

- (b) ZPMC's recent sales of RS globally;
- (c) XCMG's entry into the Mobile Equipment market and partnership with ZPMC;
- (d) Camblift AB's imminent entry into the RS market; and
- (e) Heli's FLT development.

Horizontal unilateral effects in the supply of RS

Parties' views

- 9.11 The Parties submitted that Sany had seen strong recent growth in the UK, achieved through its relationship with its distributor Cooper and by offering low prices (Cargotec estimates that Sany offers prices 5-10% lower than its own). They also submitted that other Chinese competitors, in particular ZPMC and XCMG, could enter the market and achieve success in the same way that Sany has.³⁰⁹
- 9.12 The Parties submitted that Chinese suppliers are also well-placed to capitalise on the trends towards electrification and automation due to their substantial investments in R&D. They note that both Sany and XCMG currently offer electric RS, while the Parties are still in the development stages.³¹⁰
- 9.13 In response to the CMA's working paper on the supply of Mobile Equipment, the Parties made a number of submissions:
- (a) The shares of supply analysis in the working paper shows that, in addition to Cargotec, both Sany and Hyster have a larger share of supply than Konecranes in the UK. The Parties emphasised the entry of Chinese suppliers into the UK market, stating that, not only Sany, but also ZPMC have a material share of the RS market and they expect both to be competitive in future tenders.
 - (b) The working paper ignored clear evidence of Sany's rapidly growing presence in RS, for example because shares of supply are based on an average of the period between 2016 and 2020. The Parties considered that the first years of these shares are likely to underestimate Sany's current market position because Sany and Cooper only announced their relationship in 2015.

³⁰⁹ The Parties' Response to Issues Statement, paragraph 7.11.

³¹⁰ The Parties' Response to Issues Statement, paragraphs 7.12 to 7.14.

- (c) The CMA's bidding analysis is based on incomplete data, and it does not consistently support the position that Cargotec and Konecranes are close competitors. When lost units are looked at, both Hyster and Sany are closer competitors to Cargotec than Konecranes is in the UK.
- (d) It is inappropriate to discount CVS as a constraint on the basis that it does not operate in the UK, as it accounts for 20% of Cargotec's losses in Europe (including the UK) and is one of the largest competitors in Europe.

Shares of supply

- 9.14 Chapter 6 provides an overview of our approach to shares of supply and the weight that we place on this evidence. We have constructed our estimates of the shares of supply using data provided by the manufacturers (or their distributors) themselves and, where this is not available, the Parties' estimates of their competitors' sales.³¹¹
- 9.15 Table 24 shows our estimates of the shares of supply based on the volumes sold by each supplier (either directly to a customer or to a distributor) for RS over the period 2016 to 2020 for three different geographic areas: UK, Europe, and worldwide (excluding China). As set out in Chapter 5, we provisionally conclude that the relevant geographic market is no wider than Europe-wide, with some important UK-specific aspects of competition that affect the strength of competitors for some UK customers. As such, we consider that shares of supply in both the UK and Europe as a whole are relevant to our competitive assessment.
- (a) Within the UK, the Merged Entity would have a combined share of supply of [50 – 60]%. Only two other suppliers made a significant number of deliveries in the relevant period: Hyster [20 – 30]% and Sany [20 – 30]%. Some of the suppliers that are active in Europe are not present in the UK. For example, CVS does not currently have a UK-based distributor and did not make any sales of RS in the UK over 2016 to 2020.
 - (b) Within Europe, the Parties were the two largest suppliers over the last five years, such that the Merged Entity would have a combined share of supply of [60 – 70]%. The next largest suppliers were Hyster [10 – 20]% and CVS [5 – 10]%. Sany and Liebherr were smaller suppliers, each with less than 5% share.
 - (c) On a worldwide basis (excluding China), the Merged Entity would have a combined share of supply of [50 – 60]%. Taylor is a supplier that operates

³¹¹ See Appendix B for further detail on our methodology.

only in North America and has a [0 – 5]% share of supply on a worldwide basis (excl. China). ZPMC also made a small number of sales outside of Europe during 2016 to 2020.

Table 24: Shares of supply of RS based on sales volumes, 2016–20

Volume in Units

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[X]	[30 – 40]%	[X]	[40 – 50]%	[X]	[30 – 40]%
Konecranes	[X]	[10 – 20]%	[X]	[20 – 30%]	[X]	[20 – 30%]
Combined	[X]	[50 – 60]%	[X]	[60 – 70]%	[X]	[50 – 60]%
Hyster	[X]	[20 – 30%]	[X]	[10 – 20%]	[X]	[10 – 20%]
Sany	[X]	[20 – 30%]	[X]	[0 – 5%]	[X]	[5 – 10%]
Liebherr	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[0 – 5%]
CVS	[X]	[0 – 5%]	[X]	[5 – 10%]	[X]	[5 – 10%]
Taylor	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[0 – 5%]
ZPMC	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[0 – 5%]
Others	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[10 – 20%]
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X]

9.16 Table 25 shows the same shares of supply based on revenue rather than sales volumes. The shares are similar to those in Table 24 - the Merged Entity would have [50 – 60]% share of supply in the UK and [70 – 80]% in Europe.

Table 25: Shares of supply of RS based on revenue, 2016–20

Revenue in €m

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Revenue	Share	Revenue	Share	Revenue	Share
Cargotec	[X]	[40 – 50]%	[X]	[40 – 50]%	[X]	[30 – 40]%
Konecranes	[X]	[10 – 20]%	[X]	[20 – 30%]	[X]	[20 – 30%]
Combined	[X]	[50 – 60]%	[X]	[70 – 80]%	[X]	[50 – 60]%
Hyster	[X]	[20 – 30%]	[X]	[10 – 20%]	[X]	[10 – 20%]
Sany	[X]	[20 – 30%]	[X]	[0 – 5%]	[X]	[5 – 10%]
Liebherr	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[0 – 5%]
CVS	[X]	[0 – 5%]	[X]	[5 – 10%]	[X]	[5 – 10%]
Taylor	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[0 – 5%]
ZPMC	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[0 – 5%]
Others	[X]	[0 – 5%]	[X]	[0 – 5%]	[X]	[10 – 20%]
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X].

9.17 Overall, the shares of supply indicate that the Parties are close competitors in the supply of RS in both the UK and Europe, being the two largest suppliers in Europe by some distance and two of the only four significant suppliers in the UK. The Merged Entity would have a combined share of supply of [50 – 60]% in the UK and around [70 – 80]% in Europe.

9.18 Whereas Cargotec has broadly similar shares in the UK and Europe, Konecranes' share of supply is lower in the UK (where it is around [10 – 20]%)

than it is in Europe as a whole (where it is around [20 – 30]%). We consider that this is likely to reflect the role that national distributors play in the competitive process in Mobile Equipment (see Chapter 5) and, in particular, both Konecranes' difficulties in fine-tuning its operations since its [redacted], and Sany's relative success with its UK distributor, Cooper.³¹² Nonetheless, Konecranes has a material share in the UK (above 10%) and other evidence (see below and Chapter 6) indicates that Konecranes is a close competitor to Cargotec for UK customers.

- 9.19 The position of Hyster is the reverse of Konecranes - its share of supply is larger in the UK than in Europe as a whole. As noted above, we consider that this is likely to reflect the role of its national distributor (Briggs). The shares of supply show that Hyster was the second-largest supplier in the UK over 2016 to 2020 on a volume basis (third-largest on a revenue basis) and the third-largest supplier in Europe over the same period. Therefore, we consider that the shares of supply are consistent with Hyster being a strong competitor to the Parties in both the UK and Europe.
- 9.20 The shares of supply indicate that Sany is a material competitor in the UK, with around [20 – 30]% share of supply, but is much smaller in Europe ([0 – 5]% share). As with Konecranes and Hyster, we consider that this difference is likely to reflect the role of its national distributor (Cooper).
- 9.21 In relation to Sany, the Parties submitted that presenting shares over the five-year period from 2016 to 2020 was misleading given that Sany only announced its relationship with Cooper in 2015 and that it has recently grown rapidly.
- 9.22 We note that Sany had much higher UK sales in 2019 ([redacted] units) and 2020 ([redacted] units) as compared with previous years (it sold between [redacted] units in each of the previous three years). Cooper (the UK distributor for Sany) explained that 2019 was an exceptionally good year ([redacted]). It said that it expects sales to be more in line with [redacted]. This suggests that Sany is now a more significant competitor in the UK than its share of supply over 2016 to 2020 ([20 – 30]%) would suggest.
- 9.23 The Parties further submitted that Sany plans to expand in Europe, leveraging its strong presence in the UK. We note that, according to data provided by the Parties, Sany has been delivering RS in the EEA (excluding the UK) since at

³¹² In the Main Party Hearing, Konecranes said that 'I think...why we are weaker in the UK is that we have not yet [redacted] to enable us to provide an offering the customer really appreciates. Then...Sany has taken quite a big part of the market in the UK already... I think we are not [redacted]...that is the main one [and] we have not been able to [redacted] in the UK yet. We are still growing it with Impact. Maybe if you have heard [redacted], for example, in the UK so there has been some changes there'. [redacted].

least 2010. Despite this, Sany has a share of supply of only [0 – 5]% in Europe as a whole over 2016 to 2020. While Sany has higher sales in the UK and worldwide (excluding China), we do not consider that this necessarily means that Sany’s track record in those regions will lead to growth for Sany in Europe. Further, as discussed below, we have not seen any evidence that Sany has specific expansion plans within Europe (including the UK).

- 9.24 The shares of supply show that CVS and Liebherr are the other two suppliers that are active in Europe (with shares of [5 – 10]% and [0 – 5]% respectively on a European basis). CVS did not make any sales in the UK in the period 2016 to 2020 while Liebherr made a very small number of sales ([~~3~~] units). We consider that the limited sales in the UK by these suppliers does not in itself rule out that they could compete for UK customers. However, in the round, the other evidence that we review below is consistent with these suppliers not competing closely with the Parties in relation to UK customers.

Bidding analysis

- 9.25 Chapter 6 provides an overview of our approach to the bidding analysis and the weight that we place on this evidence.

Quantitative analysis of Parties’ data

- 9.26 In this section, we present the results of our quantitative analysis of the bidding data provided by the Parties.³¹³
- 9.27 Our analysis considers ‘loss ratios’, which are the proportion of bidding opportunities lost to each competitor as a percentage of all opportunities that the Party participated in and lost. As discussed in Chapter 6, these are an important measure of the closeness of competition between the Parties and their competitors. We note that, while the Parties observe whom they lose to in the bidding data that they have provided, they do not observe the rankings of the suppliers to which they lost.
- 9.28 We calculated loss ratios on three different measures: number of opportunities lost, total number of units lost, and total value (or revenue) lost.
- 9.29 As set out in Chapter 5, we provisionally conclude that the relevant geographic market is no wider than Europe-wide, with some important UK-specific aspects of competition that affect the strength of competitors for some UK customers. As such, we consider that loss ratios in both the UK and Europe as a whole are relevant to our competitive assessment. We treat the

³¹³ We discuss this data further in appendix C.

precise levels of the UK loss ratios with caution due to the small sample sizes.³¹⁴

9.30 Table 26 below shows RS loss ratios for Cargotec in the UK from 2016 to May 2021. This indicates that Cargotec lost the same number of opportunities to each of Hyster, Konecranes and Sany in the UK. However, based on the number of units and value lost in these opportunities, Hyster was the closest competitor to Cargotec (with loss ratios of [REDACTED]%), followed by Sany ([REDACTED]%) and then Konecranes ([REDACTED]%). Cargotec lost fewer than [REDACTED]% of opportunities to any other individual competitor.

Table 26: RS loss ratios, UK, Cargotec, 2016 to May 2021

Company	UK					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	€m	Percentage
Hyster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Konecranes	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sany	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Liebherr	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Unknown	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED].

Note: As explained in Appendix C we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices.

9.31 Table 27 below shows RS loss ratios for Cargotec in Europe from 2016 to May 2021. This indicates that approximately [REDACTED]% of opportunities lost by Cargotec in Europe were awarded to Konecranes. The loss ratios show that Hyster and CVS were also material competitors to Cargotec in Europe, accounting for [REDACTED]% of lost opportunities. Cargotec lost fewer than [REDACTED]% of opportunities to any other individual competitor, including Sany.

³¹⁴ The data comprises [REDACTED] opportunities in total lost by Cargotec in the UK, and [REDACTED] lost by Konecranes in the UK.

Table 27: RS loss ratios, Europe (EEA + UK), Cargotec, 2016 to May 2021

Company	Europe (EEA + UK)					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	€m	Percentage
Konecranes	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hyster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CVS	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sany	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Liebherr	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Linde	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Unknown	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED]

Note: As explained in Appendix C we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices.

9.32 Table 28 below shows RS loss ratios for Konecranes in the UK from 2016 to May 2021. This indicates that Cargotec was the competitor to which Konecranes lost most opportunities in the UK, followed by Sany and then Hyster (based on both number of opportunities and their value).

Table 28: RS loss ratios, UK, Konecranes, 2016 to May 2021

Company	UK			
	Number of opportunities		Value (revenue in €m)	
	Number	Percentage	€m	Percentage
Cargotec	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sany	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hyster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Unknown	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED].

Notes: [REDACTED]

As explained in Appendix C, we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices. [REDACTED].

9.33 Table 29 below shows RS loss ratios for Konecranes in Europe from 2016 to May 2021. This indicates that Cargotec accounted for [REDACTED]% of opportunities lost by Konecranes in Europe. Hyster was the only other competitor to which Konecranes lost more than [REDACTED]% of opportunities. CVS and Sany were the next closest competitors of Konecranes according to the loss ratios. We note that Konecranes lost proportionately fewer opportunities to Sany in Europe than it did in the UK.

Table 29: RS loss ratios, Europe (EEA + UK), Konecranes, 2016 to May 2021

Company	Europe (EEA + UK)			
	Number of opportunities		Value (revenue in €m)	
	Number	Percentage	€m	Percentage
Cargotec	[X]	[X]	[X]	[X]
Hyster	[X]	[X]	[X]	[X]
CVS	[X]	[X]	[X]	[X]
Sany	[X]	[X]	[X]	[X]
Liebherr	[X]	[X]	[X]	[X]
Other	[X]	[X]	[X]	[X]
Unknown	[X]	[X]	[X]	[X]
Total	[X]	100%	[X]	100%

Source: CMA analysis of Parties' data.

Notes: [X]. As explained in Appendix C, we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices. [X].

9.34 Overall, our bidding analysis indicates that the Parties compete closely in both Europe and the UK. Konecranes lost more opportunities to Cargotec ([X]%) than any other competitor in Europe, while Cargotec lost approximately [X]% of its opportunities to Konecranes in Europe (more than to any other supplier). Sample sizes in the UK are small, but we note that Konecranes lost [X] opportunities to Cargotec out of [X] opportunities lost in total during the period considered and Cargotec lost [X] opportunities to Konecranes out of [X] opportunities lost in total.

9.35 The loss ratios show that Hyster is the strongest third-party constraint on the Parties in Europe and one of the two strongest constraints on the Parties in the UK, alongside Sany. Sany is a weaker constraint in Europe as a whole, accounting for fewer than [X]% of the number of lost opportunities for both Parties. The loss ratios indicate that CVS is a material competitor in Europe, but [X] CVS in the UK over the period considered. No other suppliers accounted for more than [X]% of lost opportunities for either Party. These results are broadly consistent with the shares of supply presented above.

Qualitative tender case studies

9.36 We have reviewed documents provided by customers that detail the participants and outcomes of two recent RS tenders. We place limited weight on the analysis of these specific tenders (which are better considered as part of the shares of supply and bidding data considered above), but we have taken account of the insights that they provide on customer perceptions of the strengths and weaknesses of different suppliers.

9.37 One customer of the Parties (a port operator) [X] provided contemporaneous tender evaluation documents for a tender that it ran in 2021 for seven RS and two ECH. This tender was awarded to Briggs (distributor for Hyster), [X].

9.38 [X].

- 9.39 [REDACTED].
- 9.40 [REDACTED].
- 9.41 Another port customer [REDACTED] provided a tender evaluation summary document related to a tender for the hire and maintenance (over five years) of 4 RS and 12 ECH in 2018. There were [REDACTED] participants in this tender ([REDACTED]) and it was awarded to Cargotec.³¹⁵
- 9.42 In the pre-qualification round, [REDACTED].
- 9.43 [REDACTED].
- 9.44 The examples above indicate that Hyster is a strong competitor, at least in part due to its high product quality. [REDACTED] it appears that Sany was hindered by concerns regarding the quality of its products. [REDACTED] Konecranes submitted [REDACTED].
- 9.45 Price was a very important factor in [REDACTED]. [REDACTED] demonstrating that quality can be an important factor for some customers.

Third-party evidence

Customer questionnaire

- 9.46 We sent questionnaires to 22 of the Parties' RS customers and received responses from eight customers [REDACTED].³¹⁶
- 9.47 We asked customers of the Parties to rate the importance of various criteria in their purchasing decisions for RS (scores out of 5, where 5 is the most important).³¹⁷ The responses indicated that:
- (a) Equipment reliability was considered very important, with all respondents scoring it a 5.

³¹⁵ [REDACTED].

³¹⁶ See Appendix D for further detail on our methodology.

³¹⁷ Question wording: *When thinking about purchasing reach stackers, please score the following factors according to how important they are to your choice of supplier. Please assign a score from 1-5 where 5 = very important and 1 = not important at all (more than one factor can have the same score). The factors listed were: differences in equipment reliability, differences in automation/assistive technology features, differences in purchase price, differences in running costs, differences in strength of local aftersales presence (servicing, maintenance, spare parts), differences in efficiency/environmental performance, degree of interoperability with other equipment, and already having installed base of equipment from a particular supplier.*

- (b) Purchase price, running costs, and efficiency were also very important for most respondents, with seven out of eight scoring these criteria as either 4 or 5.
- (c) The strength of local after-sales presence was the next most important criterion, with all respondents scoring this criterion at least 3 and six out of eight respondents scoring this criterion 4 or above.
- (d) Automation and interoperability were generally not scored as important criteria - for each criterion, at least five out of eight respondents scored it 3 or below.

9.48 We asked customers of the Parties to rank the alternative suppliers that were considered in their most recent purchase of RS in the UK.³¹⁸ We received responses to this question from six customers of the Parties, and all of these had most recently purchased from Cargotec. Five of the respondents had made these purchases in 2018 or later, while one respondent (customer D) had not purchased from Cargotec since 2012. These responses are summarised in the second column of Table 30 below.

³¹⁸ Question wording: *Thinking about when you most recently purchased reach stackers from [Party] in the UK, what were the main alternative suppliers that you considered? Please list the main alternatives and confirm how you ranked these alternative suppliers (where 1 = the best alternative, 2 = the next best alternative and so on).*

Table 30: Customer questionnaire responses, RS

<i>Customer</i>	<i>Alternative suppliers at most recent purchase</i>	<i>Expected ranking in future purchase</i>
Customer A	<ol style="list-style-type: none"> 1. Konecranes 2. Hyster 	<ol style="list-style-type: none"> 1. Sany 2. Konecranes 3. Cargotec
Customer B	<ol style="list-style-type: none"> 1. Konecranes 2. Hyster 3. Liebherr 	<ol style="list-style-type: none"> 1. Cargotec 2. Konecranes 3. Liebherr 4. Hyster
Customer C	<ol style="list-style-type: none"> 1. Konecranes 2. Liebherr 	<ol style="list-style-type: none"> 1. Cargotec 2. Liebherr 3. Konecranes
Customer D†	<ul style="list-style-type: none"> • Konecranes • Hyster • Linde 	<ul style="list-style-type: none"> • Cargotec • Konecranes • Hyster • Liebherr • ZPMC
Customer E	<ol style="list-style-type: none"> 1. Hyster 2. Konecranes 	<ol style="list-style-type: none"> 1. Cargotec 2. Hyster 3. Konecranes 4. Liebherr 5. Sany 6. ZPMC
Customer F	N/A ³¹⁹	<ol style="list-style-type: none"> 1. Cargotec 1. Sany
Customer G	<ol style="list-style-type: none"> 1. Linde 2. Hyster 3. Terex (now part of Konecranes) 	<ol style="list-style-type: none"> 1. Hyster 2. Cargotec 3. Linde 4. Konecranes 5. Sany
Customer H‡	N/A	<ul style="list-style-type: none"> • Hyster • Konecranes • Liebherr • Cargotec

Source: [REDACTED].

Notes:

Where the customer named a distributor, we have recorded the name of the OEM that supplies the products to the distributor. Some customers ranked suppliers as equally close alternatives.

† Customer D did not provide any rankings for the suppliers that it listed. It last purchased RS from Cargotec in [REDACTED].

‡ Customer H did not provide any rankings for the suppliers that it listed.

9.49 Three customers ranked Konecranes as the next closest alternative, one ranked it as the second closest alternative, one ranked it third closest (the lowest of the alternatives given), and another listed Konecranes without providing a ranking. Regarding other suppliers, Hyster was ranked as either the first or second alternative by four respondents and listed without a ranking by another respondent. Linde and Liebherr were the only other suppliers named, each by two customers.

³¹⁹ Customer F [REDACTED] did not respond to this question because [REDACTED]. [REDACTED].

- 9.50 We also asked customers of the Parties to provide an expected ranking of suppliers if they were to purchase RS in the UK within the next year.³²⁰ We received responses to this question from eight customers of the Parties and these responses are summarised in the third column of Table 30 above. All respondents indicated that they felt well informed about the market.³²¹
- 9.51 Four of the eight customers that responded to this question expected Cargotec to be the leading supplier in a future hypothetical purchase, one expected it to rank second, one expected it to rank third, and two listed it without providing a ranking. Konecranes was named by seven respondents, of which two ranked it second, three ranked it third or below (it was not considered by any customer as a likely winner of the purchase), and two did not provide a ranking.
- 9.52 Regarding other suppliers, four customers expected Sany to compete for the purchase, of which two expected it to rank first (either outright or joint) and two expected it to rank fifth. This is in contrast to the ranking of suppliers in recent purchases, where Sany was not mentioned by any respondent, which is in line with the fact that Sany had very limited UK sales prior to 2019. Both Hyster and Liebherr were mentioned by five customers with a range of expected rankings.
- 9.53 Overall, the responses above indicate that the Parties are among each other's close competitors and will remain so in the near future—Konecranes was commonly listed as one of the main alternatives to Cargotec in recent purchases and both Parties were named by most customers as two of the main suppliers that they would consider in a future purchase. Of the other suppliers, Hyster was commonly mentioned as a viable competitor in both recent and future purchases. Sany was not considered by the respondents as an alternative in recent purchases, but was expected by several respondents to compete in future purchases. Liebherr, Linde, and ZPMC were not generally regarded by UK customers as strong competitors for either past or future purchases.

³²⁰ Question wording: *Suppose that you were planning to purchase reach stackers in the UK within the next year. What suppliers would you expect to consider? Please list the full set of suppliers that you would expect to consider (including [Party] if applicable) and provide your expected ranking of the suppliers (where 1 = the winner, 2 = the best alternative and so on).*

³²¹ Question wording: *Have you recently monitored and/or tested the market for reach stackers and to what extent do you feel well-informed about suppliers' strengths and weaknesses as they exist today?*

Competitor questionnaire

9.54 We sent questionnaires to nine RS competitors (including distributors) of the Parties and received responses from five competitors [REDACTED].³²² We note that two of these responses covered the same brand of equipment (ie, we heard from the manufacturer and its distributor).

9.55 We asked these competitors to rank the suppliers that they considered their closest competitors in the supply of RS in the UK.³²³ These responses are summarised in Table 31 below.

Table 31: Competitor questionnaire responses, RS

<i>Competitor</i>	<i>Suppliers that are considered as closest competitors in the supply of RS</i>
Competitor A	<ol style="list-style-type: none">1. Cargotec2. Konecranes3. Sany4. Liebherr5. CVS
Competitor B	<ol style="list-style-type: none">1. Cargotec2. Konecranes3. Sany4. CVS
Competitor C	<ol style="list-style-type: none">1. Cargotec2. Hyster3. Konecranes4. Sany
Competitor D	<ol style="list-style-type: none">1. Cargotec2. Hyster3. Konecranes4. CVS5. FTMH
Competitor E	<ol style="list-style-type: none">1. Cargotec2. Konecranes3. Hyster4. Sany5. CVS

Source: [REDACTED].

9.56 All respondents listed Cargotec as their closest competitor and Konecranes as either their second or third closest competitor. Hyster, Sany, and CVS were the most commonly mentioned suppliers other than the Parties, although CVS was not considered as a particularly close competitor by any respondent. Liebherr and FTMH were each mentioned once.

³²² See Appendix D for further detail on our methodology.

³²³ Question wording: *Please list your main competitors in the supply of reach stackers to UK sites. Please rank these competitors according to how close a competitor they are to you (where 1 = closest competitor, 2 = next closest competitor, and so on).*

- 9.57 We also asked competitors if they expected the rankings to differ in two years.³²⁴ The responses indicated that competitors do not expect any changes from the rankings described above.
- 9.58 The UK distributor for [X], also responded to our questionnaire. It considered that Cargotec was its closest competitor, followed by Hyster and then Sany. It did not expect this ordering to change in two years.
- 9.59 Overall, the responses from competitors (and Impact) suggest that the Parties are close competitors. Of the other suppliers, Hyster and Sany were generally considered as the next closest competitors to the respondents after the Parties. Liebherr, CVS, and FTMH were not considered as close competitors to the respondents.

Qualitative comments

- 9.60 We received a number of qualitative comments from third parties in relation to the closeness of competition between the Parties, which consistently indicate that the Parties are close competitors in the supply of RS.
- (a) One competitor considered that, in relation to the supply of Mobile Equipment, 'Cargotec and Konecranes are very similar to each other'. This competitor added that a strength for both Parties was that they offer a 'full line' of RS.
- (b) One customer submitted that the Parties were each other's closest competitors in the supply of RS across all the most important purchasing criteria (price, quality, vehicle lifetime, and after-sales service). This customer further submitted that the Parties are 'currently constrained in their pricing behaviour primarily by the competitive pressure they impose on each other'.
- (c) One distributor considered that both Parties have strong brands and wide product ranges, and that Cargotec is the market leader in the UK.
- 9.61 Several comments noted, in particular, that the quality of the Parties' equipment set them apart from other competitors.

³²⁴ Question wording: *To what extent do you expect the main competitors that you face and their strengths and weaknesses to change over the next two years? Please use the table below to list and rank the main competitors that you would expect to face in the supply of reach stackers to UK sites in two years' time.*

- (a) One customer believed that the ‘combination of pricing and quality makes Cargotec and Konecranes somewhat far off from competitors in reach stackers’.
- (b) One customer considered that ‘Konecranes and Cargotec have the best reach stackers’.
- (c) The UK distributor for [REDACTED], considered that, in relation to Mobile Equipment generally, the Parties’ products were higher quality than those of other competitors and stated that [REDACTED].

9.62 However, some third parties commented that the quality of the Parties’ equipment had declined relative to competitors.

- (a) One distributor that considered both Parties to have strong brands and wide product ranges noted that [REDACTED].
- (b) One customer did not consider Konecranes as a viable supplier of RS.
- (c) One customer felt that Cargotec had ‘rested on [its] laurels and not developed the machine to a great degree’, and thus had fallen behind competitors in terms of quality (especially Hyster).

9.63 Overall, these views support the evidence from the customer and competitor questionnaires in suggesting that the Parties are close competitors in the supply of RS.

9.64 We also received qualitative comments from third parties in relation to the competitive constraints faced by the Parties. In general, Hyster was considered a strong competitor, despite suggestions that its product quality is lower than that of its rivals.

- (a) One distributor considered that Hyster is the second-placed supplier in the market and is especially strong in the rental market, where it can offer very competitive deals. However, it also noted that Hyster products tend to be poorer quality.
- (b) Another distributor stated that Hyster is one of the ‘major competitors for reach stackers’ and that Hyster Mobile Equipment in general is lower quality than that offered by the Parties but is also much cheaper.
- (c) One customer considered that Hyster is the only credible competitor to the Parties.

- (d) One customer submitted that Hyster would be one of the next most credible competitors to the Parties, but that it lacks the necessary product quality to impose a significant constraint.
- (e) Another customer noted that Hyster makes 'credible competitive reach stackers'. This customer noted that, in relation to a [X], Briggs (a distributor for Hyster) scored highly against all the tender criteria, especially pricing. The customer stated that pricing was particularly important for this tender given that the framework covered a 10-year period. This customer further noted that suppliers with a wide range of Mobile Equipment (such as Briggs) are favoured in tenders as the customer finds it easier to manage a single contract rather than multiple contracts with different suppliers.

9.65 The views from third parties on Sany were mixed, noting its low prices but also perceptions of poor product and/or service quality that made some customers reluctant to switch to Sany.

- (a) The UK distributor for [X], noted in relation to Mobile Equipment in general that it 'believes that some customers will not purchase Sany products simply because they are a Chinese product [...] in spite of most of the parts being built in Europe and shipped over to China for assembly'. It explained that Sany 'will always have problems with some customers with anti-Chinese rhetoric' and that 'most of it comes back down to the local support'.
- (b) Another distributor submitted that Sany has an 'aggressive pricing' strategy, but also considered that Sany had 'narrower service coverage' in the UK (through its distributor Cooper) than this distributor, which could make customers 'wary of switching' to Sany.
- (c) A third distributor noted that 'Sany is a minor competitor' and, along with other Chinese suppliers, doesn't get much repeat business, in part due to low quality support in relation to spare parts.
- (d) One competitor stated that for Sany its 'main strength is the price'.
- (e) The customer that had tendered in [X] was aware of Cooper (a distributor for Sany) but considered that Cooper would be less likely to meet its requirements.
- (f) Another customer was not aware of Sany.

- 9.66 However, there was one customer that felt that Sany ‘has become a serious market contender’. This customer considered that Sany had ‘very competitive pricing’ and ‘good UK aftersales’.
- 9.67 With regards to other competitors, we received mixed comments on the ability of Liebherr to compete with the Parties and one view that a reputation for poor service hinders the ability of CVS and FTMH to compete in the UK:
- (a) One customer submitted that Liebherr (alongside Hyster) would be one of the next most credible competitors to the Parties, but that it lacks the necessary product range to impose a significant constraint. However, this customer expected Liebherr to expand its product range in 2021 and noted that it would evaluate whether this improved offering could meet its requirements.
 - (b) The customer that had tendered in [REDACTED] noted that Liebherr makes ‘credible competitive reach stackers’.
 - (c) One of the distributors above [REDACTED] noted that Liebherr has a well-known brand for CHE generally, but is less well-known for RS in particular.
 - (d) Another distributor noted that Italian suppliers, such as CVS and FTMH, have a ‘poor reputation’ for service which makes it difficult for them to ‘break in’ to the UK market.
- 9.68 The Parties submitted that Sany is one of the leading suppliers in respect of the development of an electric RS. [REDACTED].
- 9.69 Overall, the qualitative comments from third parties indicate that Hyster is generally seen as a strong competitor to the Parties in the UK, supporting the evidence from the questionnaire responses. A number of third parties commented on Sany, but the views expressed were mixed regarding the strength of Sany as a competitor. Several customers also mentioned Liebherr as a viable competitor, although Liebherr only delivered [REDACTED] RS to UK customers between 2016 and 2020 (see Table 24).

Merger impact

- 9.70 We asked customers for their views on any positive or negative impacts of the Merger on the supply of RS.³²⁵ Most customers identified both positive and negative impacts.
- 9.71 The positive impacts mostly focussed on the potential for increased innovation and the benefits that would accrue from the sharing of technical knowledge and expertise. Two customers also expected the Merged Entity to provide improved after-sales service.
- 9.72 The negative impacts primarily related to the loss of competition and the potential negative effects that this could have on prices, innovation, and purchase terms. One customer considered that such effects are ‘mitigated by our competitive tendering processes’.
- 9.73 We asked competitors whether they expected the Merger to impact competition for the supply of RS in the UK.³²⁶ Of the six responses from competitors, one considered that the Merger would not impact competition and four considered that the Merger would have a negative impact, one of which noted that the extent of any impact will ‘depend on the new company’s strategy’. The other competitor considered that any impact depended on ‘how the merged portfolio is arranged and distributed’.
- 9.74 We also received some more detailed comments regarding the impact of the Merger in the supply of RS. A number of customers suggested that the Parties would have market dominance post-Merger, with some noting the negative impact that this would have on the market.
- (a) One customer stated that the Merged Entity would ‘have dominance and be very strong in reach stackers’.
- (b) Another customer submitted that ‘the transaction will give the merged entity a dominant position in reach stackers, which will result in significant price increases in the EEA+UK, as well as a loss of innovation’.
- (c) One competitor considered that, globally, the Merged Entity would be ‘dominant in [...] reach stackers’.

³²⁵ Question wording: *Cargotec and Konecranes are proposing to merge. What positive impacts (if any) would you expect the merger to have in relation to reach stackers? What negative impacts (if any) would you expect the merger to have in relation to reach stackers?*

³²⁶ Question wording: *Cargotec and Konecranes are proposing to merge. Do you expect the merger to impact competition for the supply of reach stackers in relation to UK customers? If ‘yes’, please describe the impact(s) on competition that you would expect as a result of the merger and explain your reasoning.*

- (d) Another competitor expects a ‘negative impact’ from the Merger as the Merged Entity will have ‘dominance in market penetration and [a] strengthened position against component suppliers [...] which will weaken all other competitors in the market’.
- (e) One distributor submitted that the Parties both have a ‘strong product offering’ that the Merged Entity could use ‘to offer a one stop shop’. This has the potential to provide the Merged Entity with ‘a dominant offering in the marketplace’. This distributor further noted that ‘competition has also been recently reduced with Linde and Konecranes joining forces’, which means that ‘3 [suppliers] will effectively become 1 if this merger takes place’.
- 9.75 One competitor submitted that ‘unless the merger will free access to [a] distribution network to other brands, the alternative options for customers will become restricted’.
- 9.76 Two third parties noted that the weakness of Konecranes could limit any impacts of the Merger.
- (a) One competitor that considered that the Merged Entity would be dominant globally noted that the impact in the UK would be smaller due to the ‘weak position of Konecranes’.
- (b) One distributor considered that the merger would not impact it much, as the number of suppliers has already reduced significantly from many years ago, and Konecranes is currently a weak competitor.
- 9.77 Overall, these responses indicate that most third parties expect some negative impact to result from the Merger in the supply of RS due to the strong position that the Merged Entity will have. Customers also noted the potential for positive impacts resulting from the Merger, such as increased innovation. The third parties that expressed fewer concerns regarding the Merger considered that Konecranes was not a strong competitor in the supply of RS.

Internal documents

- 9.78 The Parties submitted directly to the CMA around 3,000 documents from both Parties in relation to the competitive positioning and performance of the Parties and their competitors in the UK or Europe. We also included in our assessment a significant number of further documents on the same topic submitted by the Parties to the European Commission and which the Parties shared with the CMA.

- 9.79 In our assessment of the internal documents, we placed more weight on recent documents that refer specifically to the competitive situation in Europe and/or the UK and that were created before the Merger was in contemplation (our approach to these documents is explained in more detail in Chapter 6).³²⁷
- 9.80 Of the significant number of documents submitted by the Parties, only a small portion provide insight into competitive conditions, for example because many of the documents were general industry reports or reports that simply record sales achieved by each supplier. Of the documents that are relevant to the assessment of competition, many relate to Mobile Equipment in general, and are therefore relevant to multiple Mobile Equipment product markets, whereas relatively few relate to specific types of Mobile Equipment. We also note that the large majority of documents that were relevant to an assessment of competition in the supply of Mobile Equipment assess the market either globally or on an Europe-wide basis and only a few are specific to the UK.
- 9.81 Below, we first review documents that are relevant to multiple Mobile Equipment product markets. We then review documents that specifically relate to RS. In each case, we start with documents that are mainly relevant to closeness of competition between the Parties. We then assess documents that relate to the constraints posed by other suppliers. Finally, we discuss documents that provide insight into the Parties' views on how competition will develop in future.

Internal documents relating to Mobile Equipment in general

Closeness of competition between the Parties

- 9.82 Overall, the documents that we reviewed in relation to Mobile Equipment in general indicate that Cargotec and Konecranes perceive each other as strong competitors and take active steps to compete with one another.
- (a) In a 2019 document entitled 'KAMOS Technology', Cargotec assessed Konecranes and itself as having the most complete offering, marking the Parties out to be each other's main rival in Mobile Equipment software.

³²⁷ As explained in Chapter 6, in attributing probative value to specific internal documents, we have taken into account the timing, purpose and context in which they were prepared. As a general principle, we consider that internal documents prepared in the ordinary course of business, for example before the Merger was in contemplation are likely to have higher probative value than internal documents prepared once the Merger was in contemplation of the Merger. This is consistent with paragraph 2.29(a) of the Guidelines). Consequently, while we have considered their relevance to our assessment, we have treated internal documents prepared since the Merger was in contemplation with a degree of caution. In particular, we are more likely to assign weight to evidence contained in such documents where it is corroborated by other evidence.

- (b) A number of the Parties' internal documents show that they have wide and overlapping Mobile Equipment product ranges, competing closely across the lower and higher value parts of their ranges.
- (i) A Konecranes' presentation (2017) about the comparative positioning of its competitors in the 'lift truck' industry (meaning Mobile Equipment) shows a benchmarking of Konecranes' essential (value) and premium product lines against competitors present in each of these segments (Cargotec, Hyster, Sany, CVS, Taylor). Only Konecranes and Kalmar are perceived to be active in both of these segments as well as at the intersection of both (see Figure 18). Figure 19 sets out the differences in value propositions between the two Konecranes' product lines: the [REDACTED] 'Konecranes Liftace' and the [REDACTED] 'Konecranes Blue'.

Figure 18: [REDACTED]

[REDACTED]

Source: [REDACTED].

Figure 19: [REDACTED]

[REDACTED]

Source: [REDACTED]

- (ii) A Cargotec internal document produced in October 2019 predicted that future global volumes would demand [REDACTED] (emphasis in original). In response to this predicted demand, Cargotec [REDACTED].
- (iii) Konecranes' review of its action plan 2019 shows that one of its goals was to use its [REDACTED] Mobile Equipment range to compete specifically with Kalmar's [REDACTED] product range and with Sany.
- (c) [REDACTED].
- (d) [REDACTED].
- (e) In another Cargotec document, entitled 'Kalmar Mobile Solutions Strategy 2021-2024', presented to Cargotec's board in June 2021, Cargotec summarises in a table its assessment [REDACTED].
- (f) In a strategy document ('Revisiting P-3023'), produced in April 2021, just before or at the same time the Merger started being contemplated, Konecranes describes Cargotec as having '[REDACTED]' and states that '[REDACTED]'. This document flags that Kalmar has launched a '[REDACTED]', showing that

Konecranes monitored closely Cargotec's launching of a [REDACTED] line, which would compete with Konecranes [REDACTED].

(g) [REDACTED].

(h) [REDACTED].

9.83 The internal documents set out in Chapter 6 further show that the Parties have a strong offering overall, including in terms of quality and automation, and consider each other as leaders in the supply of Mobile Equipment.

Other competitive constraints

9.84 We reviewed internal documents assessing the strengths and weaknesses of the Parties' competitors in Mobile Equipment. Overall, the Parties' internal documents that we reviewed generally indicate that their main competitors in Europe in Mobile Equipment are Hyster and, to some extent, Sany. We note that the evidence from internal documents concerning Sany is mixed. While some documents note the increased presence of Sany in Europe, and the fact that it is very competitive on price, others highlight significant weaknesses of Sany. For example, some documents indicate that these weaknesses include [REDACTED]. We note that, in contrast to the Parties, Hyster and Sany seem to mainly offer products in the essential/value to medium range. Other competitors mentioned in these documents are not present, or have a very small presence, in the Europe and/or the UK.

9.85 Within the documents that relate to competition from one or more third parties in relation to Mobile Equipment in Europe:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(i) [REDACTED]

(ii) [REDACTED]

[REDACTED]

(d) Cargotec's views on increased competition were also reflected in a presentation entitled [REDACTED].[REDACTED].

(e) [REDACTED]:

- (i) [REDACTED].
- (ii) [REDACTED].
- (iii) [REDACTED].
- (iv) [REDACTED].
- (f) [REDACTED].
- (g) [REDACTED]. [REDACTED]. We have interpreted this document in the context of more recent documents. These documents do not suggest, however, that Sany improved its weakness regarding the parameters of competition set out above, including servicing and 'confidence' in the brand.

Figure 20: [REDACTED]

[REDACTED]

Source [REDACTED]

- (h) A more recent document from Konecranes [REDACTED].[REDACTED].

9.86 A number of other documents relate to Sany's strengths and weaknesses. The documents below suggest that Sany is growing its position in Mobile Equipment (including in Europe) and highlight Sany's investment in technology and perceived strength in electrification:

- (a) [REDACTED] identifies as a risk the rising competition from Sany and other Chinese Mobile Equipment suppliers [REDACTED]. We note that this document was produced after the Merger was in contemplation.

- (b) [REDACTED].

- (c) Konecranes seems to regularly track Sany's supplies of ECH and RS throughout Europe (at least since 2019) and in one of its reports of July 2019 flags that Sany had plans to introduce an electric ECH.

9.87 On the other hand, the documents below highlight weaknesses in Sany's Mobile Equipment offering, including [REDACTED]:

- (a) [REDACTED]. [REDACTED] Chinese brand with State support [REDACTED].

- (b) [REDACTED].

- (c) In a Cargotec presentation from 2020 about the market outlook and competitive situation at a global level, [REDACTED].

- (d) A Konecranes report from January 2021 notes that Sany is ‘advertising that they are searching for dealers in Europe’ using LinkedIn which suggests that Sany does not have an established network of dealers within Europe yet, but it is trying to expand it.
- (e) The Konecranes report [REDACTED], can access customers who do not value driver comfort and high uptime [REDACTED].
- (f) Konecranes’ [REDACTED].[REDACTED].

Figure 21: [REDACTED] Mobile Equipment.

[REDACTED]

Source: Konecranes [REDACTED].

The development of competition in the foreseeable future

9.88 The internal documents of the Parties also discuss the future trends that they see emerging in the Mobile Equipment market which will, in their view, dictate future competition. The common themes are electrification/sustainability and automation. Some of these documents discuss the position of the Parties and their competitors in the context of these trends.

9.89 The documents indicate that the Parties are important forces in the development of electric and hybrid Mobile Equipment, taking active steps to develop in line with projected competition and competing closely against each, as evidenced in particular by the monitoring of each other’ developing offering. Sany is also perceived as being well positioned to compete in this sphere. In these documents, as well in the documents considered in Chapter 6, the Parties set out their plans to increase their market position in Mobile Equipment in the future and each considers itself to be well-placed to do so.

(a) In February 2019, Cargotec produced an internal report on [REDACTED] which noted that ‘[REDACTED]’.The report included the following:

- (i) Cargotec aimed to have a ‘[REDACTED]’;
- (ii) CCH: [REDACTED].

(b) In its CCH ‘Strategy Round 2021-2024’, Cargotec sets out a plan to [REDACTED]. The document states that ‘[REDACTED]’. The presentation notes that [REDACTED].³²⁸

³²⁸ [REDACTED]. Based on information of Cargotec’s website, it seems that Cargotec is currently developing not a fully electric product, but a fuel-efficient product.

- (c) Cargotec produced a 'Strategy Book' in April 2021, just before or at the same time the Merger started being contemplated, which set out its goal [REDACTED]. Cargotec set out a number of strategic goals within its 2021-2024 goals but reinforced that its '[REDACTED]'.³²⁹ Cargotec noted that in 2021 they would be holding [REDACTED]. Within this document, Cargotec [REDACTED].
- (d) In its '[REDACTED]' strategy (mentioned above), Konecranes expresses the desire to become 'one of the leaders in coming industry shifts [REDACTED]. In its '[REDACTED]', the company sets out the future anticipated trends in the market. Konecranes lists: 'momentum towards [REDACTED]', the disruption of [REDACTED] and the resultant destabilisation of '[REDACTED]', equipment needing to be [REDACTED], semi-automation and sustainability. Finally, in '[REDACTED]', Konecranes re-emphasises the importance of being '[REDACTED]', describing some industries as being 'at a tipping point'. To meet these challenges Konecranes planned to launch [REDACTED].
- (e) In September 2020, Konecranes compared its electric Mobile Equipment offering, such as FLT, with that of Cargotec, noting that Konecranes' [REDACTED] results in a [REDACTED].
- (f) In May 2021, Konecranes identified [REDACTED] as 'one of the great trends' in a competitor analysis presentation. In this presentation it identified Sany, Hyster, Cargotec, and Taylor as competitors in this sphere. It notes that Sany has been the most successful in commercialising Lithium-Ion batteries and that Cargotec appears to have kept its promise to launch an all-electric portfolio in 2021. We note that this document was produced after the Merger was in contemplation.
- (g) Konecranes also actively monitors Cargotec's progression towards electric Mobile Equipment:
- (i) A September 2020 Competitor Network Meeting, notes that Cargotec has confirmed plans for an electric RS to be released in 2021.
- (ii) In January 2021, Konecranes noted that Cargotec would be launching a fully electric RS at the beginning of Q2, 2021.

9.90 The documents considered above relate to Mobile Equipment in general and provide relevant background for the assessment of the competitive constraints in each of the relevant markets. They are consistent with the Parties being close competitors in Mobile Equipment markets.

³²⁹ The [REDACTED] also referenced [REDACTED].

Internal documents relating to RS

9.91 Some of the internal documents submitted by the Parties provide insight into the Parties' views of their competitive positions, and those of their competitors, specifically in relation to RS. We start with the documents that are mainly relevant to understanding whether the Parties are close competitors in the supply of RS and then assess the documents that are also relevant to understanding the constraints posed by other suppliers and the relative importance of purchasing criteria. We then touch briefly upon the emerging trends within the market which the Parties see as affecting how competition will develop in the future.

Closeness of competition between the Parties

9.92 The documents set out below in relation to RS, consistent with the internal documents described in Chapter 6 and in paragraphs 9.81 and 9.82 about Mobile Equipment in general, indicate that Cargotec and Konecranes perceive each other as strong competitors in RS, because of capabilities such as their extensive and strong distribution and after-sales networks, and monitor each other's offerings closely. The Parties also appear compete against each other across the entire RS product range (Essential, Premium, ECO).both Parties having a more budget/value-oriented brand/product as well as a premium line. Konecranes offers the [REDACTED] 'Konecranes Blue' or SMV branded RS, as well as the [REDACTED] 'Konecranes Liftace' brand. Kalmar offers the 'Premium' and 'Eco' lines, as well as the cheaper 'Essential' line.

(a) A Cargotec presentation, produced in September 2020 ('Reachstacker Overview), includes a competitive overview of the market (extracted in Figure 22 below) which sets out [REDACTED]. [REDACTED].

Figure 22: [REDACTED]

[REDACTED]

Source: [REDACTED]

(b) In a Cargotec 'Product Briefing' produced in quarter 2 of 2018, Cargotec stated that it was [REDACTED].

(c) [REDACTED].It appears from the note that only those two competitors were mentioned in the meeting.

Other competitive constraints

9.93 In relation to other competitors, and consistent with the documents described above about Mobile Equipment in general, the Parties seem to consider

Hyster as a strong competitor in the supply of RS, in both Europe and in the UK. The Parties monitor Sany and perceive it as a threat, but the evidence on the competitive strength of Sany is mixed. While some documents recognise its existing strength in the UK (through its relationship with Cooper) and its competitive price, other documents highlight the weaknesses of Sany's offering in RS, including [REDACTED]. Other competitors, such as CVS, are not frequently assessed in the Parties' internal documents.

- (a) [REDACTED].
- (b) [REDACTED] In Cargotec's view, its strengths [REDACTED]. Cargotec considered that [REDACTED].
- (c) Cargotec's presentation 'Reachstacker Overview' (2020), mentioned above, compares Cargotec's offering with that of [REDACTED].
- (d) A Cargotec strategy document produced in 2020 for the KAMOS leadership team, [REDACTED].
- (e) Other internal documents from the Parties highlight the weaknesses of some aspects of Sany's offering, [REDACTED]:
 - (i) A Cargotec document, produced in May 2021, when the Merger was in contemplation, [REDACTED]. In the same document, Cargotec states [REDACTED]. [REDACTED].
 - (ii) [REDACTED].
 - (iii) In the same vein, an email from Konecranes' Regional Sales Director Europe) to Konecranes' Director Sales and Distribution, on 8 January 2021 states: '[REDACTED]'.³³⁰ This comment is in reaction to an email chain between Maritime's National Plant Manager and Impact's³³¹ Division Sales Manager, in which Maritime states that, in order to consider purchasing RS and ECH from [REDACTED] from Konecranes. Maritime notes that '[REDACTED]'. [REDACTED].
 - (iv) In an email chain between Impact's Divisional Sales Manager and Konecranes' Global Sales Manager, relating to the award of two RS to Sany, Konecranes' Global Sales Manager questions: 'What is the market saying about the Sany Reach stacker? All we hear from others is that the [REDACTED]. Does Coopers customer accept that, because I doubt that he is stocking to much... or have Sany improved?'. This question is consistent with much of the third-party evidence described

³³⁰ [REDACTED] (Convenience translation by the CMA from Swedish).

³³¹ Impact is Konecranes' distributor in the UK

above, which indicates that some customers have a perception that Sany offers low quality products and/or after-sales support. In the same email chain, Impact's Divisional Sales Manager argues that [REDACTED]. This meant that Sany '[REDACTED]' such that the customer did not see the 'benefit in a premium brand', having had previous problems with both Konecranes and Cargotec equipment.

Purchasing criteria

9.94 We have also reviewed internal documents about the main relevant purchasing criteria of RS, which provide insight on how the strengths and weaknesses of each competitor relate to these criteria:

(a) [REDACTED].

(b) An unsolicited business development report produced by Bain and provided to Konecranes in November 2020 sets out Bain's view that 'local dealer support [was the] most critical purchase criteria' in the supply of RS. The report quotes from a number of former heads of port operations who support that conclusion, with one stating 'local presence is by far the most critical KPC – it lays the foundation for a deal in the first place, by enabling rapid service of broken equipment to ensure 24/7 operations'. Noting that this was a report prepared by an external consultant, we place less weight upon the conclusions presented than we might if a similar document had been produced by the senior managers of Konecranes, but note that this document is broadly consistent with third-party evidence which suggests that dealer support is an important factor.

The development of competition in the foreseeable future

9.95 Some internal documents also provide insight into the Parties' views on how competition in the supply of RS will develop in future. As with other types of Mobile Equipment, the Parties predict an increasing trend towards electrification, a trend in which they believe they are well placed to succeed.

(a) [REDACTED].

(b) [REDACTED].

(c) The following documents relate to the electrification of RS:

(i) The Cargotec document referred to above at 9.82(b) [REDACTED].

(ii) [REDACTED].

(iii) [REDACTED].

(iv) An email chain within Konecranes shows that Konecranes favourably compares its electric offer against Cargotec. On 28 May 2020, [REDACTED], Senior Vice-President in Lift Trucks reacted to a summary of Cargotec's plans by stating 'We still stay ahead. Remember – at the moment we have BETTER Eco-lifting options than Kalmar has'.

9.96 As above, the internal documents reviewed indicate that the Parties consider one another to be close competitors, in the present market as well as in the future market for electric vehicles.

CMA's provisional conclusion

9.97 The Parties compete closely in the supply of RS, with both having a strong offering (including a reliable product, good quality after-sales support and a wide range of products) and a proven track-record. The only other material competitors in the UK are Hyster and Sany. Therefore, a significant competitor would be removed by the Merger and only two material competitors will impose a constraint on the Parties in relation to UK customers.³³² Further, to the extent that some customers do not consider Sany to be an effective alternative to the Parties, the remaining constraint on the Parties may be particularly limited in some cases. Our provisional conclusion is therefore that the Merger is likely to result in a SLC in the supply of RS.

9.98 The following evidence, in particular, demonstrates that the Parties compete closely in the supply of RS:

(a) The shares of supply indicate that the Parties are the two largest suppliers in Europe, and two of only four significant suppliers in the UK, over 2016 to 2020. Cargotec is the market leader in both geographies and the Merged Entity would have a combined share of supply of [50 – 60]% in the UK and around [70 – 80]% in Europe. Although Konecranes has a lower share in the UK than in Europe,³³³ this share is nonetheless material ([10 – 20]).

³³² We note that, although each merger is considered on its merits, one of the scenarios described in the CMA's guidance, in which the CMA may be more likely to find an SLC, refers to a merger involving 'the market leader and [where] the number of significant competitors is reduced from four to three' (CMA129, paragraph 2.18). Based on the evidence that we have reviewed, we consider that the Merger involves the market leader in RS (Cargotec); that there are fewer than four significant competitors in the market pre-Merger; and that a significant competitor would be removed by the Merger

³³³ As discussed at paragraph 9.18 above, we consider that this is likely to reflect the role that national distributors play in the competitive process in Mobile Equipment and, in particular, Konecranes' issues with its UK distributor Impact and Sany's relative success with its UK distributor Cooper.

- (b) Our bidding analysis shows that the Parties lost more opportunities to each other than to any other supplier in Europe. Sample sizes in the UK are small, but we note that the Parties lost a significant number of opportunities to each other over the period considered.
- (c) Evidence from third parties consistently shows that the Parties are close competitors, and most third parties raised concerns about the loss of competition that would result from the Merger. Qualitative comments from third parties and the qualitative tender documents mostly suggested that both Parties have high quality products, although some third parties commented that the quality of the Parties' equipment had declined relative to competitors.
- (d) Internal documents show that the Parties have similar strengths in Mobile Equipment more broadly in terms of their proven track records, strong sales and after-sales networks, wide product portfolios and product development. Both Parties have plans to increase their market shares in Mobile Equipment in the foreseeable future. Internal documents also show that both Parties are taking active steps to develop electrified Mobile Equipment and are monitoring each other's progress in this area. In relation to RS, specifically, internal documents are also consistent with the Parties competing closely, indicating that the Parties perceive each other as strong competitors within this market, and consider themselves as being among the few suppliers that offer a full range of RS (value, premium, and eco-friendly).

9.99 The evidence shows that Hyster is a strong competitor to the Parties in both the UK and Europe as a whole:

- (a) Shares of supply show that Hyster was the second-largest supplier in the UK over 2016 to 2020 on a volume basis (third-largest on a revenue basis) and the third-largest supplier in Europe over the same period.
- (b) This is consistent with the results of our bidding analysis, which show that, after each other, Hyster accounted for the next largest proportion of the Parties' lost opportunities in Europe. In the UK, both Parties lost a significant number of opportunities to Hyster.
- (c) Third-party evidence and the qualitative tender documents that we reviewed also show that Hyster is a strong competitor. Several third parties indicated that Hyster offers competitive prices and high product quality, although some others considered that it had low product quality.
- (d) The internal documents that we reviewed confirmed that the Parties consider Hyster as one of their closest competitors in Mobile Equipment

generally and in RS specifically. Both Parties' documents noted that Hyster is price competitive and offered a wide product range, although we note that it does not offer the full product range (as both Parties do) and Cargotec [REDACTED].

9.100 The evidence indicates that Sany is generally a material competitor in the UK, although not for some customers, but is not a material competitor in Europe as a whole. It shows that Sany has grown in the UK over recent years but does not suggest that the constraint from Sany will materially change going forward.

- (a) Shares of supply show that Sany has a [20 – 30]% share of supply in the UK over 2016 to 2020, but is much smaller in Europe ([0 – 5]% share).³³⁴ Sany had much higher UK sales in 2019 and 2020 as compared with previous years, although we note that 2019 was an exceptionally good year for Sany. Nonetheless, Sany seems to now be a more significant competitor in the UK than its share of [20 – 30]% over 2016 to 2020 would suggest.
- (b) While UK sample sizes are small, UK bidding data is consistent with shares of supply in suggesting that Sany is a material competitor to the Parties in the UK. Our bidding analysis confirms that Sany is not a strong competitor in Europe as a whole.
- (c) Third-party views on the strength of Sany as a competitor to the Parties were mixed, with third parties noting its low prices but also expressing some concerns regarding the quality of its equipment and after-sales service. This is consistent with the qualitative tender documents that we reviewed. This evidence suggests that Sany may not be a strong constraint on the Parties in relation to customers that place less weight on price and more on quality.
- (d) Internal documents relating to Mobile Equipment in general show that the Parties consider Sany as a material competitor on a global basis, while also suggesting that Sany has not yet established itself in Mobile Equipment in Europe. Internal documents show that the Parties perceive Sany as a threat in RS (including in the UK, through its relationship with Cooper) and recognise Sany's competitive prices. However, these documents also highlight the weaknesses of Sany's Mobile Equipment offer, in general, and of its RS offer in Europe and in the UK, [REDACTED].

³³⁴ We consider that this difference is likely to reflect the role of its national distributor (Cooper).

(e) The evidence available to us does not support that Sany's growing position in the UK will necessarily lead to material future additional growth for Sany in the UK or Europe. We note that Sany has been active in Europe since at least 2010 without gaining a significant share of supply in Europe (see paragraph 9.23).

9.101 The evidence indicates that no other suppliers compete closely with the Parties for UK customers:

(a) CVS has a [5 – 10]% share of supply in Europe, and was a material competitor to the Parties in Europe based on bidding data, but it did not make any sales in the UK in the period 2016 to 2020.³³⁵ The lack of sales by CVS in the UK does not in itself rule out that it could compete for UK customers, but other evidence (including from third parties and internal documents) consistently indicates that it does not impose a material constraint in relation to UK customers

(b) Other suppliers in the market (Liebherr, FTMH, and Linde) exert, at most, a limited competitive constraint on the Parties in the UK and Europe. Shares of supply show that these suppliers made no, or very limited, sales in Europe (including the UK) during 2016 to 2020, while our bidding analysis shows that the Parties did not lose many opportunities to these suppliers. Third-party evidence and internal documents indicate that these are not material competitors to the Parties.

9.102 As discussed below (from paragraph 9.264), the evidence that we reviewed in relation to entry and expansion does not suggest that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of HDFLT

Parties' views

9.103 The Parties submitted that they currently compete against multiple global competitors (such as Sany, Taylor and Svetruck) that offer a wide range of HDFLT with different lifting capacities. They also submitted that there are a large number of well-established suppliers that could easily expand their presence in the UK (such as Heli, Hangzhou-Hangcha Forklift, Hyundai and

³³⁵ We note that CVS does not have a UK-based distributor.

Doosan), and a long ‘tail’ of smaller competitors that will constrain the Merged Entity.³³⁶

9.104 The Parties further submitted that barriers to entry and expansion in HDFLT are low due to the large number of distributors that can facilitate market access (the Parties are aware of at least 17 ‘all-brand’ distributors) and the relative ease with which production capacity can be switched between different types of FLT.³³⁷

9.105 The Parties submitted that the large number of OEMs and distributors, combined with the commoditised nature of FLT, leads to low barriers to switching for customers. As evidence of this, the Parties cited various examples of their customers recently switching to rival suppliers.³³⁸

9.106 In response to the CMA’s working paper, the Parties made a number of further submissions in relation to HDFLT:

- (a) If Konecranes is considered a credible competitor based on UK share of supply estimates, Linde and Svertruck must also be considered credible constraints.
- (b) Third-party evidence indicates that a number of other competitors are ranked as close alternatives; for example, Sany was ranked as a close alternative by one quarter of respondents.
- (c) Third-party evidence does not support the position that Hyster is the Parties’ only meaningful competitor.

Shares of supply

9.107 Chapter 6 provides an overview of our approach to shares of supply and the weight that we place on this evidence. We note that product differentiation is more pronounced in HDFLT (with some suppliers only offering HDFLT with lifting capabilities towards the lower end of the >10 tonne range) as compared with other Mobile Equipment markets. Therefore, although still useful as an initial indicator of closeness of competition, we place slightly less weight on shares of supply (and more weight on other evidence, including the bidding analysis below) in HDFLT as compared with other Mobile Equipment markets.

³³⁶ The Parties’ Response to Issues Statement, paragraph 7.18.

³³⁷ The Parties’ Response to Issues Statement, paragraphs 7.19–7.20.

³³⁸ The Parties’ Response to Issues Statement, paragraph 7.19.

- 9.108 We have constructed our estimates of the shares of supply using data provided by the manufacturers (or their distributors) themselves and, where this is not available, the Parties' estimates of their competitors' sales.³³⁹
- 9.109 Table 32 shows our estimates of the shares of supply based on the volumes sold by each supplier (either directly to a customer or to a distributor) for HDFLT over the period 2016 to 2020 for three different geographic areas: UK, Europe, and worldwide (excluding China). As set out in Chapter 5, we provisionally conclude that the relevant geographic market is no wider than Europe-wide, with some important UK-specific aspects of competition that affect the strength of competitors for some UK customers. As such, we consider that shares of supply in both the UK and Europe as a whole are relevant to our competitive assessment.
- (a) Within the UK, the Parties were two of the three largest suppliers, and the Merged Entity would have a combined share of supply of [30 – 40]%. Hyster ([20 – 30]%) is currently the largest supplier in the market and Linde is the fourth largest with a share of [10 – 20]%. There are many smaller suppliers operating in the market; in addition to Hyundai (with a share of [0 – 5]%), Svetruck ([0 – 5]%), and Sany ([0 – 5]%), other suppliers accounted for a combined [10 – 20]% share of supply.
- (b) Within Europe, the Parties were two of the three largest suppliers over the last five years, and the Merged Entity would have a combined share of supply of [40 – 50]%. Hyster was the second largest supplier ([10 – 20]%) behind Cargotec and Svetruck was fourth with a [10 – 20]% share. In addition to Linde ([5 – 10]%), the other smaller suppliers (including Hyundai, Sany and CVS) accounted for a combined [10 – 20]% share of supply.
- (c) On a worldwide basis (excluding China), the Merged Entity would have a combined share of supply of [20 – 30]%. The Parties' combined share of worldwide (excluding China) sales is much lower than their share of UK and European sales primarily because of the presence of other competitors. In particular Taylor, a supplier that operates in North America, has a [5 – 10]% share of supply on a worldwide (excluding China) basis.

³³⁹ See Appendix B for further detail on our methodology.

Table 32: Shares of supply of HDFLT based on sales volumes, 2016–20

Volume in Units

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[x]	[20 – 30]%	[x]	[30 – 40]%	[x]	[10 – 20]%
Konecranes	[x]	[10 – 20]%	[x]	[10 – 20]%	[x]	[5 - 10]%
Combined	[x]	[30 – 40]%	[x]	[40 – 50]%	[x]	[20 – 30]%
Hyster	[x]	[20 – 30]%	[x]	[10 – 20]%	[x]	[20 – 30]%
Linde	[x]	[10 – 20]%	[x]	[5 - 10]%	[x]	[0 – 5]%
Hyundai	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[5 –10]%
Svetruck	[x]	[0 – 5]%	[x]	[10 – 20]%	[x]	[0 – 5]%
Sany	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[0 – 5]%
CVS	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[0 – 5]%
Taylor	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[5 - 10]%
Others	[x]	[10 – 20]%	[x]	[10 – 20]%	[x]	[30 – 40]%
Total	[x]	100%	[x]	100%	[x]	100%

Source: [x]

9.110 Table 33 shows the same shares of supply based on revenue rather than delivery volumes. The shares are similar to those in Table 32 - the Merged Entity would have a [30 – 40]% share of supply in the UK and [50 – 60]% in Europe.

Table 33: Shares of supply of HDFLT based on revenue, 2016–20

Revenue in €m

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Revenue	Share	Revenue	Share	Revenue	Share
Cargotec	[x]	[20 – 30]%	[x]	[30 – 40]%	[x]	[10 – 20]%
Konecranes	[x]	[10 – 20]%	[x]	[10 – 20]%	[x]	[5 - 10]%
Combined	[x]	[30 – 40]%	[x]	[50 – 60]%	[x]	[20 – 30]%
Hyster	[x]	[20 – 30]%	[x]	[10 – 20]%	[x]	[10 – 20]%
Linde	[x]	[10 – 20]%	[x]	[5 - 10]%	[x]	[0 – 5]%
Hyundai	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[5 –10]%
Svetruck	[x]	[0 – 5]%	[x]	[10 – 20]%	[x]	[0 – 5]%
Sany	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[0 – 5]%
CVS	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[0 – 5]%
Taylor	[x]	[0 – 5]%	[x]	[0 – 5]%	[x]	[10 – 20]%
Others	[x]	[10 – 20]%	[x]	[10 – 20]%	[x]	[30 – 40]%
Total	[x]	100%	[x]	100%	[x]	100%

Source: [x]

- 9.111 Overall, the shares of supply indicate that the Parties are close competitors in the supply of HDFLT in both the UK and Europe, being two of the four largest suppliers. The Merged Entity would have a combined share of supply of [30 – 40%] in the UK and [40 – 50%] in Europe, on a volume basis. The shares of supply also suggest that Hyster is a strong competitor to the Parties in the UK, where it has a share of [20 – 30%], and Europe, where it has a share of [10 – 20%]. Svetruck has [10 – 20]% share of supply in Europe, but is much smaller in the UK ([0 – 5]%), while for Linde it is the opposite – it has a share of supply of [10 – 20]% in the UK compared with [5 – 10]% in Europe).
- 9.112 We note that Linde only sells HDFLT with lifting capacities between 10 and 18 tonnes, so does not compete with the Parties at higher lifting capacities.
- 9.113 There are a number of other suppliers of HDFLT (including Hyundai) that together account for a sizeable share of the market but have low individual shares. We consider that the limited sales by these suppliers does not in itself mean that they could not effectively compete with the Parties. However, in the round, the other evidence that we review below is consistent with these suppliers not competing closely with the Parties.
- 9.114 Consistent with the market definition set out in Chapter 5, the shares of supply above relate to HDFLT (ie FLT with lifting capacities greater than 10 tonnes). However, based on data submitted by the Parties, their shares are higher still when considering the heavier end of the HDFLT market. In particular, on a volume basis, the Parties' combined share of supply for HDFLT with lifting capacities of greater than 25 tonnes is [40 – 50%] and [60 – 70%] for the UK and Europe respectively over 2016 to 2020; as discussed at paragraph 9.111, their combined share of supply for all HDFLT is [30 – 40%] in the UK and [40 – 50%] in Europe.

Bidding analysis

- 9.115 Chapter 6 provides an overview of our approach to the bidding analysis and the weight that we place on this evidence.

Quantitative analysis of Parties' data

- 9.116 In this section, we present the results of our quantitative analysis of the bidding data provided by the Parties.³⁴⁰ As explained above, our analysis considers loss ratios, which we consider as a useful measure of the closeness

³⁴⁰ We discuss this data further in appendix C.

of competition between the Parties and their competitors (see paragraph 7.22).

9.117 As set out in Chapter 5 we provisionally conclude that the relevant geographic market is no wider than Europe-wide, with some important UK-specific aspects of competition that affect the strength of competitors for some UK customers. As such, we consider that loss ratios in both the UK and Europe as a whole are relevant to our competitive assessment.

9.118 Table 34 below shows HDFLT loss ratios for Cargotec in the UK from 2016 to May 2021. This indicates that Cargotec lost the most opportunities to Konecranes in the UK based on the number of opportunities and value of the opportunities lost, closely followed by Hyster. Based on the number of units lost, Cargotec lost the most opportunities to Hyster followed by Konecranes. The loss ratios show that Linde was the next closest competitor to Cargotec in the UK, with loss ratios around [REDACTED]%. Svetruck, Sany and Doosan were the other known competitors to which Cargotec lost opportunities in the UK, each with loss ratios in the region of [REDACTED]%.

Table 34: HDFLT loss ratios, UK, Cargotec, 2016 to May 2021

Company	UK					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	Number	Percentage
Konecranes	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hyster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Linde	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Svetruck	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sany	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Doosan	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Unknown	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED]

Note: As explained in Appendix C, we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices.

9.119 Table 35 below shows HDFLT loss ratios for Cargotec in Europe from 2016 to May 2021. This indicates that around [REDACTED]% of the opportunities lost by Cargotec in Europe were awarded to Konecranes and around [REDACTED]% were awarded to Hyster (across all measures). Linde and Svetruck were the next closest competitors to Cargotec according to the loss ratios, accounting for around [REDACTED]% of lost opportunities. There were no other competitors that

individually accounted for more than [X]% of the opportunities that Cargotec lost.³⁴¹

Table 35: HDFLT loss ratios, Europe (EEA + UK), Cargotec, 2016 to May 2021

Company	Europe (EEA + UK)					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	€m	Percentage
Konecranes	[X]	[X]	[X]	[X]	[X]	[X]
Hyster	[X]	[X]	[X]	[X]	[X]	[X]
Linde	[X]	[X]	[X]	[X]	[X]	[X]
Svetruck	[X]	[X]	[X]	[X]	[X]	[X]
Doosan	[X]	[X]	[X]	[X]	[X]	[X]
CVS	[X]	[X]	[X]	[X]	[X]	[X]
Sany	[X]	[X]	[X]	[X]	[X]	[X]
Unknown	[X]	[X]	[X]	[X]	[X]	[X]
Other	[X]	[X]	[X]	[X]	[X]	[X]
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X]

Note: As explained in Appendix C, we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices.

9.120 Table 36 below shows HDFLT loss ratios for Konecranes in the UK from 2016 to May 2021. This indicates that Cargotec was the competitor to which Konecranes lost most opportunities in the UK (loss ratios of around [X]%), followed by Svetruck and Hyster with loss ratios of [X]% and [X]% respectively based on the number of opportunities lost. Linde and Sany each accounted for [X]% of the number of opportunities lost by Konecranes, but Linde accounted for [X]% of the total value lost (the highest proportion based on value) compared with [X]% for Sany.

³⁴¹ Note that for [X]% of the HDFLT tenders lost by Cargotec in Europe between 2016 and May 2021 (accounting for around [X]% of units and value) the winner was unknown.

Table 36: HDFLT loss ratios, UK, Konecranes, 2016 to May 2021

<i>UK</i>				
Company	<i>Number of opportunities</i>		<i>Value (revenue in €m)</i>	
	<i>Number</i>	<i>Percentage</i>	<i>€m</i>	<i>Percentage</i>
Cargotec	[X]	[X]	[X]	[X]
Svetruck	[X]	[X]	[X]	[X]
Hyster	[X]	[X]	[X]	[X]
Sany	[X]	[X]	[X]	[X]
Linde	[X]	[X]	[X]	[X]
Doosan	[X]	[X]	[X]	[X]
Unknown	[X]	[X]	[X]	[X]
Total	[X]	100.0%	[X]	100.0%

Source: [X]

Notes: [X]

As explained in Appendix C, we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices.

9.121 Table 37 below shows HDFLT loss ratios for Konecranes in Europe from 2016 to May 2021. This indicates that Cargotec is the competitor to which Konecranes lost the most opportunities in Europe, with loss ratios of [X]%. Hyster was the only other competitor to account for more than 10% of lost opportunities. The loss ratios show that Svetruck and Linde were the next closest competitors to Konecranes in Europe, with loss ratios of [X]% each. There were no other competitors that individually accounted for more than [X]% of the opportunities that Konecranes lost (except Doosan on the basis of value).

Table 37: HDFLT loss ratios, Europe (EEA + UK), Konecranes, 2016 to May 2021

<i>Europe (EEA + UK)</i>				
Company	<i>Number of opportunities</i>		<i>Value (revenue in €m)</i>	
	<i>Number</i>	<i>Percentage</i>	<i>€m</i>	<i>Percentage</i>
Cargotec	[X]	[X]	[X]	[X]
Hyster	[X]	[X]	[X]	[X]
Svetruck	[X]	[X]	[X]	[X]
Linde	[X]	[X]	[X]	[X]
CVS	[X]	[X]	[X]	[X]
Sany	[X]	[X]	[X]	[X]
Doosan	[X]	[X]	[X]	[X]
Hyundai	[X]	[X]	[X]	[X]
Unknown	[X]	[X]	[X]	[X]
Other	[X]	[X]	[X]	[X]
Total	[X]	100%	[X]	100%

Source: CMA analysis of Parties' data.

Notes: [REDACTED]
As explained in Appendix C we have made adjustments to the recorded values of a small number of opportunities that we consider outliers based on their high implied unit prices. [REDACTED]

9.122 Overall, our bidding analysis indicates that the Parties compete closely; in both Europe and the UK, Konecranes lost more opportunities to Cargotec (around [REDACTED]%) than any other competitor, and Cargotec lost more opportunities to Konecranes (around [REDACTED]%) than any other competitor.

9.123 The loss ratios show that Hyster is the strongest third-party constraint on the Parties in Europe and in the UK it is an equally strong constraint on Cargotec as Konecranes is. Svetruck and Linde are the only other material constraints on a European basis according to the loss ratios. They are also material constraints in the UK (Svetruck accounted for more of the opportunities lost by Konecranes in the UK than Hyster). Sany and Doosan impose some constraint on the Parties in the UK, but less so in Europe.

9.124 Overall, these findings are broadly consistent with the shares of supply presented above.

Qualitative tender case studies

9.125 We have reviewed documents provided by customers that detail the participants and outcomes of two recent HDFLT tenders. We place limited weight on the analysis of these specific tenders (which are better considered as part of the shares of supply and bidding data considered above), but we have taken account of the insights that they provide on customer perceptions of the strengths and weaknesses of different suppliers.

9.126 One industrial customer [REDACTED] provided a document that summarises the scoring and pricing of participants in a tender for 10 tonne and 12 tonne FLT in 2019. There were [REDACTED] participants in this tender [REDACTED] and it was awarded to Cargotec.

9.127 [REDACTED].

9.128 [REDACTED].

9.129 [REDACTED]

9.130 A port customer provided a tender evaluation summary related to a tender for one 12 tonne FLT and one 16 tonne FLT in 2019. There were [REDACTED] participants in this tender ([REDACTED]), and it was awarded to Cargotec.

9.131 [REDACTED].

- 9.132 The summary indicates that all three participants passed the technical and contractual assessments. [REDACTED].
- 9.133 In both tenders [REDACTED] was the closest competitor to Cargotec. Price was also an important criterion in both tenders, but more so in the latter example. Service quality was a relevant criterion in the first example but did not appear to be a factor in the second example.

Third-party evidence

Customer questionnaire

- 9.134 We sent questionnaires to 25 of the Parties' HDFLT customers and received responses from 13 customers [REDACTED].³⁴²
- 9.135 We asked customers of the Parties to rate the importance of various criteria in their purchasing decisions for HDFLT (scores out of 5, where 5 is the most important).³⁴³ The responses indicated that:
- (a) Equipment reliability was considered very important, with the twelve respondents to this question [REDACTED] all scoring it either 4 or 5.
 - (b) Purchase price, running costs, and efficiency were also very important for most respondents - for each criterion, eleven out of the twelve respondents scored these either 4 or 5.
 - (c) The strength of local after-sales presence was also important, with ten out of twelve respondents scoring it either 4 or 5 (the other two scored this criterion a 3).
 - (d) Automation and interoperability were generally not scored as important criteria - for each criterion, at least eight out of twelve respondents scored it 3 or below.
- 9.136 We asked customers of the Parties to rank the alternative suppliers that were considered in their most recent purchase of HDFLT in the UK.³⁴⁴ We received

³⁴² See Appendix D for further detail on our methodology.

³⁴³ Question wording: *When thinking about purchasing HDFLT, please score the following factors according to how important they are to your choice of supplier. Please assign a score from 1-5 where 5 = very important and 1 = not important at all (more than one factor can have the same score). The factors listed were: differences in equipment reliability, differences in automation/assistive technology features, differences in purchase price, differences in running costs, differences in strength of local aftersales presence (servicing, maintenance, spare parts), differences in efficiency/environmental performance, degree of interoperability with other equipment, and already having installed base of equipment from a particular supplier.*

³⁴⁴ Question wording: *Thinking about when you most recently purchased HDFLT from [Party] in the UK, what were the main alternative suppliers that you considered? Please list the main alternatives and confirm how you ranked these alternative suppliers (where 1 = the best alternative, 2 = the next best alternative and so on).*

responses to this question from seven customers of the Parties and all of these had most recently purchased from Cargotec. Five of the respondents had most recently purchased from Cargotec in 2018 or after, and one respondent (customer F) had not recently purchased from Cargotec.³⁴⁵ These responses are summarised in the second column of Table 38 below.

Table 38: Customer questionnaire responses, HDFLT

<i>Customer</i>	<i>Alternative suppliers at most recent purchase</i>	<i>Expected ranking in future purchase</i>
Customer A	<ol style="list-style-type: none"> 1. Konecranes 2. Linde 3. Hyster 	<ol style="list-style-type: none"> 1. Konecranes 2. Cargotec 3. Sany 4. Linde 5. Hyster
Customer B	No other suppliers considered due to existing relationship	<ol style="list-style-type: none"> 1. Cargotec 2. TCM 3. Linde
Customer C	N/A	<ol style="list-style-type: none"> 1. Cargotec 2. Linde 3. HLT
Customer D	<ol style="list-style-type: none"> 1. Konecranes 	<ol style="list-style-type: none"> 1. Cargotec 2. Konecranes 2. Svetruck 2. Linde
Customer E	<ol style="list-style-type: none"> 1. Linde 2. Konecranes 3. Hyster 	<ol style="list-style-type: none"> 1. Linde 1. Konecranes 1. Hyster 1. Cargotec
Customer F [†]	<ul style="list-style-type: none"> • Konecranes • Hyster • CVS 	<ul style="list-style-type: none"> • Cargotec • Konecranes • Hyster • CVS
Customer G	<ol style="list-style-type: none"> 1. Linde 2. Konecranes 3. Hyster 	<ol style="list-style-type: none"> 1. Cargotec 2. Linde 3. Hyster 4. Konecranes 4. Liebherr 6. ZPMC
Customer H	N/A	<ol style="list-style-type: none"> 1. Cargotec 2. Sany 3. Konecranes
Customer I [‡]	N/A	<ul style="list-style-type: none"> • Hyster • Konecranes • Linde • Cargotec
Customer J	<ol style="list-style-type: none"> 1. Linde 1. Hyster 	N/A

³⁴⁵ The remaining respondent confirmed that it leased HDFLT from Cargotec but did not provide the date on which this lease started.

<i>Customer</i>	<i>Alternative suppliers at most recent purchase</i>	<i>Expected ranking in future purchase</i>
	3. STILL	

Source: [X].

Notes: Where the customer named a distributor, we have recorded the name of the OEM that supplies the products to the distributor. Some customers ranked suppliers as equally close alternatives.

† Customer F did not provide any rankings for the suppliers that it listed. It has not recently purchased HDFLT from Cargotec.

‡Customer I did not provide any rankings for the suppliers that it listed.

9.137 Five out of the six respondents that considered other suppliers at their most recent purchase named Konecranes - four ranked it as either the first or second closest alternative, while the other did not provide a ranking. Regarding other suppliers, Linde was also ranked as either the first or second alternative by four respondents. Hyster was ranked as the third alternative by three respondents (which was the lowest alternative given by all of these customers), the joint first alternative by one respondent, and listed without a ranking by another. STILL and CVS were the only other suppliers mentioned, each by one respondent.

9.138 We also asked customers of the Parties to provide an expected ranking of suppliers if they were to purchase HDFLT in the UK within the next year.³⁴⁶ We received responses to this question from nine customers of the Parties and these responses are summarised in the third column of Table 38 above. All respondents indicated that they felt well informed about the market.³⁴⁷

9.139 Six of the nine respondents expected Cargotec to be the leading supplier (either individually or jointly) in a future hypothetical purchase, one expected Cargotec to rank second, and the other two did not provide rankings. Konecranes was named by seven respondents, of which two ranked Konecranes first (either individually or jointly), one ranked it joint second, one ranked it third, one ranked it joint fourth, and two did not provide a ranking.

9.140 Regarding other suppliers, seven customers expected Linde to compete for the purchase, although only one expected it be the (joint) winning supplier. Hyster and Sany were mentioned by five and two customers respectively, with a range of expected rankings. Svetruck, TCM, HLT, CVS and ZPMC each received one mention as non-leading suppliers.

9.141 Overall, the responses above indicate that the Parties are among each other's close competitors and will remain so in the near future. Konecranes was

³⁴⁶ Question wording: *Suppose that you were planning to purchase HDFLT in the UK within the next year. What suppliers would you expect to consider? Please list the full set of suppliers that you would expect to consider (including [Party] if applicable) and provide your expected ranking of the suppliers (where 1 = the winner, 2 = the best alternative and so on).*

³⁴⁷ Question wording: *Have you recently monitored and/or tested the market for HDFLT and to what extent do you feel well-informed about suppliers' strengths and weaknesses as they exist today?*

commonly listed as one of the main alternatives to Cargotec in recent purchases and both Parties were named by most customers as two of the main suppliers that they would consider in a future purchase. Of the other suppliers, Linde was the most frequently mentioned as a strong competitor in both recent and future purchases. Hyster was also commonly mentioned as a viable competitor in both recent and future purchases, although it was not always ranked highly. A range of other suppliers (including Sany, Svetruck and ZPMC) were not generally regarded by UK customers as strong competitors for either past or future purchases. Hyundai and Doosan were not listed by the respondents to either question.

Competitor questionnaire

9.142 We sent questionnaires to 13 HDFLT competitors (including distributors) of the Parties and received responses from five competitors [redacted].³⁴⁸ We note that two of these responses covered the same brand of equipment (ie, we heard from the manufacturer and its distributor).

9.143 We asked these competitors to list the suppliers that they considered their closest competitors in the supply of HDFLT in the UK.³⁴⁹ The responses are summarised in Table 39 below.

Table 39: Competitor questionnaire responses, HDFLT

<i>Competitor</i>	<i>Suppliers that are considered as closest competitors in the supply of HDFLT</i>
Competitor A	<ol style="list-style-type: none"> 1. Cargotec 2. Konecranes 3. Svetruck 4. Hyundai 5. Sany
Competitor B	<ol style="list-style-type: none"> 1. Cargotec 2. Hyundai 3. Konecranes 4. Svetruck 5. Linde
Competitor C	<ol style="list-style-type: none"> 1. Hyster 2. Cargotec 3. Konecranes 4. Svetruck
Competitor D	<ol style="list-style-type: none"> 1. Cargotec 2. Konecranes 2. Hyster 4. Doosan 4. Hyundai

³⁴⁸ See Appendix D for further detail on our methodology.

³⁴⁹ Question wording: *Please list your main competitors in the supply of HDFLT to UK sites. Please rank these competitors according to how close a competitor they are to you (where 1 = closest competitor, 2 = next closest competitor, and so on).*

Competitor

Suppliers that are considered as closest competitors in the supply of HDFLT

6. Mitsubishi

Competitor E

1. Hyster
2. Cargotec

Source: [REDACTED]

Note: Competitors sometimes listed two or more suppliers as being equally close competitors to themselves.

9.144 All respondents listed Cargotec as one of their two closest competitors and most respondents listed Konecranes as either their second or third closest competitor. Hyster, Svetruck, and Hyundai were the most commonly mentioned suppliers other than the Parties, with Hyster generally considered as a closer competitor than Svetruck and Hyundai by the respondents. Sany, Linde, Doosan, and Mitsubishi were each mentioned once.

9.145 We also asked competitors if they expected the rankings to differ in two years.³⁵⁰ The responses indicated that four competitors do not expect any changes from the rankings described above; however, competitor A expected Sany to become its second closest competitor (behind the Merged Entity), followed by Hyundai and Svetruck.

9.146 A distributor also responded to our questionnaire. It considered that Cargotec was its closest competitor, followed by Hyster and then Svetruck. It did not expect this ordering to change in two years.

9.147 In response to a question from the CMA, Hyundai said that it offers HDFLT with lifting capacities of greater than 20 tonnes in the UK and Europe, [REDACTED].³⁵¹ This suggests that Hyundai is more focused on the lighter end of the HDFLT market, as compared with the Parties (the Parties' data shows that [REDACTED]% of Cargotec's and [REDACTED]% of Konecranes' HDFLT sales in Europe (including the UK) over 2016 to 2020 came from HDFLT with a lifting capacity of at least 25 tonnes).

9.148 Overall, the responses from competitors (and Impact) suggest that the Parties are close competitors. Of the other suppliers, Hyster was consistently ranked as a close competitor to the respondents. Svetruck and Hyundai were the other most commonly listed suppliers. Sany, Doosan, and Linde were not considered as close competitors to the respondents. For Linde, this is in

³⁵⁰ Question wording: *To what extent do you expect the main competitors that you face and their strengths and weaknesses to change over the next two years? Please use the table below to list and rank the main competitors that you would expect to face in the supply of HDFLT to UK sites in two years' time.*

³⁵¹ Question wording: *Do you supply FLT with a lifting capacity of at least 20 tonnes to the UK and Europe? If so, approximately, what proportion of your sales of HDFLT in the UK and Europe are FLT with a lifting capacity of at least 20 tonnes?.*

contrast to the responses from customers, who generally considered it a strong competitor.

Qualitative comments

9.149 We received qualitative comments from third parties in relation to the closeness of competition between the Parties in the supply of HDFLT. Most of these noted that the Parties' offerings are broadly similar, including in terms of the types of customer that they supply.

- (a) One customer stated that the 'combination of pricing and quality makes Cargotec and Konecranes somewhat far off from competitors in [...] heavy FLT'.
- (b) Another customer noted that it in a recent purchase of HDFLT 'Konecranes made an offer comparable to Cargotec'.
- (c) The UK distributor for [X], considered that, in relation to Mobile Equipment generally, the Parties' products were higher quality than those of other competitors and stated that [X]. This distributor further considered that the Parties are among the 'main three FLT manufacturers for terminals in the UK', stating that the products offered by the Parties are 'high-value, high-performance, and high-quality'.
- (d) A distributor considered that Cargotec was the 'market leader' in all Mobile Equipment markets, noting that it is 'aggressive on price' and that its 'product is very good'. This distributor also submitted that the Parties 'are very similar in terms of design, technical content and price' in relation to HDFLT specifically.
- (e) A distributor said that Konecranes and Cargotec have focused on the heavy end of the market (lifting capacities greater than 20 tonnes) and noted that there are fewer competitors at this end of the market compared with the lighter end.

9.150 However, one competitor noted that it 'competes mainly with Cargotec' and that, while it still considers Konecranes as a competitor, Konecranes has lost share following its change of distributor (from Cooper to Impact) such that it is now 'not present as much in FLT in the UK'.

9.151 Overall, these views are supportive of the evidence from the customer and competitor questionnaires in suggesting that the Parties are close competitors in the supply of HDFLT.

- 9.152 We also received qualitative comments from third parties in relation to the competitive constraints faced by the Parties. In general, Hyster was considered as a strong competitor.
- (a) One customer considered that Hyster is one of the ‘credible alternatives to Konecranes and Cargotec in heavy FLT’ but did not consider Hyster’s ‘pricing to be competitive’.
 - (b) Another customer noted that, in relation to a [REDACTED], Briggs (a distributor for Hyster) scored highly against all the tender criteria, especially pricing. The customer stated that pricing was particularly important for this tender given that the framework covered a 10-year period. This customer further noted that suppliers with a wide range of Mobile Equipment (such as Briggs) are favoured in tenders as the customer finds it easier to manage a single contract rather than multiple contracts with different suppliers.
 - (c) One distributor considered that the main three FLT manufacturers for terminals in the UK are Cargotec, Konecranes and Hyster, and noted that Hyster offers ‘high-value, high-performance, and high-quality’ products.
 - (d) One competitor that ranked Hyster as its closest competitor in its questionnaire response stated that Hyster’s ‘main strengths are the distribution network and the price’.
- 9.153 On the other hand, one customer stated in relation to Hyster HDFLT that were ‘questions about quality and reliability’.
- 9.154 One of the customers above [REDACTED] also considered Linde as one of the ‘credible alternatives to Konecranes and Cargotec in heavy FLT’. However, [REDACTED] noted that it has so far struggled to supply HDFLT to UK ports due to the reliance on ‘word of mouth’ and a preference to use suppliers that also supply other CHE to the port (such as the Parties).
- 9.155 We also received a range of comments in relation to Asian suppliers of HDFLT (Hyundai, Doosan, and Sany). Views on Hyundai and Doosan were mostly positive with regards to their ability to compete for HDFLT with a lifting capacity between 10 and 20 tonnes, whereas these players were not identified as being competitive at heavier lifting capacities. Views on Sany were mixed; qualitative comments suggest that Sany often has a commercially attractive offering but can have lower product and/or service quality than other suppliers in the market.
- (a) The customer that had tendered in [REDACTED] was aware of Cooper (a distributor for Sany) but considered that Cooper would be less likely to meet its requirements.

- (b) One distributor noted that Sany is generally quite small in the UK and, along with other Chinese suppliers, doesn't get much repeat business, in part due to low quality support in relation to spare parts.
- (c) One competitor noted Hyundai as a strong competitor for FLT with a lifting capacity of less than 20 tonnes. It further noted that Sany has been able to gain share (largely at the expense of Konecranes) since starting to use Cooper as a distributor.
- (d) Another distributor noted that the 10 to 16 tonnes segment is quite competitive, and that it has been priced out of this segment due to strong competition from the Parties and new suppliers from Asia. Such suppliers include Hyundai and Doosan, which this distributor considered had strong brands and good dealer coverage. It noted that Sany offers attractive pricing but has a 'lower quality' product.
- (e) A third distributor submitted that Sany and Hyundai offer 'commercially attractive' products, but also noted that Sany has a 'limited product offering' while Hyundai has a 'low service representation'. It added that Hyundai is a competitor for HDFLT with lifting capacities of 16 to 20 tonnes but not at heavier lifting capacities.

9.156 Two of these third parties further suggested that Svetruck is only suitable for customers with specialised requirements and/or willing to pay a high price.

- (a) One distributor noted that Svetruck has a strong brand and high-quality product but is 'commercially unattractive'.
- (b) One competitor noted that Svetruck focusses on 'specialised heavy FLT'.

9.157 This was supported by a customer, which noted in its questionnaire response that Svetruck 'likely [had the] best quality and functionality' but with a 'higher price'.

9.158 Overall, the comments from third parties indicate that Hyster is generally seen as a strong competitor to the Parties in the UK, supporting the evidence from the questionnaire responses. Among other suppliers, Hyundai and Doosan received several positive mentions (but were not identified as being competitive at lifting capacities greater than 20 tonnes), while third-party views on Sany were mixed. One customer considered Linde as a strong competitor to the Parties. Svetruck was not often mentioned, and it was noted that it may not be suitable for all customers.

Merger impact

- 9.159 We asked customers for their views on any positive or negative impacts of the Merger on the supply of HDFLT.³⁵² Seven of the thirteen respondents identified both positive and negative impacts, three only identified positive impacts, and three did not identify any specific impacts (either positive or negative).
- 9.160 The positive impacts mostly focussed on the potential for increased innovation and the benefits that would accrue from the sharing of technical knowledge and expertise. Several customers also expected the Merger to result in wider product offerings, and one noted an ‘expanded service network’ as a positive impact.
- 9.161 The negative impacts primarily related to the loss of competition and the potential negative effects that this could have on prices, innovation, and purchase terms. One customer considered that such effects are ‘mitigated by our competitive tendering processes’.
- 9.162 We asked competitors whether they expected the Merger to impact competition for the supply of HDFLT in the UK.³⁵³ Of the six responses from competitors, one considered that the Merger would have no impact on competition and four considered that the Merger would have an impact. One of these respondents noted that the impact would be less than for RS and ECH due to more choice for HDLFT. The other competitor considered that the Merger would not have an impact for FLT with lifting capacities lower than 25 tonnes due to the competition provided by ‘cheap Korean and Japanese producers such as Doosan and Hyundai’, but could have an impact for FLT with lifting capacities greater than 25 tonnes due to a more limited number of suppliers.
- 9.163 We also received some more detailed comments regarding the impact of the Merger on the supply of HDFLT. Two of these third parties thought that the Merger would have a negative impact.
- (a) One competitor submitted that ‘unless the merger will free access to [a] distribution network to other brands, the alternative options for customers will become restricted’.

³⁵² Question wording: *Cargotec and Konecranes are proposing to merge. What positive impacts (if any) would you expect the merger to have in relation to HDFLT? What negative impacts (if any) would you expect the merger to have in relation to HDFLT?*

³⁵³ Question wording: *Cargotec and Konecranes are proposing to merge. Do you expect the merger to impact competition for the supply of HDFLT in relation to UK customers? If ‘yes’, please describe the impact(s) on competition that you would expect as a result of the merger and explain your reasoning.*

(b) One distributor submitted that the Merged Entity could have ‘a dominant offering in the marketplace’. This distributor further noted that the Parties both have a ‘strong product offering’ that the Merged Entity could use ‘to offer a one stop shop’.

9.164 Another two thought that the Merger would have limited impact in the supply of HDFLT.

(a) One competitor did not think that the Merger would have an impact on it as it operates in a different (‘premium’) segment, explaining that its HDFLT could be considered ‘premium’ due to their long lifespan and greater reliability.

(b) Another competitor considered that the Merged Entity would be generally strong in the supply of CHE to terminals and ports but thought that this would not apply to HDFLT.

9.165 Overall, these responses indicate that third parties have mixed views on the impact of the Merger in the supply of HDFLT. Several third parties indicated that the wider choice of suppliers available for HDFLT relative to other Mobile Equipment influenced their views that the Merger would have a limited impact on competition in the supply of HDFLT.

Internal documents

9.166 Internal documents submitted by the Parties (discussed at paragraphs 9.168 to 9.170) provide insight into how the Parties perceive their own competitive positions in HDFLT and those of their competitors.

9.167 We start with documents that are mainly relevant to closeness of competition between the Parties in HDFLT. We then assess documents that relate to the constraints posed by other suppliers, and the importance of different purchasing criteria, for HDFLT. Finally, we discuss documents that provide insight into the Parties’ views on how competition in the supply of HDFLT will develop in future.

Closeness of competition between the Parties

9.168 The documents set out below are consistent with the internal documents described in Chapter 6 and in paragraphs 9.81 and 9.829.82 about Mobile Equipment in general and, read together with those documents, they indicate that Cargotec and Konecranes perceive each other as strong and aggressive competitors in HDFLT. These documents also show that Parties compete closely with each other, monitoring closely each other’s offering and trying to

'beat' each other. Both Parties distinguish themselves from their competitors by their wide range of HDFLT, possibility of customisation, and extensive and strong distribution and after-sales networks. The Parties also appear to be the only competitors that compete against each other in both the 'premium' and 'essential' segments of the market for HDFLT.

9.169 We reviewed a number of documents in which the Parties refer to their wide range as an advantage of their offering, suggesting that the Parties are close competitors in this respect. These documents show that the Parties consider themselves (and each other) to offer HDFLT products across different value proposition segments. The Parties do not consider third-party competitors to be similarly active across all segments:

- (a) A Cargotec internal document, produced in June 2020, lists as one of Kalmar's advantages that it has a '[redacted]'. This advantage is also highlighted in another document, produced in May 2018, in which Kalmar is said to have a '[redacted]'.
- (b) Another Cargotec internal document, produced in July 2018, attributes to Kalmar a '[redacted]'. Cargotec acknowledges in another presentation, from October 2019, that Konecranes FLT are '[redacted]'.
- (c) In a Cargotec internal document, from November 2017, [redacted].
- (d) Similarly, we note that the Konecranes internal document discussed in paragraph 9.82(b)(i) above (which relates to Mobile Equipment in general rather than HDFLT specifically), benchmarks Konecranes' [redacted] (Konecranes Blue) and Konecranes' [redacted] (Liftace) product lines against their competitors' presence in these segments. Only Kalmar is shown as being active in both these segments as well as at the intersection of both.
- (e) In an internal email, from June 2019, Konecranes considers its FLT product range to be comprehensive. In relation to a potential research initiative for [redacted], the email notes '[a]lready with our current product range we should be able to offer a more comprehensive and complete "solution" offering [redacted] than Kalmar and other forklift competitors'.

9.170 We also reviewed a number of further documents that show that the Parties compete closely:

- (a) A Cargotec presentation entitled '[redacted]', from October 2018, sets out a detailed plan on how Cargotec should approach the Konecranes [redacted] offerings. The presentation notes that Cargotec should be '[redacted]'. Such a presentation indicates that Cargotec considered Konecranes as [redacted].

- (b) A Cargotec market analysis document produced in 2020, '2020 KAMOS Market information for years 2020-2023' shows that it considers itself to be the market leader for HDFLT. [REDACTED]. This document identifies Cargotec's main competitors at a global level as Hyster, Taylor, Konecranes (as its third-largest competitor) and then Svetruck. In last place, under the category 'others' are listed 'Hyundai, Sany, MCFE, Omega, etc'.
- (c) Such a position is also reflected in Konecranes documents that highlight, over a number of years, the fact that Cargotec is its key competitor. For example, in March 2017 the 'Business Unit Lift Trucks' presentation set out that '[REDACTED]'. While we acknowledge that this document dates from four years ago, it is consistent with more recent examples that are discussed below.

Other competitive constraints

- 9.171 In relation to other competitors, and consistent with the documents described above about Mobile Equipment in general, the Parties seem to consider Hyster and Svetruck as material competitors in the supply of HDFLT in Europe. Linde, Doosan, Hyundai seem to compete with the Parties but impose a much less significant competitive constraint. Sany is considered to be a weak competitor in HDFLT. Overall, the smaller suppliers tended to be discussed in a global context, such that it is unclear how much of a constraint they impose in Europe (including the UK) in particular.
- 9.172 Within the documents that refer to competitive constraints in the UK or Europe (including the UK):
- (a) [REDACTED]. [REDACTED]
- (b) [REDACTED].
- (c) The above assessment is reinforced in an assessment of competitors produced in 2020, entitled '[REDACTED]', which sets out only Kalmar, Sany and Hyster as competitors in the region. The report notes that Sany has '[REDACTED]' '[REDACTED]' '[REDACTED]' and that it has [REDACTED]. With regard to Hyster, the presentation stated [REDACTED].
- 9.173 We have also considered the following internal documents in which the Parties assess their competitors at global level:
- (a) A Cargotec presentation on '[REDACTED]' sets out that Sany is among Cargotec's main competitors. However, [REDACTED]. This is consistent with the [REDACTED].
- (b) A Cargotec '[REDACTED].[REDACTED].

- (c) In the Cargotec strategy document described above ([REDACTED]), it is noted that Konecranes '[REDACTED]'. This is again reflected in the '[REDACTED]' [REDACTED].
- (d) [REDACTED],[REDACTED].
- (e) Several documents produced by Konecranes in 2016 show detailed technical comparisons between Konecranes' HDFLT and equivalent machines from Sany and Svetruck suggesting some competition between the three companies.
- (f) [REDACTED].
- (g) This global assessment is followed by Konecranes' 'competitor overview' produced in January 2021 that also assesses the position of a number of FLT suppliers on a global basis. Hyster, Taylor and Sany appear to be considered as relatively strong competitors, with the document noting that Sany has experienced 'rapid growth'. The document notes that Heli is the 'biggest Chinese FLT manufacturer' and offers prices at least [REDACTED] lower than Konecranes, but there is no mention of its presence in Europe. CVS and Svetruck are also assessed, but it is noted that CVS lacks '[REDACTED]' and that Svetruck is a '[REDACTED]'. Toyota is assessed in relation to 3.5 to 8 tonne FLT but there is no evidence of it being present in heavier FLT. The document notes that there is 'no information on any FLT' for ZPMC and XCMG.
- (h) [REDACTED]. We note that, while some of the smaller suppliers continue to operate to date, this document conveys Konecranes' perception that at least some of these smaller competitors are not financially sound.

Purchasing criteria

9.174 We have also reviewed internal documents outlining Cargotec's assessment of customers' main purchasing criteria that are relevant to HDFLT. This assessment can provide insight on how the strengths and weaknesses of each competitor relate to these criteria.

9.175 [REDACTED].[REDACTED].

The development of competition in the foreseeable future

9.176 Some internal documents also provide insight into the Parties' views on how competition in the supply of HDFLT will develop in future. As with other types of Mobile Equipment, the Parties predict an increasing trend towards electrification, within which they believe they are well-placed to succeed.

- (a) [REDACTED].
- (b) In [REDACTED].
- (c) A Cargotec document from October 2020 sets out its expectation that [REDACTED].
- (d) Konecranes internal documents discuss the growing need to provide environmentally-friendly solutions in all markets and how the next competitive step is electrification. In order to meet this challenge, Konecranes has developed the 'next step within eco lifting' through the introduction of [REDACTED], which were the first of that type to market. The need to provide electric options is reinforced throughout the P-3023 planning documents, with a 'pillar action' in the Konecranes '[REDACTED] Masterplan' listed as [REDACTED].
- (e) In [REDACTED].

CMA's provisional conclusion

9.177 The Parties compete closely in the supply of HDFLT, with both having a strong offering (including a reliable product, good quality after-sales support and a wide range of products) and a proven track-record. The only other material competitors in the UK are Hyster and, to some extent, Linde and Svetruck. Hyster is a strong competitor to the Parties, whereas the competitive strength of Linde and Svetruck is more limited (with Svetruck providing a stronger constraint in Europe but a lesser constraint in the UK). Therefore, a significant competitor would be removed by the Merger and, at most, three material competitors will impose a constraint on the Parties in relation to UK customers. Further, the positioning of the remaining competitors means that some customers may have fewer than four competitive offers after the Merger: in particular, unlike the parties, Linde is not active in the supply of HDFLT with lifting capacities greater than 18 tonnes. Our provisional conclusion is therefore that the Merger is likely to result in a SLC in the supply of HDFLT.

9.178 The following evidence, in particular, demonstrates that the Parties compete closely in the supply of HDFLT:

- (a) The shares of supply indicate that, in both Europe and the UK, the Parties are two of only four suppliers with shares of supply greater than 10% over 2016 to 2020. Cargotec is the market leader in Europe and one of the market leaders, alongside Hyster, in the UK. The Merged Entity would have a combined share of supply in HDFLT of [30 – 40]% in the UK and

around [50 – 60]% in Europe. The Parties' combined share is higher still at the heavier end of the HDFLT market.

- (b) Our bidding analysis confirms that the Parties compete closely in HDFLT; the Parties lost more opportunities to each other than to any other supplier in both the UK and Europe as a whole.
- (c) Evidence from third parties consistently shows that the Parties are close competitors, particularly at the heavier end of the HDFLT market (which is consistent with shares of supply). Qualitative comments from third parties and the qualitative tender documents that we reviewed mostly suggested that both Parties have high quality products. A number of third parties raised concerns about the loss of competition that would result from the Merger.³⁵⁴
- (d) Internal documents are also consistent with the Parties competing closely. Documents relating to HDFLT specifically indicate that the Parties perceive each other as being strong competitors and having an advantage over other competitors by offering a full range of HDFLT, from 'value' to 'premium'. Documents relating to Mobile Equipment in general are consistent with this and show that both Parties are taking active steps to develop electrified Mobile Equipment and are monitoring each other's progress in this area.
- (e) As discussed at paragraphs 9.98(d) and 9.168, a range of evidence outlined in Chapter 6 supports that the Parties have similar strengths in CHE, and plan to increase their market shares in Mobile Equipment in the foreseeable future.

9.179 The evidence shows that Hyster is a strong competitor to the Parties in both Europe and the UK.

- (a) Shares of supply show that Hyster was the second-largest supplier in Europe over 2016 to 2020 on a volume basis (third-largest on a revenue basis) and one of the market leaders (alongside Cargotec) in the UK over the same period.
- (b) This is consistent with our bidding analysis, which suggests that, after each other, Hyster accounted for the next largest proportion of both

³⁵⁴ However, several third parties stated that the wider choice of suppliers available for HDFLT relative to other Mobile Equipment indicated that the Merger would have a more limited impact on competition in the supply of HDFLT.

Parties' lost opportunities in Europe. In the UK, both Parties lost a significant number of opportunities to Hyster.

- (c) Hyster was commonly mentioned as a competitor by third parties but was not always ranked highly (it tended to be ranked more highly by competitors than customers). Third parties generally noted that Hyster was high quality, but there were conflicting views about its price competitiveness.
- (d) Internal documents confirmed that the Parties consider Hyster as one of their closest competitors in Mobile Equipment generally and in HDFLT specifically. Both Parties' documents noted that Hyster is price competitive (Cargotec noted this as a challenge in the UK specifically) and offered a wide product range.

9.180 The evidence indicates that Linde competes with the Parties, in relation to HDFLT with lifting capacities up to 18 tonnes.

- (a) Shares of supply show that Linde has a [10 – 20]% share of supply in the UK but is smaller in Europe ([5 – 10]% share).
- (b) Our bidding analysis indicates that Linde is a closer competitor to the Parties than suggested by the shares of supply, as both Parties lost a significant number of opportunities to Linde in both the UK and Europe as a whole.
- (c) Third-party views on the strength of Linde as a competitor to the Parties were mixed, with UK customers ranking Linde more highly than competitors. Qualitative comments from third parties and the qualitative tender documents that we reviewed indicated that Linde was seen as a feasible alternative to the Parties.
- (d) Linde is considered as a credible competitor in HDFLT in Cargotec's internal documents, but it is not often mentioned in Konecranes internal documents. It does not seem to offer a range as wide as the Parties in terms of lifting capacity and value positioning.

9.181 The evidence indicates that Svetruck may compete with the Parties, in relation to certain customers:

- (a) Shares of supply show that Svetruck has a [10 – 20]% share of supply in Europe but is much smaller in the UK ([0 – 5]% share).
- (b) Our bidding analysis indicates that Svetruck is a closer competitor to the Parties than suggested by the shares of supply, as both Parties lost a

significant number of opportunities to Svetruck in both the UK and Europe as a whole.

- (c) Third-party views on the strength of Svetruck as a competitor to the Parties were mixed, with competitors that responded to our questionnaire ranking Svetruck more highly than UK customers that responded to our questionnaire. Qualitative comments from third parties suggested that Svetruck may not be a strong constraint on the Parties in relation to customers that place less weight on quality and more on price (ie in relation to 'premium' HDFLT).
- (d) Svetruck is present in the Parties' documents related to HDFLT and is considered as a credible competitor in these documents, although sometimes only in relation to a [✂]. It is not often mentioned in documents related to Mobile Equipment in general.

9.182 The evidence indicates that no other suppliers compete closely with the Parties for UK customers:

- (a) Hyundai had less than [0-5] % share of supply in both Europe and the UK over 2016 to 2020 and the Parties lost very few opportunities to Hyundai during the period considered. Third parties suggested that Hyundai was not seen as a competitor for HDFLT with lifting capacities greater than 20 tonnes. Hyundai was not mentioned by any of the UK customers that responded to our questionnaire but was considered as a close competitor by some of the competitors that responded to our questionnaire.³⁵⁵ Hyundai is present in the Parties' documents related to HDFLT but it is not considered as a strong competitor in these documents; it is rarely mentioned in documents related to Mobile Equipment in general.
- (b) Other suppliers in the market (Sany, Doosan, ZPMC and a number of other smaller suppliers) exert, at most, a limited competitive constraint on the Parties in Europe and the UK. Shares of supply and our bidding analysis show that, individually, these suppliers do not have a significant presence in either the UK or Europe. Third parties did not generally consider these suppliers as strong competitors.³⁵⁶ With the exception of Sany, other smaller suppliers in HDFLT (including Doosan and ZPMC) are rarely mentioned in the internal documents that we reviewed. Although Sany is discussed extensively in documents relating to Mobile

³⁵⁵ However, given the differentiation within HDFLT, this does not necessarily mean that Hyundai is a close competitor to the Parties.

³⁵⁶ Some third parties suggested that Doosan was competitive for HDFLT with lifting capacities between 10 and 20 tonnes. Third-party views on Sany were mixed; it was noted that Sany often has a commercially attractive offering but can have lower product and/or service quality than other suppliers in the market.

Equipment in general, in documents related to HDFLT specifically the Parties appear to consider Sany as a weak competitor at present.

9.183 As discussed below (from paragraph 9.264), the evidence that we reviewed in relation to entry and expansion does not suggest that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

Horizontal unilateral effects in the supply of ECH

Parties' views

9.184 The Parties submitted that Hyster will arguably remain the market leader in the UK and Europe post-Merger, and is well-placed to expand as it is at the 'forefront of innovation' and offers competitive prices ([REDACTED]).³⁵⁷

9.185 The Parties further submitted that the Merged Entity would be constrained by Chinese suppliers, especially Sany. They note that Sany has grown its global share of supply from roughly [5 – 10]% to [20 – 30]% in the last five years, and Cargotec estimates that [REDACTED]. The Parties submitted that Sany is also highly innovative, being the first supplier to develop a fully electric ECH.³⁵⁸

9.186 The Parties submitted that there are also a number of other emerging global competitors that will constrain the Merged Entity, such as Svetruck, CVS, Taylor, ZPMC and XCMG.³⁵⁹

9.187 In response to the CMA's working papers, the Parties made a number of further submissions in relation to ECH:

- (a) The CMA's 2016 to 2020 timeframe underestimates Sany's market position because Sany entered the UK in 2015.
- (b) Hyster is the closest competitor to Cargotec as loss ratios show that Hyster accounted for 75% of tenders lost by Cargotec in the UK. The Parties submitted that there is no basis to conclude that Konecranes is a particularly close competitor of Cargotec.
- (c) Third-party evidence indicates that 60% of respondents ranked Sany for future purchases and 75% considered Sany as a close competitor.

³⁵⁷ The Parties' Response to Issues Statement, paragraphs 7.25–7.26.

³⁵⁸ The Parties' Response to Issues Statement, paragraphs 7.27–7.28.

³⁵⁹ The Parties' Response to Issues Statement, paragraph 7.30.

Shares of supply

- 9.188 Chapter 6 provides an overview of our approach to shares of supply and the weight that we place on this evidence. We have constructed our estimates of the shares of supply using data provided by the manufacturers (or their distributors) themselves and, where this is not available, the Parties' estimates of their competitors' sales.
- 9.189 Table 40 shows our estimates of shares of supply based on the volumes sold by each supplier (either directly to a customer or to a distributor) for ECH over the period 2016 to 2020 for three different geographic areas: UK, Europe, and worldwide (excluding China). As set out in Chapter 5, we provisionally conclude that the relevant geographic market is no wider than Europe-wide, with some important UK-specific aspects of competition that affect the strength of competitors for some UK customers. As such, we consider that shares of supply in both the UK and Europe as a whole are relevant to our competitive assessment.
- (a) Within the UK, the Merged Entity would have a combined share of supply of [30 – 40]%, while Hyster, with a share of [50 – 60]%, would remain the market leader. Sany was the only other supplier that made deliveries in the relevant period in the UK, with a [10 – 20]% share of supply.
 - (b) Within Europe, the Merged Entity would have a combined share of supply of [30 – 40]%, ahead of Hyster ([30 – 40]% share), which is currently the largest supplier. Svetruck is the fourth largest supplier with a [5 – 10]% share of supply.
 - (c) On a worldwide basis (excluding China), the Merged Entity would have a combined share of supply of [40 – 50]%. This compares with [20 – 30]% for Hyster, which is currently the joint market leader (together with Cargotec). Taylor is a supplier that operates in North America and has a [5 – 10]% share of supply on a worldwide basis (excluding China).

Table 40: Shares of supply of ECH based on sales volumes, 2016–20

Volume in Units

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[X]	[20 – 30]%	[X]	[20 – 30]%	[X]	[20 – 30]%
Konecranes	[X]	[5 – 10]%	[X]	[10 – 20]%	[X]	[10 – 20]%
Combined	[X]	[30 – 40]%	[X]	[30 – 40]%	[X]	[40 – 50]%
Hyster	[X]	[50 – 60]%	[X]	[30 – 40]%	[X]	[20 – 30]%
Sany	[X]	[10 – 20]%	[X]	[0 – 5]%	[X]	[5 – 10]%
Svetruck	[X]	[0 – 5]%	[X]	[5 – 10]%	[X]	[5 – 10]%
CVS	[X]	[0 – 5]%	[X]	[5 – 10]%	[X]	[0 – 5]%
FTMH	[X]	[0 – 5]%	[X]	[0 – 5]%	[X]	[0 – 5]%
Taylor	[X]	[0 – 5]%	[X]	[0 – 5]%	[X]	[5 – 10]%
ZPMC	[X]	[0 – 5]%	[X]	[0 – 5]%	[X]	[0 – 5]%
Others	[X]	[0 – 5]%	[X]	[5 – 10]%	[X]	[5 – 10]%
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X]

9.190 Table 41 shows the same shares of supply based on revenue rather than delivery volumes. The shares are similar to those in Table 40—the Merged Entity would have [30 – 40] % share of supply in the UK and [40 – 50] % in Europe.

Table 41: Shares of supply ECH based on revenue, 2016–20

Revenue in €m

Company	Geographic area					
	UK		Europe		Worldwide (excl. China)	
	Revenue	Share	Revenue	Share	Revenue	Share
Cargotec	[X]	[10 – 20]%	[X]	[20 – 30]%	[X]	[30 – 40]%
Konecranes	[X]	[10 – 20]%	[X]	[10 – 20]%	[X]	[10 – 20]%
Combined	[X]	[30 – 40]%	[X]	[40 – 50]%	[X]	[40 – 50]%
Hyster	[X]	[50 – 60]%	[X]	[30 – 40]%	[X]	[20 – 30]%
Sany	[X]	[10 – 20]%	[X]	[0 – 5]%	[X]	[5 – 10]%
Svetruck	[X]	[0 – 5]%	[X]	[5 – 10]%	[X]	[5 – 10]%
CVS	[X]	[0 – 5]%	[X]	[5 – 10]%	[X]	[0 – 5]%
FTMH	[X]	[0 – 5]%	[X]	[0 – 5]%	[X]	[0 – 5]%
Taylor	[X]	[0 – 5]%	[X]	[0 – 5]%	[X]	[5 – 10]%
ZPMC	[X]	[0 – 5]%	[X]	[0 – 5]%	[X]	[0 – 5]%
Others	[X]	[0 – 5]%	[X]	[5 – 10]%	[X]	[5 – 10]%
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X]

- 9.191 Overall, the shares of supply indicate that the Parties are close competitors in the supply of ECH in both the UK and Europe, being two of the four largest suppliers in these regions over 2016 to 2020. The Merged Entity would have a combined share of supply of around [30 – 40]% in the UK and around [40 – 50]% in Europe.
- 9.192 Whereas Cargotec has broadly similar shares in the UK and Europe, Konecranes' share of supply is lower in the UK (where it is [5 – 10]% on a volume basis and [10 – 20]% on a revenue basis) than it is in Europe as a whole (where it is [10 – 20]% on a volume basis and [10 – 20]% on a revenue basis). We consider that this is likely to reflect the role that national distributors play in the competitive process in Mobile Equipment (see Chapter 5) and, in particular, Konecranes' difficulties in fine-tuning its operations [REDACTED] and Sany's relative success with its UK distributor, Cooper.³⁶⁰ Nonetheless, Konecranes has a material share in the UK ([REDACTED]) and other evidence (see below and Chapter 6) indicates that Konecranes is a close competitor to and important constraint on Cargotec.
- 9.193 The shares of supply above are consistent with Hyster being a strong competitor to the Parties in the UK and Europe; Hyster was the market leader both in the UK and Europe over 2016 to 2020. It would be the largest player in the UK post-Merger and the second largest player in Europe as a whole.
- 9.194 The shares of supply also show that Sany is the only other material competitor in the UK with a [10 – 20]% share of supply but is much smaller in Europe ([0 – 5]% share). As with Konecranes, we consider that this difference is likely to reflect the role of its national distributor (Cooper).
- 9.195 In relation to Sany, the Parties submitted that presenting shares over the five-year period 2016 to 2020 was misleading given that Sany only announced its relationship with Cooper in 2015 and that it has recently grown rapidly. The Parties also submitted that Sany's European share can be expected to increase as it will be able to leverage its strong presence in the UK and rely on its growing global track record - Sany's global share of supply has increased from [REDACTED]% to [REDACTED]% in the past five years.
- 9.196 We reviewed Sany's annual UK sales and found no clear trend. Sany sold much higher volumes in the UK in 2019 ([REDACTED] units) compared with each of the previous three years (between [REDACTED] units). However, Cooper (the UK

³⁶⁰ In the Main Party Hearing, Konecranes said that 'I think...why we are weaker in the UK is that we have not yet [REDACTED] to enable us to provide an offering the customer really appreciates. Then...Sany has taken quite a big part of the market in the UK already... I think we are not [REDACTED]...that is the main one [and] we have not been able to [REDACTED] in the UK yet. We are still growing it with Impact. Maybe if you have heard [REDACTED], for example, in the UK so there has been some changes there'. [REDACTED]. MPH, Konecranes, lines 11-23.

distributor for Sany) explained that 2019 was an exceptionally good year [REDACTED], and that it sold only [REDACTED] Sany ECH in the UK in 2020.

9.197 In relation to Sany's position in Europe more widely, we note that, according to our shares of supply, Sany did not sell any ECH in Europe outside of the UK during 2016 to 2020. While Sany has higher sales in the UK and worldwide (excluding China), we do not consider that this necessarily means that Sany's track record in those regions will lead to growth for Sany in Europe. Further, as discussed below, [REDACTED].

9.198 The shares of supply show that Svetruck, CVS, and FTMH are all active in Europe (with shares of supply less than 10% on a European basis) but have not made sales in the UK in the period 2016 to 2020. We consider that the lack of UK sales by these suppliers does not in itself rule out that they could compete effectively for UK customers. However, in the round, the other evidence that we review below is consistent with these players not competing closely with the Parties in relation to UK customers.

Bidding analysis

9.199 Chapter 6 provides an overview of our approach to the bidding analysis and the weight that we place on this evidence.

Quantitative analysis of Parties' data

9.200 In this section, we present the results of our quantitative analysis of the bidding data provided by the Parties.³⁶¹ As explained above, our analysis considers loss ratios, which we consider as a useful measure of the closeness of competition between the Parties and their competitors (see paragraph 7.22).

9.201 As set out in Chapter 5, we provisionally conclude that the relevant geographic market is no wider than Europe-wide, with some important UK-specific aspects of competition that affect the strength of competitors for some UK customers. As such, we consider that loss ratios in both the UK and Europe as a whole are relevant to our competitive assessment. We treat the precise levels of the UK loss ratios with caution due to the small sample sizes.³⁶²

³⁶¹ We discuss this data further in Appendix C.

³⁶² The data comprises [REDACTED] opportunities in total lost by Cargotec in the UK, and [REDACTED] lost by Konecranes in the UK.

9.202 Table 42 below shows ECH loss ratios for Cargotec in the UK from 2016 to May 2021. This indicates that Hyster accounted for [X] of the [X] opportunities lost by Cargotec in the UK. Cargotec also lost [X] opportunities to Sany and [X] each to Konecranes and MOL. The [X] opportunity lost to Konecranes accounted for more units and revenue than the [X] opportunities lost to Sany and MOL combined.

Table 42: ECH loss ratios, UK, Cargotec, 2016 to May 2021

Company	UK					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	Number	Percentage
Hyster	[X]	[X]	[X]	[X]	[X]	[X]
Sany	[X]	[X]	[X]	[X]	[X]	[X]
Konecranes	[X]	[X]	[X]	[X]	[X]	[X]
MOL	[X]	[X]	[X]	[X]	[X]	[X]
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X]

Note: As explained in Appendix C, we have made adjustments to the recorded values of a small number of tenders that we consider outliers based on their high implied unit prices.

9.203 Table 43 below shows ECH loss ratios for Cargotec in Europe as a whole from 2016 to May 2021. This shows that Hyster was the competitor to which Cargotec lost most opportunities in Europe as a whole (accounting for approximately [X]% of lost opportunities). The loss ratios indicate that Konecranes was the only other significant competitor of Cargotec in Europe, accounting for [X]% of lost opportunities; Cargotec lost fewer than [X]% of opportunities to any other individual competitor.

Table 43: ECH loss ratios, Europe (EEA + UK), Cargotec, 2016 to May 2021

Company	Europe (EEA + UK)					
	Number of opportunities		Number of units		Value (revenue in €m)	
	Number	Percentage	Number	Percentage	Number	Percentage
Hyster	[X]	[X]	[X]	[X]	[X]	[X]
Konecranes	[X]	[X]	[X]	[X]	[X]	[X]
CVS	[X]	[X]	[X]	[X]	[X]	[X]
Sany	[X]	[X]	[X]	[X]	[X]	[X]
Other	[X]	[X]	[X]	[X]	[X]	[X]
Unknown	[X]	[X]	[X]	[X]	[X]	[X]
Total	[X]	100%	[X]	100%	[X]	100%

Source: [X]

Note: As explained in Appendix C, we have made adjustments to the recorded values of a small number of tenders that we consider outliers based on their high implied unit prices.

9.204 Table 44 below shows ECH loss ratios for Konecranes in the UK from 2016 to May 2021. This shows that Konecranes lost a similar number of opportunities

to each of Cargotec, Sany and Hyster in the UK. The opportunities lost to Sany were of lower value than the opportunities lost to Cargotec and Hyster.

Table 44: ECH loss ratios, UK, Konecranes 2016 to May 2021

Company	UK			
	Number of opportunities		Value (revenue in €m)	
	Number	Percentage	Number	Percentage
Cargotec	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sany	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hyster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Unknown	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED]

Notes: [REDACTED]

As explained in Appendix C, we have made adjustments to the recorded values of a small number of tenders that we consider outliers based on their high implied unit prices.

9.205 Table 45 below shows ECH loss ratios for Konecranes in Europe as a whole from 2016 to May 2021. This shows that Cargotec accounted for [REDACTED]% of opportunities lost by Konecranes in Europe. The loss ratios indicate that Hyster was the only other significant competitor of Konecranes in Europe, accounting for [REDACTED]% of lost opportunities; Konecranes lost fewer than [REDACTED]% of opportunities to any other individual competitor.

Table 45: ECH loss ratios, Europe (EEA + UK), Konecranes, 2016 to May 2021

Company	Europe (EEA + UK)			
	Number of opportunities		Value (revenue in €m)	
	Number	Percentage	Number	Percentage
Cargotec	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Hyster	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
CVS	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sany	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Other	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Unknown	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100%	[REDACTED]	100%

Source: [REDACTED].

Notes: [REDACTED]

As explained in Appendix C, we have made adjustments to the recorded values of a small number of tenders that we consider outliers based on their high implied unit prices.

9.206 Overall, our bidding analysis indicates that the Parties compete closely in both Europe and the UK. Konecranes lost more opportunities to Cargotec ([REDACTED]%) than any other competitor in Europe, while Cargotec lost [REDACTED]% of its opportunities to Konecranes in Europe. Sample sizes in the UK are small, but

we note that Konecranes lost [REDACTED] opportunities to Cargotec out of [REDACTED] opportunities lost in total during the period considered and Cargotec lost [REDACTED] opportunity to Konecranes out of [REDACTED] opportunities lost in total.

9.207 The loss ratios show that Hyster is generally the strongest third-party constraint on the Parties and, in particular, the main constraint on Cargotec (ie, Cargotec loses significantly more opportunities, on all metrics, to Hyster than Konecranes). They further show that Sany is the only other material competitor in the UK, although it appears that it only won low-value opportunities from the Parties. In Europe as a whole, Sany accounted for fewer than [REDACTED]% of lost opportunities for both Parties. These results are consistent with the shares of supply, where Hyster is the leading supplier in the UK and Europe and Sany is a less significant competitor in Europe as a whole than in the UK.

Qualitative tender case studies

9.208 We have reviewed documents provided by customers that detail the participants and outcomes of four recent ECH tenders. We place limited weight on the analysis of these specific tenders (which are better considered as part of the shares of supply and bidding data considered above), but we have taken account of the insights that they provide on customer perceptions of the strengths and weaknesses of different suppliers.

9.209 As noted in paragraph 9.37 above, one port customer [REDACTED] provided contemporaneous tender evaluation documents for a tender that it concluded in 2021 for seven RS and two ECH. There were [REDACTED] participants in this tender ([REDACTED]) and it was awarded to Briggs (UK distributor for Hyster).

9.210 [REDACTED].

9.211 [REDACTED]

9.212 [REDACTED].

9.213 Another port customer [REDACTED] provided an executive summary for a tender that it ran during [REDACTED].

9.214 [REDACTED].

9.215 [REDACTED].

9.216 [REDACTED].

9.217 A third port customer [REDACTED] provided a tender evaluation summary document related to a tender for the hire and maintenance (over four years) of three

ECH in 2018. There were [REDACTED] participants in this tender ([REDACTED]) and it was awarded to Cargotec.

9.218 [REDACTED][REDACTED].

9.219 [REDACTED].

9.220 This customer [REDACTED] also ran a tender for the hire and maintenance (over five years) of four RS and 12 ECH in 2018. As discussed at paragraph 9.41 above, Cargotec was awarded this tender [REDACTED].

9.221 In each of the examples above, Hyster was a strong competitor, primarily due to its high product quality. It appears that Hyster also benefitted from an incumbency advantage in the [REDACTED] example. In [REDACTED], it appeared that Sany was hindered by concerns regarding the quality of its products. In each of these tenders Konecranes submitted [REDACTED].

9.222 Price was an important factor in all tenders, but particularly in the [REDACTED]. In the first example, [REDACTED], demonstrating that quality is an important factor for some customers. In the second example, [REDACTED].

Third-party evidence

Customer questionnaire

9.223 We sent questionnaires to 17 of the Parties' ECH customers and received responses from seven customers [REDACTED].³⁶³

9.224 We asked customers of the Parties to rate the importance of various criteria in their purchasing decisions for RS (scores out of 5, where 5 is the most important).³⁶⁴ The responses indicated that:

(a) Equipment reliability was considered very important, with all six respondents to this question [REDACTED] scoring it a 5.

(b) Purchase price, running costs, and efficiency were also very important for most respondents, with five out of six scoring all three of these criteria as

³⁶³ See Appendix D for further detail on our methodology.

³⁶⁴ Question wording: *When thinking about purchasing ECH, please score the following factors according to how important they are to your choice of supplier. Please assign a score from 1-5 where 5 = very important and 1 = not important at all (more than one factor can have the same score). The factors listed were: differences in equipment reliability, differences in automation/assistive technology features, differences in purchase price, differences in running costs, differences in strength of local aftersales presence (servicing, maintenance, spare parts), differences in efficiency/environmental performance, degree of interoperability with other equipment, and already having installed base of equipment from a particular supplier.*

either 4 or 5 (the other respondent scored purchase price as 3 and the other two criteria as 5).

- (c) The strength of local after-sales presence was the next most important criterion, with all respondents scoring this criterion at least 3 and five out of six respondents scoring this criterion 4 or above.
- (d) Automation and interoperability were generally not scored as important criteria—for each criterion, at least three out of six respondents scored it 3 or below.

9.225 We asked customers of the Parties to rank the alternative suppliers that were considered in their most recent purchase of ECH in the UK.³⁶⁵ We received responses to this question from three customers of the Parties, and all of these had most recently purchased from Cargotec. Two of the respondents had most recently purchased from Cargotec in 2018 or after, while one respondent (customer F) did not provide the date of its last purchase. These responses are summarised in the second column of Table 46 below.

Table 46: Customer questionnaire responses, ECH

<i>Customer</i>	<i>Alternative suppliers at most recent purchase</i>	<i>Expected ranking in future purchase</i>
Customer A	<ol style="list-style-type: none"> 1. ZPMC 2. Liebherr 3. Konecranes 4. Sany 	<ol style="list-style-type: none"> 1. ZPMC 2. Cargotec 3. Konecranes 4. Sany 5. Liebherr 6. Hyster
Customer B [†]	N/A	<ul style="list-style-type: none"> • Cargotec • Konecranes • Hyster • CVS
Customer C	<ol style="list-style-type: none"> 1. Hyster 2. Konecranes 	<ol style="list-style-type: none"> 1. Cargotec 2. Hyster 3. Konecranes 4. Liebherr 5. Sany 6. ZPMC
Customer D	N/A	<ol style="list-style-type: none"> 1. Cargotec 1. Sany
Customer E [‡]	N/A	<ul style="list-style-type: none"> • Hyster • Konecranes • Cargotec
Customer F	<ol style="list-style-type: none"> 1. WRS Hull 	<ol style="list-style-type: none"> 1. WRS Hull

³⁶⁵ Question wording: *Thinking about when you most recently purchased ECH from [Party] in the UK, what were the main alternative suppliers that you considered? Please list the main alternatives and confirm how you ranked these alternative suppliers (where 1 = the best alternative, 2 = the next best alternative and so on).*

<i>Customer</i>	<i>Alternative suppliers at most recent purchase</i>	<i>Expected ranking in future purchase</i>
	2. Hyster	2. Hyster 3. Cargotec

Source: [REDACTED].

Notes: Where the customer named a distributor, we have recorded the name of the OEM that supplies the products to the distributor. Some customers ranked suppliers as equally close alternatives.
† Customer B did not provide any rankings for the suppliers that it listed.
‡ Customer E did not provide any rankings for the suppliers that it listed.

9.226 One customer ranked Konecranes as the second closest alternative, one ranked it as the third closest alternative, and the other did not mention Konecranes. Regarding Hyster, one customer ranked it as the first alternative, another ranked it as the second alternative (behind WRS Hull, a dealer that focuses on used equipment), and the third customer did not include Hyster in its rankings. ZPMC, Liebherr and Sany were all mentioned once by the same respondent.³⁶⁶

9.227 We also asked customers of the Parties to provide an expected ranking of suppliers if they were to purchase ECH in the UK within the next year.³⁶⁷ We received responses to this question from six customers of the Parties and these responses are summarised in the third column of Table 46 above. All respondents indicated that they felt well informed about the market.³⁶⁸

9.228 Two of the six respondents expected Cargotec to be the leading supplier (either individually or jointly) in a future hypothetical purchase, one expected it to rank second, one expected it to rank third (lowest of the alternatives given), and two did not provide a ranking. Konecranes was named by four respondents, of which two ranked it third and two did not provide a ranking.

9.229 Regarding Hyster, five customers expected it to compete for the purchase, of which two expected it to rank second, one expected it to rank last, and two did not provide a ranking. Sany was mentioned by three respondents, only one of which expected it to rank in the top three suppliers. Liebherr was mentioned twice as a low-ranking supplier. ZPMC was also mentioned twice, once as a winning supplier and another time as the lowest-ranked supplier. CVS was mentioned once without a ranking. We note that CVS does not currently have a UK-based distributor.

³⁶⁶ We note that this respondent indicated that its most recent purchase of ECH was part of a wider package that also included STS and RTG ([REDACTED]).

³⁶⁷ Question wording: *Suppose that you were planning to purchase ECH in the UK within the next year. What suppliers would you expect to consider? Please list the full set of suppliers that you would expect to consider (including [Party] if applicable) and provide your expected ranking of the suppliers (where 1 = the winner, 2 = the best alternative and so on).*

³⁶⁸ Question wording: *Have you recently monitored and/or tested the market for ECH and to what extent do you feel well-informed about suppliers' strengths and weaknesses as they exist today?*

9.230 Overall, the small number of respondents to the question regarding a customer’s most recent purchase makes it difficult to draw firm conclusions from this evidence. We received more responses to the question regarding future purchases. Customers’ expected rankings of suppliers in a future purchase point towards the Parties being among each other’s close competitors in the future, with both Parties being named by most customers as two of the main suppliers that they would consider. Of the other suppliers, Hyster and Sany were most commonly mentioned, with a range of expected rankings. Liebherr, ZPMC, and CVS were not generally expected by UK customers to be strong competitors in a future purchase.

Competitor questionnaire

9.231 We sent questionnaires to nine ECH competitors (including distributors) of the Parties and received responses from four of these [REDACTED].³⁶⁹ We note that two of these responses covered the same brand of equipment (ie, we heard from the manufacturer and its distributor).

9.232 We asked these competitors to list the suppliers that they considered their closest competitors in the supply of ECH in the UK.³⁷⁰ The responses are summarised in Table 47 below.

Table 47: Competitor questionnaire responses, ECH

<i>Competitor</i>	<i>Suppliers that are considered as closest competitors in the supply of ECH</i>
Competitor A	<ol style="list-style-type: none"> 1. Cargotec 2. Konecranes 3. Sany 4. Liebherr 5. CVS
Competitor B	<ol style="list-style-type: none"> 1. Cargotec 2. Konecranes 3. Sany 4. CVS
Competitor C	<ol style="list-style-type: none"> 1. Hyster 2. Cargotec 3. Sany 4. Konecranes
Competitor D	<ol style="list-style-type: none"> 1. Cargotec 2. Hyster 3. Konecranes 4. CVS 4. FTMH
Source: [REDACTED]	

³⁶⁹ See Appendix D for further detail on our methodology.

³⁷⁰ Question wording: *Please list your main competitors in the supply of ECH to UK sites. Please rank these competitors according to how close a competitor they are to you (where 1 = closest competitor, 2 = next closest competitor, and so on).*

Note: Competitors sometimes listed two or more suppliers as being equally close competitors to themselves.

9.233 All respondents listed Cargotec as one of their two closest competitors and most respondents listed Konecranes as either their second or third closest competitor. Hyster, Sany, and CVS were the most commonly mentioned suppliers other than the Parties, although CVS was not considered as a particularly close competitor by any respondent. Liebherr and FTMH were each mentioned once.

9.234 We also asked competitors if they expected the rankings to differ in two years.³⁷¹ One competitor (competitor D) expected that Konecranes would be its second closest competitor rather than third closest, switching positions with Hyster, which it attributed to the ‘advanced electrification strategy’ of Konecranes compared with the ‘confused electrification strategy’ of Hyster. There were no other changes from the rankings described above.

9.235 The UK distributor for [X], also responded to our questionnaire. It considered that Cargotec was its closest competitor, followed by Hyster. It did not expect this ordering to change in two years.

9.236 Overall, the responses from competitors (and Impact) suggest that the Parties are close competitors. Of the other suppliers, Hyster and Sany were generally considered as the next closest competitors to the respondents after the Parties. Liebherr, CVS, and FTMH were not considered as close competitors to the respondents.

Qualitative comments

9.237 We received qualitative comments from third parties in relation to the closeness of competition between the Parties, some of which indicated that the Parties are close competitors in the supply of ECH.

(a) The UK distributor for [X], stated that the Parties (alongside Hyster) are among the three ‘main alternatives for empty container handlers’ and noted that [X]. This distributor further considered that, in relation to Mobile Equipment generally, the Parties’ products were higher quality than those of other competitors.

(b) Another distributor submitted that both Parties have strong brands, high quality products, and comprehensive product ranges.

³⁷¹ Question wording: *To what extent do you expect the main competitors that you face and their strengths and weaknesses to change over the next two years? Please use the table below to list and rank the main competitors that you would expect to face in the supply of ECH to UK sites in two years’ time.*

(c) One competitor noted in its questionnaire response that a strength for both Parties was that they offer a 'full line' of RS. This strength was not listed for any other supplier.

9.238 A third distributor did not consider the Parties as particularly close competitors, noting that Konecranes Mobile Equipment is generally lower quality. In relation to ECH specifically, this distributor noted that Cargotec has a strong brand and a 'technically strong' product, but that Konecranes suffers from a 'poor quality reputation'.

9.239 Overall, these views support the evidence from the questionnaires in suggesting that the Parties compete closely, although we note that it is a limited number of comments.

9.240 We also received qualitative comments from third parties in relation to the competitive constraints faced by the Parties. In general, Hyster was considered as a strong competitor that offers competitive prices but with lower product quality its rivals.

(a) One customer considered that Hyster makes 'credible competitive' ECH. The same customer noted that [REDACTED], Briggs (a distributor for Hyster) scored highly against all the tender criteria, especially pricing. The customer stated that pricing was particularly important for this tender [REDACTED]. This customer further noted that suppliers with a wide range of Mobile Equipment (such as Briggs) are favoured in tenders as the customer finds it easier to manage a single contract rather than multiple contracts with different suppliers.

(b) A second customer that has recently purchased four Cargotec ECH [REDACTED] noted that its 'only other options [were] Mitsubishi (CAT) and Hyster'.

(c) A third customer considered that Hyster offers prices that are 'generally competitive in comparison [with] alternative tenderers'.

(d) A fourth customer stated that there were 'questions about [the] quality and reliability' of Hyster's ECH.

(e) One distributor named Hyster (alongside the Parties) as one of the three 'main alternatives for empty container handlers' and noted that Hyster Mobile Equipment in general is lower quality than that offered by the Parties but is also much cheaper.

(f) Another distributor considered that Hyster has a strong brand and dealer network, and offers the 'lowest cost' products. However, it further considered that the Hyster ECH was the 'worst of all available'.

9.241 The views from third parties on Sany were mixed, noting its low prices but also perceptions of poor product and/or service quality that made some customers reluctant to switch to Sany.

- (a) The UK distributor for [REDACTED], noted in relation to Mobile Equipment in general that it 'believes that some customers will not purchase Sany products simply because they are a Chinese product [...] in spite of most of the parts being built in Europe and shipped over to China for assembly'. It explained that Sany 'will always have problems with some customers with anti-Chinese rhetoric' and that 'most of it comes back down to the local support'.
- (b) Another distributor submitted that Sany has an 'aggressive pricing' strategy.
- (c) A third distributor noted that Sany is generally quite small in the UK and, along with other Chinese suppliers, doesn't get much repeat business, in part due to low quality support in relation to spare parts.
- (d) The customer that had tendered in [REDACTED] was aware of Cooper (a distributor for Sany) [REDACTED].
- (e) Another customer considered that Sany was 'not established in the UK market'.

9.242 We received several comments that offered mixed views on Liebherr.

- (a) The customer that had tendered in [REDACTED] considered that 'Liebherr make credible competitive [...] ECH'.
- (b) Another customer considered that Liebherr had a 'limited' range of ECH in its offering.
- (c) One of the distributors above noted that Liebherr has a well-known brand for CHE generally, but is less well-known for ECH in particular.

9.243 The Parties submitted that Sany is one of the leading suppliers in respect of the development of an electric ECH. Sany's distributor in the UK (Cooper) told us that Sany's electric ECH is available in Asia but not yet in Europe. Cooper does not expect to sell electric ECH in the UK until 2023 at the earliest. Cooper considered that there would not be a significant advantage for the first OEM to launch an electric ECH, as customers can be reluctant to be the first to purchase new products (similar to Cooper's experience in selling Sany equipment).

9.244 Overall, the comments from third parties indicate that Hyster is generally seen as a strong competitor to the Parties in the UK, supporting the evidence from the questionnaire responses. Several third parties commented on Sany, but the views expressed were mixed regarding the strength of Sany as a competitor. Two customers mentioned Liebherr as a viable competitor, although Liebherr did not deliver any ECH to UK customers between 2016 and 2020 (see Table 40).

Merger impact

9.245 We asked customers for their views on any positive or negative impacts of the Merger on the supply of ECH.³⁷² Five of the seven respondents identified both positive and negative impacts, and two only identified positive impacts.

9.246 The positive impacts mostly focussed on the potential for increased innovation and the benefits that would accrue from the sharing of technical knowledge and expertise, including a wider or improved product range. Two customers also expected the Merged Entity to provide improved after-sales service.

9.247 The negative impacts primarily related to the loss of competition and the potential negative effects that this could have on prices, innovation, and purchase terms. One of the five customers identifying negative impacts considered that such effects are 'mitigated by our competitive tendering processes'.

9.248 We asked competitors whether they expected the Merger to impact competition for the supply of ECH in the UK.³⁷³ Of the five responses from competitors, one considered that the Merger would have no impact on competition and three considered that the Merger would have some impact, one of which noted that the extent of any impact will 'depend on the new company's strategy'. The other competitor considered that any impact depended on 'how the merged portfolio is arranged and distributed'.

9.249 We also received some more detailed comments regarding the impact of the Merger on the supply of ECH. Several customers suggested that the Parties would have market dominance post-Merger, with some noting the negative impact that this would have on the market.

³⁷² Question wording: *Cargotec and Konecranes are proposing to merge. What positive impacts (if any) would you expect the merger to have in relation to ECH? What negative impacts (if any) would you expect the merger to have in relation to ECH?*

³⁷³ Question wording: *Cargotec and Konecranes are proposing to merge. Do you expect the merger to impact competition for the supply of ECH in relation to UK customers? If 'yes', please describe the impact(s) on competition that you would expect as a result of the merger and explain your reasoning.*

- (a) One competitor considered that, globally, the Merged Entity would be 'dominant in ECH'.
- (b) Another competitor submitted that 'unless the merger will free access to [a] distribution network to other brands, the alternative options for customers will become restricted'.
- (c) One customer stated that the Merged Entity would 'have dominance and be very strong in [...] ECH'.
- (d) One distributor submitted that the Merged Entity could have 'a dominant offering in the marketplace'. This distributor further noted that the Parties both have a 'strong product offering' that the Merged Entity could use 'to offer a one stop shop'.

9.250 Two third parties noted that the weakness of Konecranes could limit any impacts of the Merger.

- (a) One distributor felt that the merger would not impact it much as the number of suppliers has already reduced significantly from many years ago, and it felt that Konecranes is currently a weak competitor.
- (b) One competitor that considered that the Merged Entity would be dominant globally. This competitor noted that the impact in the UK would be smaller due to the 'weak position of Konecranes'.

9.251 Overall, these responses indicate that most third parties expect some negative impact to result from the Merger in the supply of ECH due to the strong position that the Merged Entity will have. Customers also noted the potential for positive impacts resulting from the Merger, such as increased innovation. The third parties that expressed fewer concerns regarding the Merger noted that Konecranes was not a strong competitor in the supply of ECH.

Internal documents

9.252 Internal documents submitted by the Parties (discussed at paragraphs 9.78 to 9.80) provide insight into how the Parties perceive their own competitive positions in ECH and those of their competitors.

9.253 We start with documents that are mainly relevant to closeness of competition between the Parties in ECH. We then assess documents that relate to the constraints posed by other suppliers, and the importance of different purchasing criteria, for ECH. Finally, we discuss documents that provide

insight into the Parties' views on how competition in the supply of ECH will develop in future.

Closeness of competition

9.254 The documents set out below in relation to ECH are consistent with the internal documents described in Chapter 6 and in paragraph 9.82 about Mobile Equipment in general and, read together with those documents, they indicate that Cargotec and Konecranes perceive each other as strong and aggressive competitors in ECH, for reasons including their extensive and strong distribution and after-sales networks. These documents also show that the Parties compete closely with each other, comparing the other's offering and discussing how they can have the edge over each other. The Parties also appear to be the only competitors that compete against each other across the entire ECH product range (see Figure 23).

- (a) The internal documents of the Parties show that they have an overlapping offering across the differentiated ECH value product ranges, competing closely in all ranges.
 - (i) An internal Konecranes' document (see paragraph 9.82(b)), shows a benchmarking of Konecranes' essential (value) and premium product lines against competitors' presence in these segments. Only Kalmar is perceived to be active in both these segments as well as at the intersection of both.
 - (ii) In an internal document from Cargotec entitled '[REDACTED]', Cargotec provides a competitive overview of different value categories of ECH (essential and premium) supplied by Konecranes and Cargotec. [REDACTED]. It appears that across the differentiated value product ranges, the Parties have overlapping ECH products.

Figure 23: [REDACTED]

[REDACTED]

Source: [REDACTED]

- (iii) In the same document Cargotec also [REDACTED].

Constraints on the Parties

9.255 The documents below indicate that the main supplier in the market and the Parties' closest competitor is Hyster. While the internal documents reflect a growing competitive threat from Sany, especially regarding electrification, we note that this is on a global basis; it is unclear from internal documents

whether the Parties perceive Sany as a significant threat in Europe and the UK specifically.

- (a) [REDACTED] Cargotec [REDACTED].
- (b) A Cargotec assessment of Western European competition, in the presentation [REDACTED] and that it was the [REDACTED].[REDACTED].
- (c) This assessment is followed by the 2021 'Empty Container Handler overview' on Hyster. In this document Cargotec sets out [REDACTED].[REDACTED].
- (d) A Cargotec strategy document produced in 2020 for the KAMOS leadership team, which is not specific to Europe, notes that Sany is offering an '[REDACTED]'. In the same document it is noted in relation to CCH markets (RS and ECH) that '[REDACTED]'. A key risk highlighted in this document is '[REDACTED]'. This is also reflected in the [REDACTED].
- (e) Internal documents from Konecranes [REDACTED].[REDACTED].
- (f) A December 2020 email between a Sales Director and a Sales Manager at Konecranes shows that Konecranes [REDACTED]. The customer is reported to have said that [REDACTED].

Main Purchasing Criteria

9.256 [REDACTED].[REDACTED].

Competition dynamic in the foreseeable future

9.257 Some internal documents also provide insight into the Parties' views on how competition in the supply of ECH will develop in future. As with other types of Mobile Equipment, the Parties predict an increasing trend towards electrification, within which they believe they are well-placed to succeed.

- (a) The Parties appear to monitor each other's potential development of electric ECH. For example, in an internal Cargotec document, prepared in October 2018, [REDACTED].[REDACTED].
- (b) In an April 2021 (ie, just before or at the same time the Merger started being contemplated) strategic document entitled '[REDACTED]'

CMA's provisional conclusion

9.258 The Parties compete closely in the supply of ECH, with both having a strong offering (including a reliable product, good quality after-sales support and a

wide range of products) and a proven track-record. The only other material competitors in the UK are Hyster and Sany. Therefore, a significant competitor would be removed by the Merger and only two material competitors will impose a constraint on the Parties in relation to UK customers. Further, to the extent that some customers do not consider Sany to be an effective alternative to the Parties, the remaining constraint on the Parties may be particularly limited in some cases. Our provisional conclusion is therefore that the Merger is likely to result in a SLC in the supply of ECH.

9.259 The following evidence, in particular, demonstrates that the Parties compete closely in the supply of ECH.

- (a) The shares of supply indicate that the Parties are two of the only four significant suppliers in the UK over 2016 to 2020, and two of the three largest suppliers in Europe over the same period. The Merged Entity will have a combined share of supply of around [30 – 40]% in the UK and around [40 – 50]% in Europe. Although Konecranes has a lower share in the UK than in Europe,³⁷⁴ its UK share is nonetheless material ([5 – 20]%).
- (b) Our bidding analysis confirms that the Parties compete closely in ECH. In Europe, Konecranes lost more opportunities to Cargotec than to any other competitor and Cargotec lost a significant proportion of its lost opportunities to Konecranes. Sample sizes in the UK are small, but we note that the Parties lost significant volumes to each other over the period considered.
- (c) Evidence from third parties consistently shows that the Parties are close competitors, and most third parties raised concerns about the loss of competition that would result from the Merger.³⁷⁵ Qualitative comments from third parties and qualitative tender documents mostly suggested that both Parties have high quality products, although some third parties considered that Konecranes offered a lower quality product.
- (d) Internal documents are also consistent with the Parties competing closely. Documents relating to ECH specifically indicate that the Parties perceive each other as strong competitors within this market and that they consider themselves as the only suppliers that offer a full range of ECH (value, premium and eco-friendly). The documents relating to Mobile Equipment

³⁷⁴ As discussed at paragraph 9.192 above, we consider that this is likely to reflect the role that national distributors play in the competitive process in Mobile Equipment and, in particular, Konecranes' issues with its UK distributor Impact and Sany's relative success with its UK distributor Cooper.

³⁷⁵ The third parties that expressed fewer concerns regarding the Merger noted that Konecranes was not a strong competitor in the supply of ECH.

in general are consistent with this and show that both Parties are taking active steps to develop electrified Mobile Equipment and are monitoring each other's progress in this area.

- (e) As discussed at paragraphs 9.98(d) and 9.254, a range of evidence outlined in Chapter 6 supports that the Parties have similar strengths in CHE, and plan to increase their market shares in Mobile Equipment in the foreseeable future.

9.260 The evidence shows that Hyster is a strong competitor to the Parties in both the UK and Europe as a whole.

- (a) Shares of supply show that Hyster was the largest supplier in both the UK and Europe as a whole over 2016 to 2020. It would remain the largest supplier in the UK post-Merger.
- (b) This is consistent with the results of our bidding analysis based on Europe as a whole, which suggest that Hyster accounted for the highest proportion of Cargotec's lost opportunities and the second highest proportion of Konecranes' lost opportunities (after Cargotec).
- (c) Third-party evidence and the qualitative tender documents that we reviewed also show that Hyster is a strong competitor. Several third parties indicated that Hyster offers competitive prices and high product quality, although some others considered that it had low product quality.
- (d) The internal documents that we reviewed confirmed that the Parties consider Hyster as one of their closest competitors in Mobile Equipment generally and in ECH specifically. Both Parties' documents noted that Hyster is price competitive (Cargotec noted [X]), especially so for ECH, although Cargotec considered that [X].

9.261 The evidence indicates that Sany is generally a material competitor in the UK, although not for some customers, but is not a material competitor in Europe as a whole. It does not suggest that the constraint from Sany will materially change going forward.

- (a) Shares of supply show that Sany has a [10 – 20]% share of supply in the UK over 2016 to 2020 but is much smaller in Europe ([0 – 5]% share).³⁷⁶
- (b) While UK sample sizes are small, UK bidding data is consistent with shares of supply in suggesting that Sany is a material constraint on the

³⁷⁶ We consider that this difference is likely to reflect the role of its national distributor (Cooper).

Parties in the UK.³⁷⁷ Our bidding analysis confirms that Sany is not a strong constraint in Europe as a whole, where it accounted for fewer than [X] % of lost opportunities for both Parties over 2016 to May 2021.

- (c) Third-party views on the strength of Sany as a competitor to the Parties were mixed, with customers in the UK noting its low prices but also expressing some concerns regarding the quality of its equipment and after-sales service. This is consistent with the qualitative tender documents that we reviewed. This evidence suggests that Sany may not be a strong constraint on the Parties in relation to customers that place less weight on price and more on quality.
- (d) The Parties' documents reflect a growing competitive threat from Sany in ECH on a global basis, especially regarding electrification, but it is unclear from internal documents whether the Parties perceive Sany as a significant threat in the supply of ECH in Europe and the UK specifically. Documents relating to Mobile Equipment in general show that the Parties consider Sany as a material competitor on a global basis, while also suggesting that Sany has not yet established itself in Mobile Equipment in Europe.
- (e) We found no clear trend in Sany's annual sales of ECH in the UK over the last five years and the evidence available to us does not support that there will be material future additional growth for Sany in the UK or in Europe.

9.262 The evidence indicates that no other suppliers compete closely with the Parties for UK customers. Svetruck, CVS and FTMH are all active in Europe (with shares of supply of less than 10%) but did not make sales in the UK over 2016 to 2020, while Liebherr did not make any sales in Europe over this period.³⁷⁸ According to our bidding analysis, the Parties did not lose many opportunities to these suppliers in Europe. Third-party evidence and internal documents indicate that these are not material competitors to the Parties.

9.263 As discussed below (from paragraph 9.264), the evidence that we reviewed in relation to entry and expansion does not suggest that the constraint imposed by these third parties (or any other third parties) will change materially in the foreseeable future.

³⁷⁷ Sample sizes in the UK were small, but we note that Sany only won low-value opportunities from the Parties.

³⁷⁸ We note that CVS does not have a UK-based distributor.

Entry and expansion of existing alternative suppliers of Mobile Equipment

9.264 As set out in our guidance, the CMA's assessment is generally forward-looking and will seek to account for the future evolution of competitive conditions, including constraints from rival entry or expansion,³⁷⁹ following the approach set out in Chapter 6.

9.265 In this section, we consider the possible constraint on the Merged Entity arising from entry or expansion that would have occurred irrespective of the Merger.³⁸⁰ We considered whether the main potential sources of entry identified by the Parties have the necessary capabilities and intention to enter at scale or to substantially expand their operations in the supply of Mobile Equipment in Europe (including the UK).

9.266 In our assessment of the likelihood of entry and expansion, we have taken into account the provisional findings in Chapter 12.

Parties' views

9.267 The Parties told us that they are, 'expecting a number of companies, including Chinese players such as ZPMC and XCMG (which have already entered in the market), to drastically change the market structure in the coming years and disrupt any hypothetical coordination'.

9.268 In particular, the Parties submitted that:

- (a) 'Chinese players ZPMC and XCMG also offer competitive prices and are expected to expand quickly in the market for reach stackers going forward, similarly to Sany'.
- (b) Heli 'has mainly made sales [of HDFLT] in China thus far, [but] the significant sales it has made allowed it to gain a track record and improve quality, which it will be able to leverage on in its expansion outside China going forward'.
- (c) Hyundai 'is a recent market entrant', but which 'clearly has expansion plans in this market [HDFLT]'. The Parties expect Hyundai to become a strong competitor in the supply of HDFLT going forward on account of its recognised quality in other machinery and equipment and established customer relations.

³⁷⁹ CMA129, paragraph 4.16.

³⁸⁰ CMA129, paragraph 4.16.

(d) Toyota has 'expanded into the forklift trucks market (focusing currently on lighter forklift trucks)'. The Parties expect it to be able to quickly expand into heavier FLT as well given its recognised quality in other related machinery and equipment, and an established distribution network.

9.269 The Parties submitted that the cost of investing in direct supply would not be a significant barrier to entry, and the cost of outsourcing to distributors would not be a barrier to entry. Furthermore, they submitted that there are a number of distributors with the expertise and coverage to supply customers across the UK.

Assessment of evidence on specific entry or expansion

9.270 We investigated whether any third parties have the necessary capabilities or specific intention to enter or to substantially expand their operations in relation to the supply of Mobile Equipment in Europe (including the UK), in the near future.

9.271 We set out below the evidence that we received from third parties:

(a) ZPMC [REDACTED]:

(i) [REDACTED].

(ii) [REDACTED].

(iii) [REDACTED].

(b) Sany [REDACTED].

(c) Hyster [REDACTED].

9.272 We note that Sany had some recent successes in the supply of RS and ECH in the UK, which is reflected in the analysis above.

9.273 In regard to RS, we consider that:

(a) Sany [REDACTED]. For example, Sany told us [REDACTED].

(b) Hyster is [REDACTED] which may help it to expand.

(c) ZPMC would [REDACTED].

9.274 In regard to HDFLT, we consider that:

(a) Sany has a [REDACTED], as noted above.

(b) Hyster is [REDACTED] HDFLT which may help it to expand.

9.275 In regard to ECH, we consider that:

(a) Sany has a [REDACTED], as noted above.

(b) Hyster is [REDACTED] ECH which may help it to expand.

(c) ZPMC [REDACTED].

9.276 Our current view is that existing alternative suppliers of Mobile Equipment have an ambition to expand, and intend to pursue business opportunities in the normal course of business, but we have not seen evidence of any specific plans to expand, nor anything to indicate that there will be a material change in the level of competitive constraint that they will pose in the near future.

9.277 We did not find evidence that any of the existing alternative suppliers identified above, or any other third parties, have the necessary capabilities or intention to enter at scale or to substantially expand into the supply of RS, HDFLT or ECH in Europe (including the UK), in the near future. No entry on significant scale has occurred over the past ten years in Europe (5 years in the UK), after Sany's entry.

9.278 We consider that future entry and expansion is made difficult by some of the barriers to expansion in the relevant markets, including the importance of having established customer relationships and a broad interoperable product portfolio. Even if the Parties' submissions on barriers to entry and expansion being low were correct (which we do not consider to be the case), the share of supply data does not show evidence of recent entry or expansion at scale. We consider barriers to entry, as result of the Merger, in Chapter 12.

10. Horizontal effects: ATT

The CMA's analytical framework

10.1 Horizontal mergers combine firms that are currently active or, absent the merger, would be active in the future at the same level of the supply chain, and compete to supply products that are substitutable for each other.³⁸¹ Unilateral effects relate to the merged entity being able to profitably and unilaterally³⁸² raise its prices, worsen its quality or service and non-price

³⁸¹ CMA129, paragraph 2.15.

³⁸² As distinct from acting in coordination with other firms in the market.

factors of competition, or reduce innovation efforts at one or more of the pre-merger businesses.³⁸³

- 10.2 An assessment of horizontal unilateral effects arising from a merger essentially relates to the weakening or elimination of a competitive constraint. The competitive constraint eliminated by a merger may be an existing constraint, or a potential or future constraint.³⁸⁴
- 10.3 Mergers where one or both parties are potential entrants can lessen potential competition, for example, the merger may imply a loss of future competition (for example, over price, service, quality or innovation) between the merger firms that would have occurred, had the potential entrant entered or expanded.³⁸⁵
- 10.4 The evidence available to us indicates that the ATT offerings of Cargotec and some other suppliers are already relatively close to market, with pilots underway and commercial sales projected in the next few years. We assessed whether the Merger would give rise to a substantial loss of future competition in the supply of ATT.
- 10.5 As set out in the Merger Assessment Guidelines, in assessing whether a merger involving a potential entrant leads to a loss of future competition between the merger firms, we consider evidence on:
 - (a) Whether either merger firm would have entered or expanded absent the merger; and
 - (b) whether the loss of future competition brought about by the merger would give rise to an SLC, taking into account other constraints and potential entrants.³⁸⁶
- 10.6 As set out in Chapter 4, we provisionally found that Cargotec [X]. As described in that Chapter, the available evidence demonstrates that Cargotec considers the supply of ATT to be strategically important and that it has an incentive to enter the supply of ATT. We also provisionally found that [X].

³⁸³ CMA129, paragraph 2.17.

³⁸⁴ CMA129, paragraph 4.2.

³⁸⁵ It is a well-established principle that competition law protects not only actual competition, but also potential competition between undertakings. (See CMA129, section 5) This is because there is competitive interaction between a firm that has the potential to enter or expand in competition with other firms (CMA129 paragraph 5.1). A potential competitor may exert competitive pressure on the firms in the market 'by reason merely that it exists' (C-307/18 Generics (UK) Ltd and Others v CMA, EU:C:2020:28, paragraph 42).

³⁸⁶ CMA129, paragraph 5.7.

- 10.7 As set out in the Merger Assessment Guidelines,³⁸⁷ our assessment of competitive effects from the loss of future competition between the merger firms is similar to the assessment when the merger firms are existing suppliers, except that the assessment will reflect the future competitive conditions expected after entry or expansion by the merger firms has taken place.
- 10.8 In response to the Parties' submission that there is currently no 'market' for ATT, in the sense of customer demand at commercial scale (see paragraph 10.11), we note that ATT offerings are being developed by a number of firms and that ATT with some level of automation are likely to be offered to customers in the foreseeable future.^{388,389} We further note that ATT are likely to be an important part of suppliers' equipment offerings in the foreseeable future and already appear to be an important focus for several firms. While sales to end-users appear to be a few years away, several suppliers are already engaged in significant activities intended to support the development and marketing of ATT offerings (see internal documents set out in paragraphs 10.32 to 10.36 and other evidence from third parties and public sources considered below), with competitors often monitoring each other's developments closely. These developments have a global focus and the evidence available to us does not suggest any reason why ATT will not be supplied to UK customers in the future.
- 10.9 The remainder of this Chapter is structured as follows:
- (a) The Parties' views.
 - (b) Konecranes' position absent the Merger.
 - (c) Competitive dynamics in the supply of ATT, including:
 - (i) Shares of supply in TT;
 - (ii) Internal documents;
 - (iii) Third-party evidence; and
 - (iv) Other evidence relating to ATT development by other potential suppliers.
 - (d) Closeness of competition and competitive constraints

³⁸⁷ CMA129, paragraph 5.14.

³⁸⁸ See also Chapter 5.

³⁸⁹ See internal documents referred in paragraphs 10.39 to 10.54.

- (e) Provisional conclusion on the effect of the Merger on potential competition in the supply of ATT.

Parties' views

10.10 In relation to future competition in ATT, the Parties submitted that, to the best of their knowledge, there are no fully functioning ATT available. As noted above, the Parties also submitted that the demand for ATT is uncertain to materialise, and 'there is currently no "market" in the sense of customer demand for ATT at commercial scale'.

10.11 Notwithstanding this position, the Parties also submitted that many suppliers – including not only 'traditional' TT suppliers, but also major automotive and tech / automation companies – are making advances with ATT offerings, with large-scale marketability being imminent.

10.12 As discussed in Chapter 4, the Parties submitted that Cargotec currently supplies TT [REDACTED], whereas Konecranes does not supply TT and is [REDACTED].

10.13 In relation to Cargotec's position in ATT, the Parties submitted that:

(a) '[REDACTED]'.³⁹⁰

(b) '[REDACTED]'.

10.14 In relation to Konecranes' position in ATT, the Parties submitted that:

(a) 'Konecranes [REDACTED] in ATT within a reasonable timeframe absent the Merger.' The Parties submitted, in this regard, that Konecranes is not active in manufacturing TT and that there is no evidence that Konecranes was [REDACTED] TT.

(b) 'Konecranes [REDACTED], would not be able to do so within a relatively short timeframe (i.e., in the next two to three years), and would [REDACTED] project without customer demand. Konecranes did not acquire and would not have acquired any [REDACTED]. Further, [REDACTED] was a loose agreement with no obligation on either party to supply the relevant equipment until a project contract was agreed in the future. The Parties also submitted that '[REDACTED]. [REDACTED]'.

³⁹⁰ Cargotec further submitted that it [REDACTED]. Parties' Response to the Statement of Issues, paragraph 8.11.

- (c) Konecranes submitted that the [REDACTED] would have related to a business active in [REDACTED] and was primarily of interest to Konecranes for its [REDACTED] business. Konecranes also submitted that, in any case '[REDACTED]'.
- (d) 'Although Konecranes has some existing technologies and capabilities in automation, developing these specifically for ATT would take '[REDACTED]' and '[w]hilst Konecranes is an experienced supplier of different types of ECH, its experience with [REDACTED] is very limited'.
- (e) 'As such, Konecranes cannot be considered a significant competitive constraint in ATT'.³⁹¹

10.15 In relation to the position of third-party ATT suppliers, the Parties submitted that:

- (a) 'Terberg is the clear leading supplier of TT in Europe'. The Parties further submitted that Terberg is currently partnering with other suppliers to develop ATT, such as ZF and Easysmile, both of which are at the forefront of automation, citing several press releases to support this position.³⁹² The Parties also said that Terberg plans to bring to market its own ATT (AutoTUG), which they considered shows that Terberg is clearly contemplating entry as an individual company (ie independent of Konecranes) to this nascent market.³⁹³
- (b) There are numerous companies that are developing ATT, such as Westwell Lab,³⁹⁴ Terberg, Einride and Sinotruk, major suppliers in the automotive industry (eg, Volvo,³⁹⁵ Volvo, Daimler, MAN etc.) and tech companies (including Google, Microsoft and Amazon).³⁹⁶

10.16 Finally, the Parties submitted that 'it is not clear that the post-Merger position would be any less competitive than the CMA's most likely counterfactual –

³⁹¹ The Parties' response to the Statement of Issues, paragraph 8.9.

³⁹² Royal Terberg Group, an Autonomous Tractor Partnership [online], available at <https://newsmedia.terberggroup.com/en/special-vehicles/overview/press-releases/special-vehicles/an-autonomous-tractorpartnership/> and Terberg (July 2021), 'Terberg and EasyMile work together on Autonomous Terminal Tractor' [online], available at <https://www.royalterberggroup.com/en/news/news-template-page/41086> [accessed 24/11/2021].

³⁹³ The Parties response to Issues Statement, 19 August 2021, paragraph 8.7-8.9.

³⁹⁴ In relation to Westwell Lab/Q-Trucks, the Parties consider the Chinese tech company Westwell Lab to be 'the frontrunner in full TT automation globally'. They said that Westwell Labs has developed the so-called Q-Truck (or Qomolo-Truck), 'a wirelessly charging, fully ATT, using cutting edge technology'. 'Both technologically and commercially, the Parties consider the Q-Truck to be the most advanced ATT product available' and 'Westwell Lab may already be capable of mass production'. The Parties response to Issues Statement, 19 August 2021, p 50.

³⁹⁵ In relation to Volvo, the Parties submitted that Volvo has developed the ATT "Vera"...Vera has already been deployed at APMT's port facility in Gothenburg, Sweden but, to the best of the Parties' knowledge the product is not yet fully operational'. The Parties said that the full and final rollout of this product is expected to happen within a few years. The Parties response to Issues Statement, 19 August 2021, p 51.

³⁹⁶ The Parties response to Issues Statement, 19 August 2021, paragraph 810 and footnote 161. [REDACTED]

there are the same number of potential competitors in ATT pre- and post-Merger.

Konecranes's position in ATT absent the Merger

10.17 As mentioned above in Chapter 4, we provisionally found that it is likely that, absent the Merger, Konecranes had strong incentives and the ability to enter into the supply of [REDACTED], once any operational or financial challenges of coronavirus (COVID-19) eased.³⁹⁷

10.18 Based on the evidence summarised in Chapter 4, we consider that Konecranes already possesses several attributes that make it well-placed to enter the supply of ATT. In particular Konecranes has:

- (a) Developed the ability [REDACTED];
- (b) experience of customers' manual TT [REDACTED];
- (c) established a reputation and track record in the supply of CHE, other than ATT, in adjacent markets; and
- (d) developed automation technology and knowhow for other types of CHE through its subsidiary, TBA Group.

10.19 The internal documents assessed below in paragraph 10.34 also show that Konecranes has [REDACTED] broader experience in horizontal transport equipment, as being among key relevant strengths.

10.20 Although Konecranes does not currently have all the capabilities to supply a complete ATT offering, for example because it does not produce a TT product at present, [REDACTED]. In this regard, as set out in Chapter 4, we note that Konecranes had, in particular, [REDACTED] with Terberg [REDACTED].

10.21 [REDACTED].

10.22 Therefore, we provisionally found that Konecranes is an emerging supplier with an intention and a strong incentive to supply ATT in the near future that already possesses a number of important capabilities that make it well-placed to provide a significant ATT offering, [REDACTED]. We also note, however (as explained below in paragraph 10.83) that a number of other suppliers also possess or are developing similar capabilities, and that Konecranes (even

³⁹⁷ As set out in paragraph 5.7 of CMA129, a merger involving a potential entrant leads to a loss of future competition between the merger firms. The CMA will consider evidence on whether either merger firm would have entered or expanded absent the merger. In some cases, evidence relevant to the counterfactual and evidence relevant to the competitive assessment will be overlapping (paragraph 5.9).

taking into account its expected future development) is not among the strongest competitors in the supply of ATT.

Evidence on competitive dynamics in the supply of ATT

10.23 In the section below, we summarise our provisional findings regarding competition faced by Cargotec from Konecranes and from other third-party competitors in the supply of ATT. In reaching our provisional findings, we have taken into account the Parties' submissions, shares of supply in TT, the Parties' internal documents, and evidence received from third parties.

10.24 We note that Terberg has entered into a partnership arrangement with Konecranes [REDACTED]. We are not required to reach a view on exactly how Terberg is likely to develop its offering in future and therefore have taken into account this range of possibilities in our competitive assessment.

Shares of supply

10.25 As noted above, current TT suppliers are among those that are actively developing ATT offers. We consider that shares of supply for TT providers (see Table 48) are an initial point of reference for our assessment, in that players with strong sales in TT are likely to hold important capabilities required for a successful ATT offering. However, we recognise that a strong share of supply in TT may not in itself be determinative of success in ATT. We therefore consider a wider range of players (including those from outside of the TT sector) in the remainder of this Chapter.

Table 48: Shares of supply for TT, based on number of deliveries, 2017–19

Volume in units

Company	Geographic area					
	UK		Europe		Worldwide	
	Volume	Share	Volume	Share	Volume	Share
Cargotec	[REDACTED]	[30-40]%	[REDACTED]	[10-20]%	[REDACTED]	[30 - 40]%
Konecranes	[REDACTED]	[0 - 5]%	[REDACTED]	[0 - 5]%	[REDACTED]	[0 - 5]%
Combined	[REDACTED]	[30-40]%	[REDACTED]	[10-20]%	[REDACTED]	[30-40]%
Terberg	[REDACTED]	[50-60]%	[REDACTED]	[50-60]%	[REDACTED]	[20-30]%
Mafi	[REDACTED]	[0-5]%	[REDACTED]	[5-10]%	[REDACTED]	[0-5]%
Capacity	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[5-10]%
TICO	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	
Autocar	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[5-10]%
Shaanxi	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
Sinotruk	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%	[REDACTED]	[0-5]%
Others	[REDACTED]	[0-5]%	[REDACTED]	[10-20]%	[REDACTED]	[5-10]%
Total	[REDACTED]	100%	[REDACTED]	100%	[REDACTED]	100%

Source: Parties, Response to P1 RFI 3, Annex 3.1

Note: These shares of supply were submitted by the Parties. The CMA is not producing its own shares of supply for TT using third party data.

10.26 We note that the Parties' estimates of shares (see table 48) of supply are broadly consistent with an estimate of Cargotec's share of supply in a Cargotec internal document in relation to North Europe and at global level, prepared before the Merger was in contemplation. As explained below in paragraph 10.33, the same internal document shows that [REDACTED].

10.27 The shares set out in Table 48 above suggest that the supply of TT in the UK is effectively a duopoly, with Cargotec and Terberg accounting for essentially all of the market. The position appears to be similar within Europe, albeit that Cargotec's share is lower and Mafi (and other smaller suppliers) account for a marginally larger part of the market.

10.28 The share data show that Terberg was the largest TT supplier in the UK and Europe over this period by a significant margin (with the fact that Terberg is regarded as the leading TT supplier being supported by the Parties' submissions, paragraph 10.15 above), while Cargotec was the second largest supplier. On a global basis, Cargotec is the largest supplier, followed by Terberg, with the two suppliers accounting for the majority of the market and holding significantly higher shares than any other supplier.

10.29 Mafi (a German company specialising in developing and producing heavy-duty vehicles for ports and industry)³⁹⁸ was the only other player to sell a material volume of units in the UK or Europe over this period.

10.30 While the shares of supply indicate that Konecranes has sold some TT over this period, Konecranes submitted that these sales occurred during the short period after it acquired MHPS's terminal tractor business in 2017, as part of the broader acquisition of MHPS, before ceasing TT production that same year. Konecranes submitted that, today, it only re-sells.

Internal documents

10.31 We have reviewed a range of internal documents submitted by the Parties relating to ATT. The documents that we placed weight on as the most relevant to our competitive assessment are considered further below.

Internal documents relating to Cargotec's position in ATT

10.32 [REDACTED]:

(a) [REDACTED].

(b) [REDACTED].

Figure 24: [REDACTED]

[REDACTED]

Source: [REDACTED]

10.33 We also reviewed several Cargotec internal documents that showed that Cargotec considers its TT division (including TT, electric TT and ATT) to be in a strong position, with ATT seen as a source of growth:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

10.34 Konecranes' internal documents show that it is aware of Cargotec's ATT progress and considers that Cargotec is well-positioned to have a strong ATT offering. For example:

³⁹⁸ Mafi, About Us [online], available at <https://www.mafi.de/en/company/about-us/> [accessed 6 September 2021].

- (a) Konecranes's [REDACTED] to Board of Directors document, produced by [REDACTED], Executive Vice President, Port Solutions, Konecranes, in September 2019 concludes that '[REDACTED] – [REDACTED]'. The document assesses the '[REDACTED]' and '[REDACTED]'. [REDACTED] receive the highest score in relation to both of these factors.
- (b) Konecranes '[REDACTED]' document, produced by [REDACTED], Executive Vice President, Port Solutions, Konecranes, in March 2019 (discussed above), also comments on [REDACTED] including Cargotec (Kalmar). In relation to Cargotec, the document notes that 'Kalmar has announced launch of automated TT for 2020 with lithium technology' and also notes 'Competition news - Kalmar automated terminal tractor (introduced 2019)'.
- (c) Konecranes' [REDACTED] (dated 17 December 2019) notes that 'traditional OEMs of manual TT like Kalmar [Cargotec]... have [REDACTED] and [REDACTED]. They have [REDACTED] and [REDACTED]'.

Internal documents relating to Konecranes' position in ATT

10.35 [REDACTED]:

- (a) Konecranes '[REDACTED]' document (dated 28 June 2017) includes a number of Q&A in relation to Konecranes and Terberg ATT partnership. The document says that, when Konecranes and Terberg team up, 'the customer gets leading terminal tractors from Terberg combined with Konecranes' long experience of automated horizontal transport. The customers receive turn-key automated solutions that not only include equipment but also yard process automation and full system integration. All of the automated operations run smoothly with the equipment control system TEAMS provided by TBA [Konecranes subsidiary]'. The document states that Konecranes 'is capable of delivering [REDACTED]' and that Konecranes has 'the largest fleet of automated equipment out there and our approach allows us to fully commit to performance'.
- (b) Konecranes' [REDACTED] for [REDACTED] (dated 17 December 2019) presents a SWOT (strengths, weaknesses, opportunities, threats) analysis of Konecranes' [REDACTED] and TBA. Strengths relating to [REDACTED] include its '[REDACTED]'. Strengths that appear to relate to Konecranes include [REDACTED]. A comment on the page notes that the analysis is not aligned with the BL/BU [i.e. business unit] analysis 'up to now'. As weaknesses of the [REDACTED], this document identifies the lack of [REDACTED], as well [REDACTED], which can make new inventions [REDACTED].
- (c) Konecranes' [REDACTED] (dated 17 December 2019) outlines Konecranes' view that there is 'large potential in container terminals' for [REDACTED] and that target customer groups will include [REDACTED]. It assesses three scenarios, including

one in which [REDACTED]. The other scenarios are: [REDACTED], in which Konecranes' share would be [REDACTED]% and [REDACTED] in which Konecranes' share would be [REDACTED]. The document notes that a combined Konecranes' solution of [REDACTED]. This suggests that Konecranes sees its wider position in other CHE (in particular A-RTG) as contributing to the strength of its ATT offer.

10.36 We consider that the documents described above broadly show that Konecranes has strong ambitions in the supply of ATT and sees its technological capabilities as well as its broader experience in horizontal transport equipment as among its relevant strengths.

10.37 In addition, as noted above in relation to Cargotec, a Konecranes internal document, produced in September 2019, concludes that '[REDACTED]'. The document assesses the '[REDACTED]' and '[REDACTED]' of a number of players. [REDACTED] receive the highest score in relation to both of these factors.

10.38 In our review of Cargotec's internal documents, we found several references to Konecranes' ATT activity:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

Internal documents relating to third-party competitors in ATT

10.39 We reviewed a number of Cargotec internal documents in which it monitors and assesses third-party ATT developments.

10.40 [REDACTED].

10.41 [REDACTED].

10.42 [REDACTED].

10.43 [REDACTED].

(a) [REDACTED].

Figure 25: [REDACTED]

[REDACTED]

Source: [REDACTED]

(b) [REDACTED].

Figure 26: [REDACTED]

[REDACTED]

Source: [REDACTED]

(c) [REDACTED].

(d) [REDACTED].

(e) [REDACTED].

10.44 [REDACTED]:

(a) [REDACTED].

(b) [REDACTED].

10.45 [REDACTED]:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

10.46 As set out below, we also reviewed a number of Konecranes' internal documents in which it comments on third-party ATT developments.

10.47 Konecranes's [REDACTED] to Board of Directors document, produced by [REDACTED], Executive Vice President, Port Solutions, Konecranes, in September 2019 (also discussed above), assesses the '[REDACTED]' and '[REDACTED]' of a number of players. The third-party players assessed against these criteria are [REDACTED]. Each of these players receives a lower score than [REDACTED] on both criteria. These third parties are assessed as being [REDACTED] in relation to '[REDACTED]' (see Figure 27).

Figure 27: [REDACTED]

[REDACTED]

Source: [REDACTED]

10.48 Konecranes '[REDACTED]' document, produced by [REDACTED], Executive Vice President, Port Solutions, Konecranes in March 2019 also discussed above), comments on ATT developers including [REDACTED]. In particular:

(a) In relation to [REDACTED], the document refers to Terberg partnership [REDACTED] with one of the leading TT manufacturer [REDACTED] for container handling terminals. Terberg [REDACTED] and refers to Terberg's position in the TT market.

(b) The document comments on a possible [REDACTED]. It says that [REDACTED].

10.49 We also reviewed Konecranes' [REDACTED] for [REDACTED] dated 17 December 2019 (also discussed above). This document assesses different groups of potential competitors. These include [REDACTED].

10.50 Overall, the document appears to rate the first group ([REDACTED]) as being the strongest competitors, noting that '[REDACTED]'. The document appears to include ZPMC in this first group and comments that ZPMC's 'expansion into automated Terminal Tractors is very likely and should be monitored closely'.

10.51 In relation to the second group ([REDACTED]), the document comments that the big players like [REDACTED] have '[REDACTED] and have [REDACTED]', while adding that 'they are [REDACTED]'.

10.52 The document notes that it is unclear if the third group ([REDACTED]) have a long-term interest in ports or industrial applications, but notes that as '[REDACTED]'.

10.53 Overall, in our view, these documents demonstrate that the Parties consider that there are a wide range of suppliers that could be active within the supply of ATT, with Cargotec in particular monitoring announcements about electric and automated vehicle pilots and other developments in relation to a wide range of third parties.

10.54 Some of the documents that we reviewed included more detailed analysis. In particular, we note that a Cargotec document rated [REDACTED]. We note that Konecranes' documents comment on the strength of [REDACTED], while more broadly suggesting that traditional TT OEMs have a [REDACTED].

Third-party evidence

Competitor views

10.55 In relation to its own ATT offering, Terberg told us that:

(a) [REDACTED].

(b) [REDACTED].

(c) In this regard, Terberg noted that it has recently announced a co-operation with EasyMile.³⁹⁹ Terberg told us that this was to develop a ‘proof of concept’ autonomous tractor in Benschop (Netherlands). [REDACTED].

(d) [REDACTED].

10.56 In relation to other ATT players, Terberg said that it sees a number of companies who are looking to develop autonomous driving trucks in Europe, Asia and America, including Cargotec, other CHE suppliers, truck manufacturers and technology companies.

10.57 Terberg referred to Cargotec tests of an ATT three years ago. Terberg understands that the American companies, such as Waymo, are not developing the terminal tractor themselves but rather are approaching manufacturers in the market, [REDACTED], to supply these vehicles. Terberg expect that the Chinese companies will develop the terminal tractors (or their equivalent) themselves.

10.58 [REDACTED].

10.59 Terberg also mentioned that Aidrivers (UK) focuses on automated equipment, but not ATT.

10.60 Terberg said that it was too early to say which of the ATT offers being developed would be strongest.

10.61 In relation to TT, [REDACTED].

Other competitor views

10.62 In relation to its own ATT offer, Westwell Lab said that:

(a) Westwell’s Q-Truck ATT has been ‘released commercially for about 3 years’ and are in operation in terminals such as Terminal D of Laem Chabang in Thailand, CSP in Abu Dhabi, and Terminal C of Tianjin Port in China. [REDACTED].

(b) In Terminal D of Laem Chabang (operated by HPT), 6 ATT have been working together with manual trucks in the past year. [REDACTED].

(c) [REDACTED].

³⁹⁹ Terberg (July 2021), ‘Terberg and EasyMile work together on Autonomous Terminal Tractor’ [online], available at <https://www.royalterberggroup.com/en/news/news-template-page/41086> [accessed 24 November 2021].

10.63 Westwell also highlighted the differences between autonomous road vehicles (where responding to unexpected hazards is important) and container handling autonomous trucks (where having a high tolerance – ie the ability to make very precise movements – is very important). Westwell considers Q-Truck’s precise vehicle control to be one of its strengths.

10.64 [REDACTED]:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

10.65 In relation to its own ATT offer, [REDACTED] said that:

(a) It has entered a partnership with US terminal tractor manufacturer [REDACTED] to develop zero emissions terminal tractors for the UK and European markets. It said these vehicles will form the basis for a global ATT [REDACTED].

(b) Production of zero emission terminal tractors is planned for early 2023, with an automated terminal tractor offering following shortly afterwards, on a bespoke per-customer project basis. [REDACTED] confirmed that it plans to enter the UK market with this ATT offer.

10.66 In relation to competitors’ ATT offers, [REDACTED] said that:

(a) The only potential competitors that could currently or in the future have an ATT offering in the UK market are Terberg (using a Konecranes system) and Gaussin.

(b) In addition, Kalmar (Cargotec) could potentially expand into this market post-Merger using Konecranes technology and that the merged entity ‘would have the machines and all of the required system technology to do so...this would present a serious challenge to other market participants and new entrants’.

(c) While it monitors public announcements about the ATT sector and tries to keep informed about developments in the field, ‘there is a limited amount of information on active projects available in the public domain’.

10.67 In relation to how UK customers would choose which ATT supplier to use, [REDACTED] said that ‘the most important factors are not the type or brand of the physical gantry crane, but instead (1) the fleet management system and (2) the terminal operating system used by the terminal. This is because the Automated Terminal Tractors need to be linked with both systems effectively

in order for the automation to function correctly. This is critical for the success of the automation project and is a challenge to achieve. Technology lock-in and supplier lock-in of these technologies are possible’.

10.68 [X] said that the Merger of Cargotec and Konecranes will have a significant impact on the market for the supply of ATT to UK customers. It said that:

(a) Kalmar (Cargotec) is the global market leader in terminal tractors. Both Kalmar and Konecranes have a strong position in container terminal automation. Konecranes has already worked on ATT projects but has not previously had a terminal tractor offering.

(b) The combination of these companies will produce the global market leader for terminal tractors, and most likely the global market leader in (installed) terminal automation systems also.

10.69 [X] also noted the market shares of Terberg and Kalmar as the strengths of those players. It said that Terberg and now Konecranes/Kalmar (Cargotec) ‘controls’ [sic] the European ATT market.

10.70 [X].

10.71 The [X] said that it does not currently supply ATT in the UK (or elsewhere) [X]. As a result, it said it was not in a position to respond to the CMA’s other questions regarding ATT.

10.72 [X] told us that it currently does not have a very clear road map for the development of ATT and that there is a lot of uncertainty and it cannot say when it will be in a position to market an ATT.

Customer questionnaire evidence on ATT

10.73 We asked a sample of the Parties’ UK CHE customers about their intentions in relation to purchasing ATT in the UK, with 13 customers responding to at least one of our questions regarding ATT. Of these 13 respondents:

(a) 11 said that they had not considered purchasing ATT for any existing or planned UK sites, whereas two customers had considered doing so.⁴⁰⁰

⁴⁰⁰ Questionnaire question, ‘[h]ave you considered purchasing Automated Terminal Tractors for any of your existing or planned UK sites?’

- (b) None of these 13 customers said that they expected to purchase ATT for UK sites in the next five years (one said 'TBC' and the others said 'no' or did not respond).⁴⁰¹

10.74 While these responses indicate that customers in the UK are not purchasing ATT at present (and do not have any specific plans to purchase ATT in the near future), we consider, for the reasons set out in paragraph 10.8 above, that various suppliers are already in the process of competing to supply ATT in the UK in future. For example, while [X] told us that it is considering options for future investment, including for ATT, it does not currently have any plans to use ATT, two third parties, [X].

10.75 We asked customers of the Parties to rate the importance of various criteria in future purchasing decisions for ATT (scores out of 5, where 5 is the most important).⁴⁰² The eight responses to this question indicated that:

- (a) Differences in equipment reliability were considered very important, with all eight respondents to this question scoring reliability at 5;
- (b) Differences in automation/assistive technology features, purchase price, running costs, aftersales services, efficiency/environmental performance were also considered relatively important by most respondents (each of these criteria received a mix of scores between 3 and 5 from each customer, except for efficiency/environmental performance (which received a score of 2 from one customer), and running costs (which received a score of 1 from one customer);
- (c) Views were more mixed in relation to the importance of the degree of interoperability with other equipment (four customers gave it a score of 3, one gave it a score of 4, one scored it as 1 and two scored it as 5); and
- (d) Already having an installed base of equipment from a particular supplier was generally rated as being least important of the criteria that we asked about (three customers gave it a score of 2 or lower, one scored it between 2 and 3, two did not score this criterion, and only three scored it 3 or more).

⁴⁰¹ Questionnaire question, '[d]o you expect to purchase ATT for UK sites within the next five years?'

⁴⁰² Questionnaire question, '[w]hen thinking about purchasing ATT in the UK, please score the following factors according to how important they are to your choice of supplier: (i) differences in equipment reliability, (ii) differences in automation/assistive technology features, (iii) differences in purchase price, (iv) differences in running costs, (v) differences in strength of aftersales presence (servicing, maintenance, spare parts), (vi) differences in efficiency/environmental performance, (vii) degree of interoperability with other equipment, (viii) already having an installed base of equipment from a particular supplier, (ix) other.'

10.76 We asked these customers about the extent to which they had recently monitored and/or tested the market for ATT and felt well-informed about suppliers' strengths and weaknesses.⁴⁰³ Given that the knowledge of customers about the details of potential ATT suppliers' development plans is by nature limited, we place relatively limited weight on this evidence. The 11 responses to this question were as follows:

Table 49: CHE customer assessments of whether they have recently monitored/tested the ATT market and feel well-informed about suppliers

<i>Response option</i>	<i>Number of responses</i>
(i) Have recently monitored and/or tested the market, and overall feel well-informed about suppliers in the market and their strengths and weaknesses	1
(ii) Have not recently monitored and/or tested the market, and overall feel well-informed about suppliers in the market and their strengths and weaknesses	3
(iii) Have recently monitored and/or tested the market, and overall do not feel well-informed about suppliers in the market and their strengths and weaknesses	1
(iv) Have not recently monitored and/or tested the market, and overall do not feel well-informed about suppliers in the market and their strengths and weaknesses	6

Source: Responses to CMA questionnaire.

10.77 Finally, we asked customers of the Parties which ATT suppliers they would expect to consider as viable options, supposing that they were planning to purchase ATT in the UK within the next five years.⁴⁰⁴ Among the four respondents that identified themselves as feeling well-informed about ATT suppliers (response options (i) and (ii) above):⁴⁰⁵

(a) Three mentioned Terberg, three mentioned Cargotec, one mentioned Konecranes and one did not list any suppliers; and

(b) No other providers were mentioned.

⁴⁰³ Questionnaire question, '[h]ave you recently monitored and/or tested the market for ATT and to what extent do you feel well-informed about suppliers' strengths and weaknesses?'

⁴⁰⁴ Questionnaire question, '[s]uppose that you were planning to purchase ATT in the UK within the next five years. What suppliers would you expect to consider?'

⁴⁰⁵ We do not present here the responses of three further respondents; this is because they identified themselves as not feeling well-informed about ATT suppliers (response options (iii) and (iv) above).

Other evidence relating to ATT development by potential alternative suppliers

10.78 We also note a range of other announcements, or media commentary, about possible developments in relation to the supply of ATT. In particular:

- (a) Gaussin has announced on its website that it has developed a fully autonomous ATT (APM 75T). A news article from UPS, dated November 2020, states that it is testing ‘electronic shifters’ developed in cooperation with Gaussin in its London Hub.⁴⁰⁶
- (b) A news article describes the trial of Volvo’s Vera (an electronic, connected and autonomous vehicle) at APMT’s port facility in Gothenburg (with the headline ‘Volvo Trucks presents an autonomous transport between a logistics centre and port’). The article suggests that Vera seems to have been trialled in a port context and that Volvo is working with Nvidia to develop AI for autonomous trucks.⁴⁰⁷
- (c) A news article from May 2021 describes how MAN is testing self-driving trucks for use in hub-to-hub container traffic, with practice tests carried out with a self-driving truck in regular traffic at HHLA Container Terminal Altenwerder.⁴⁰⁸ The article goes on to describe that HHLA and MAN ‘are developing and testing self-driving trucks for use in hub-to-hub container traffic.’ Another article (dated 27 July 2021) describes a project in Ulm to ‘automate transshipment between transport modes’ (ie between the rail and container hubs).
- (d) Scania is engaged in a multi-year project involving autonomous trucks which will be platooned on public roads in Singapore.⁴⁰⁹

10.79 We consider that these news articles and press releases are broadly consistent with the position that a range of firms, with differing capabilities, are developing technologies that could be deployed in automated CHE. While some of the pilots referred to above are in automated vehicles that would transport containers in a terminal context (eg lift trucks, or driverless trucks), it is not clear whether these firms will develop products that will be close

⁴⁰⁶ UPS Press release (November 2020), UPS To Test Gaussin Autonomous-Enabled EV’s To Move Trailers At Its London Hub [online] available at <https://about.ups.com/us/en/newsroom/press-releases/innovation-driven/ups-to-test-gaussin-autonomous-enabled-ev-s-to-move-trailers-at-its-london-hub.html> [accessed 24 November 2021].

⁴⁰⁷ Volvo Group (June 2019), ‘Vera’s first assignment: Volvo Trucks presents an autonomous transport between a logistics centre and port’ [online], available at <https://www.volvogroup.com/en/news-and-media/news/2019/jun/news-3336083.html> [accessed 24 November 2021].

⁴⁰⁸ ShipInsight (June 2021), ‘Successful trial of automated trucks in the Port of Hamburg’ [online], available at <https://shipinsight.com/articles/successful-trial-of-automated-trucks-in-the-port-of-hamburg/> [accessed 24 November 2021].

⁴⁰⁹ Scania, ‘Autonomous truck platoon in Singapore’ [online], available at <https://www.scania.com/sg/en/home/experience-scania/features/autonomous-truck-platoon-in-singapore.html> [accessed 24 November 2021].

alternatives to the Parties' ATT offers. In particular, Scania, MAN and Volvo's innovations appear to focus on hub-to-hub (as opposed to within-terminal) driverless trucks, whereas Gaussin's 'electronic shifter' has been developed for a warehouse application (for UPS). It is not clear whether vehicles developed by these players will be a close alternative to the parties' ATT.

Overall assessment of closeness of competition and potential competitive constraints in the supply of ATT

10.80 Based on the evidence set out above, we have assessed the competitive position of the Parties and the potential constraints that they would face, absent the Merger, in the supply of ATT.

The Parties

10.81 Based on the evidence set out above, [REDACTED].

10.82 Cargotec has a strong existing position in TT (being one of only two main players), with a share of [30-40]% within the UK, and its internal documents show [REDACTED]. The prospective competitors and customers that we heard from (customers that consider themselves to be 'well informed' but do not have access to confidential information about ATT suppliers' development plans) generally expect Cargotec to be a main player in ATT in the UK. Internal documents set out above, clearly show that Cargotec (as well as Konecranes) have strong integration capabilities. While the Parties told us that integration capability may become obsolete as a requirement in the future, because of the potential development of fully autonomous rather than automated vehicles, we have seen limited evidence to support this assertion. We accept the Parties' submission that other suppliers may have strengths in relation to integration and other capabilities relevant for the supply of ATT, although the evidence indicates that this is an important strength of Cargotec's and Konecranes' offer.

10.83 Konecranes also has a strong incentive [REDACTED] to become an important player in the supply of ATT. In particular, Konecranes had [REDACTED]. The internal documents set out above in paragraph 10.35 and 10.36 also show that Konecranes possesses a number of attributes to be a significant competitive presence.

10.84 We also note, however, that Konecranes currently has some gaps in the capabilities required to provide a compelling ATT offering (most notably the lack of a TT offer). While Konecranes was taking steps to address these limitations (eg [REDACTED]), the evidence available to us does not suggest that it was as well-placed as Cargotec (and some other suppliers) as a supplier of ATT. In this regard, we consider that Konecranes should be considered as one of

the other suppliers that also possess or are developing similar capabilities, but not among the strongest competitors in the supply of ATT.

Terberg

- 10.85 Based on the evidence summarised above, we consider that Terberg (like Cargotec) is likely to become one of the main potential competitors in the supply of ATT in Europe.
- 10.86 In particular, Terberg has a very strong established position in the supply of conventional TT, holding a share of [50-60]% in the UK for example, which we consider is likely to be a material competitive advantage in the supply of ATT. It has advanced plans in relation to the supply of ATT, is already working with a number of technology partners (including Konecranes and others), and appears to possess the capabilities to be a material competitor to the Parties in ATT. We note, in particular, that Konecranes considered Terberg to be ‘one of the leading TT manufacturer(s)’.
- 10.87 We note that Terberg currently has a [redacted] with Konecranes for the development of ATT. [redacted] as a result of a change of control over Konecranes and therefore would only be [redacted], following the Merger, if either [redacted]. [redacted].
- 10.88 On completion of the Merger, all assets and liabilities of Konecranes transfer to Cargotec. Such assets and liabilities include [redacted], meaning that the Merged Entity (including the Cargotec business) will succeed Konecranes [redacted]⁴¹⁰ [redacted].
- 10.89 [redacted] in relation to the supply of ATT.
- 10.90 [redacted] (ie [redacted]Terberg [redacted]). [redacted].
- 10.91 [redacted]⁴¹¹ [redacted]:
- (a) [redacted]
 - (b) [redacted];
 - (c) [redacted];
 - (d) [redacted];

⁴¹⁰ See Chapter 4, for details.

⁴¹¹ We note in relation to the Parties’ submissions that the [redacted], is a ‘loose’ agreement that (see paragraph 10.14. above) the purpose of the [redacted] with Terberg was clearly to develop and market the ATT developed by Terberg and Konecranes. [redacted] envisages the parties working closely to develop a strong ATT offering and promoting it jointly and separately. Notably, as set out in Chapter 4, the parties to the [redacted]. It can reasonably be expected that they intended to bid for contracts jointly [redacted].).

(e) [REDACTED].

10.92 Therefore, although Terberg would be a very strong potential ATT supplier and impose a significant constraint on Cargotec absent the Merger, the competitive constraint that Terberg would have imposed is likely to be substantially softened as a result of the contractual link that the Merger will establish between the Merged Entity and Terberg.

Other potential suppliers of ATT

10.93 There are a number of other players that are developing ATT solutions. The level of constraint that each of these potential competitors would likely impose on the Merged Entity varies.

10.94 The evidence that we have reviewed suggests that Westwell Lab/Q-Truck and the Hyster-Yale-Capacity-VDL partnership are likely to provide a material constraint on the Merged Entity. [REDACTED]. On the other hand, the third parties did not list Q-Truck as a main competitor or as an option they would consider if buying ATT in the UK in future (although that may be justified by the lack of detailed knowledge of potential ATT suppliers' development plans). In keeping with evidence in relation to other product areas, we consider that a significant possible weakness for Westwell Lab/Q-Truck (and similar players) could be its limited track record in Europe.

10.95 Another material potential competitor is the Hyster-Yale-Capacity-VDL partnership. This partnership would benefit from Capacity's TT position, VDL's technology (highlighted in internal docs) and Hyster's position in CHE. Capacity has a 10% share of TT [REDACTED] (although the third parties that we heard from did not list Hyster-Yale, Capacity or VDL as a main competitor or as an option they would consider if buying ATT in the UK in future).

10.96 We have seen some evidence that ZPMC/Shaanxi, Sany and Sinotruk are also developing ATT. The Parties' internal documents considered above refer to these suppliers, but these documents and other evidence suggest that these players may not be as well advanced in ATT as the likes of Terberg and Q-Truck. In addition, it is not clear whether these players would have the sales and servicing capabilities to be a material constraint in ATT in Europe in the early stages of this market.⁴¹² Although ZPMC is present in Europe in the supply of cranes and, to a limited extent, HTE, it does not currently supply TT or Mobile Equipment in Europe. As noted in paragraph 10.25, Shaanxi and Sinotruk sell TT in some regions but did not sell TT in Europe during the

⁴¹² See paragraph 10.72 about [REDACTED] development and marketing plans.

period 2017-19 and so do not appear to have an established presence in Europe. Sany sells certain Mobile Equipment in Europe, but not TT. Overall, we consider that this group of suppliers is likely to impose a materially weaker competitive constraint on the Merged Entity than suppliers such as Westwell Lab/Q-Truck and the Hyster-Yale-Capacity-VDL partnership.

10.97 We consider that other potential suppliers of ATT in future (individually or in partnerships with others) include Einride, Volvo, MAN and Gaussin. These potential suppliers do not appear to have experience of and a track record in the supply of CHE to port terminals and we have heard that ATT for container handling terminals requires different capabilities as compared to autonomous vehicles for road applications. These suppliers therefore appear to face very material barriers in providing a close alternative to the Merged Entity. We therefore consider that these players would likely impose a weaker competitive constraint on the Merged Entity than both the most significant competitors to the Merged Entity (ie Westwell Lab/Q-Truck and the Hyster-Yale-Capacity-VDL) or the secondary constraints (ie ZPMC/Shaanxi, Sany and Sinotruk).

10.98 The Parties also suggested that competition would come from other players including technology companies (such as Waymo/Alphabet). However, most of the evidence available to us does not suggest that these players will impose a material constraint on the Merged Entity. The Parties undertake some monitoring of these players in their internal documents, however, they appear to generally consider these players to be less well-placed in ATT, as compared to players that are actively developing ATT in a container handling terminal setting. We therefore do not currently consider that these suppliers will be a material competitive presence in the supply of ATT.

10.99 Overall, Westwell Lab/Q-Truck and the Hyster-Yale-Capacity-VDL partnership seem to be well placed to compete with the Merged Entity in ATT. While there are other potential suppliers of ATT that may compete with the Parties in future, there are doubts as to whether these players will provide a close alternative to the Merged Entity's ATT offer, especially in the early stages of the ATT market.

Provisional conclusion on the effect of the Merger on potential competition in the supply of ATT

10.100 We consider that Cargotec is well placed to be one the main future suppliers of ATT in Europe. Konecranes is also likely to be a material competitor in this market absent the Merger, but it is not likely to be among the most significant constraints to Cargotec as a standalone competitor.

- 10.101 We consider that Terberg is also likely to become one of the main potential competitors in the supply of ATT in Europe and therefore would (assuming that it can continue to operate independently from the Merged Entity) be a key competitor within this market.
- 10.102 As noted above, in light of the alternative options that appear to be available to Terberg, we are not concerned that the loss of Konecranes as a partner would materially affect the competitiveness of Terberg post-Merger. We are, however, concerned that the creation of an ongoing contractual link between Terberg and the Merged Entity, as brought about by the Merger could substantially soften the competitive constraint that Terberg would otherwise impose on the Merged Entity.
- 10.103 Other than Terberg (which cannot be regarded as a fully independent competitor for the reasons set out above), the Hyster-Yale-Capacity-VDL partnership and Q-Truck seem to be well placed to compete with the Merged Entity. While there are other potential suppliers of ATT (Einride, Volvo, Man, Gaussin and ZPMC), that are likely to compete with the Parties in future, there are doubts as to whether their offer will be an effective alternative to the Merged Entity ATT, given the likely relative strength of their offer. The evidence does not suggest that other suppliers such as Waymo/Alphabet would impose any meaningful constrain on the Parties, in relation to port terminals.
- 10.104 Given the significance of the competitive constraint Terberg would impose on Cargotec absent the Merger, compared to the constraint posed by the other firms developing an ATT offering, we consider that the contractual link between the Merged Entity and Terberg presents a material risk that competition between two of the main players within this emerging market will be substantially softened and that the remaining potential suppliers of ATT would not impose a sufficient constraint on the Merged Entity. Therefore, by creating a contractual link between Merged Entity and the Terberg, we provisionally conclude that the Merger may be expected to result in an SLC in the supply of ATT in Europe.

11. Vertical effects

Framework and approach

- 11.1 In this Chapter, we assess two main types of vertical theories of harm: input foreclosure and customer foreclosure.
- 11.2 In relation to input foreclosure, we considered whether the Merged Entity would have the ability and incentive to stop supplying spreaders for cranes

(‘crane spreaders’), or worsen the terms of spreader supply, in order to foreclose downstream rivals of the Merged Entity in MHC.⁴¹³

- 11.3 While the Merged Entity would also have a vertical position in relation to RTG and ASC, our assessment has focused on whether horizontal unilateral effects arise as a result of the Merger in the markets for the supply of RTG and ASC. As we have provisionally found SLCs as a result of horizontal unilateral effects in each of these markets (see Chapter 7), we have not considered it necessary to assess the potential for any additional vertical effects of the Merger in these two markets.
- 11.4 In relation to customer foreclosure, we considered whether the Merged Entity would have the ability and incentive to switch purchases of spreaders for Mobile Equipment (‘mobile spreaders’) from one of its rivals to itself, foreclosing this competitor in the Mobile spreader market.
- 11.5 In assessing vertical theories of harm, the CMA considers whether three cumulative conditions are met: whether the merged entity would have the ability to foreclose its rival (downstream rivals in the case of input foreclosure and upstream rivals in the case of customer foreclosure), whether it would have the incentive to do so, and whether the effects of such foreclosure would substantially lessen overall competition.⁴¹⁴ The CMA’s Merger Assessment Guidelines state that the CMA is likely to apply the ability, incentive, effect framework flexibly and consider these as overlapping analyses.⁴¹⁵

Input foreclosure

- 11.6 The Merger Assessment Guidelines state that ‘[t]he CMA may consider a wide range of mechanisms through which the merged entity could potentially harm its rivals when supplying inputs. These may include, for example: refusing or restricting supply, increasing prices, reducing quality or service levels, deteriorating product interoperability, slowing the rollout of upgrades, restricting licensing of intellectual property, shutting down APIs [Application Programming Interfaces], reprioritising R&D spending, or limiting access to data. The CMA’s focus will be on understanding if, collectively, these would allow the merged entity to foreclose its rivals, not on predicting the precise actions it would take’.⁴¹⁶

⁴¹³ We note that, for MHC, as only Konecranes is active in the supply of MHCs, the Merger creates a new vertical link. For RTG and ASC, the Merger combines Cargotec and Konecranes’ downstream businesses in these markets.

⁴¹⁴ CMA129, paragraphs 7.9-7.10 and 7.23-7.25.

⁴¹⁵ CMA129, fn 119.

⁴¹⁶ CMA129, paragraph 7.13.

- 11.7 In relation to ability, the Merger Assessment Guidelines add that when assessing whether the merged entity will have the ability to foreclose its rivals, the CMA will typically focus on two issues - market power upstream and the importance of the input.⁴¹⁷
- 11.8 In relation to the incentive limb, the Merger Assessment Guidelines state that even where a merged entity would have the ability to foreclose its rivals, it may not have the incentive to do so. This is because while foreclosure may result in additional profits downstream, it may also result in costs such as a loss of sales upstream. If these costs are greater than the benefits, the merged entity will not have the incentive to engage in input foreclosure. The CMA therefore considers whether a merged entity would have the incentive to pursue a foreclosure strategy, in particular through a consideration of the magnitude and likelihood of the costs and benefits (for instance, the CMA may consider gain in downstream sales, loss of upstream sales, relative profit margins, other costs and benefits and business strategy considerations).⁴¹⁸
- 11.9 In relation to the effect, the Merger Assessment Guidelines state that the CMA will consider whether the harm to competitors it has identified will result in substantial harm to overall competition in the downstream market.⁴¹⁹
- 11.10 The CMA has used this framework to consider input foreclosure in relation to Cargotec's supply of crane spreaders for MHC.

Customer foreclosure

- 11.11 The concern with a customer foreclosure theory of harm is that the merged entity may use its control of a downstream firm to switch purchases from rivals to itself, and thereby restrict its competitors' access to customers. While a loss of sales by competitors is not problematic in and of itself, and a firm using its own inputs can result in efficiencies, this may be a concern if it would result in these rival suppliers becoming less effective competitors for other customers. The merged entity would then face less competition in the upstream market, resulting in higher prices and lower quality.⁴²⁰
- 11.12 Like input foreclosure, customer foreclosure is assessed based on ability, incentive and effect. In the case of customer foreclosure, the ability assessment typically focuses on the size of the customer, and the importance of scale upstream.⁴²¹ Incentive is considered in relation to the benefit of

⁴¹⁷ CMA129, paragraph 7.14.

⁴¹⁸ CMA129, paragraph 7.16 and 7.19.

⁴¹⁹ CMA129, paragraph 7.20.

⁴²⁰ CMA129, paragraph 7.23.

⁴²¹ CMA129, paragraph 7.26.

additional sales upstream and the potential cost of losing sales downstream.⁴²² In relation to effect, the CMA will consider whether the harm to competitors it has identified will result in substantial harm to overall competition in the upstream market.⁴²³

Market definition

Spreaders

Product market definition

- 11.13 The Parties submitted that there was limited demand-side substitutability between crane spreaders and mobile spreaders, as they may have a different size, shape or lifting capacity. They explained that crane spreaders often have a ‘twin-lift’ mode that allows them to grip two containers at once, while mobile spreaders are ‘single-lift’.⁴²⁴ Cargotec’s internal documents support this. [X].
- 11.14 Overall, we consider that there is limited demand-side substitutability between crane spreaders and mobile spreaders.
- 11.15 The Parties submitted that there was a high degree of supply-side substitutability between crane spreaders and mobile spreaders. They submitted that all suppliers of mobile spreaders are active in the supply of crane spreaders and that suppliers representing around [X]% of the global share of supply of crane spreaders are active in the supply of mobile spreaders. They added that suppliers active in the supply of one type of spreader could easily, and with minimal additional cost and time, expand or switch their production to other types of spreader.⁴²⁵
- 11.16 We note that, while many suppliers are active in both Crane and mobile spreaders, some focus on supplying only one of these (such as RAM and VDL for crane spreaders and Elme for mobile spreaders). We also note that a large manufacturer of crane spreaders is not active in the supply of mobile spreaders.
- 11.17 We heard from a spreader manufacturer that it would be ‘difficult for a supplier of crane spreaders to expand into the supply of mobile spreaders’ because it requires ‘scale’, ‘experience’ and ‘a good reputation with customers’ to be competitive. This manufacturer added that the market is ‘conservative’, which

⁴²² CMA129, paragraph 7.27.

⁴²³ CMA129, paragraph 7.28.

⁴²⁴ The Parties’ response to Issues Statement, paragraph 9.7.

⁴²⁵ The Parties’ response to Issues Statement, paragraph 9.8.

makes it 'difficult to convince a customer to switch spreader supplier' and noted that crane spreaders are more bespoke than mobile spreaders, with major components differing between these.

11.18 Overall, we consider that there is some supply-side substitutability between Crane and mobile spreaders, but not to the extent claimed by the Parties.

11.19 Our provisional conclusion is that crane spreaders and mobile spreaders are not part of the same product market.

Geographic market definition

11.20 The Parties submitted that the spreader market is worldwide in scope.

11.21 We note that, for both crane spreaders and mobile spreaders, the structure of supply is similar when considered on a European-wide basis and on a worldwide basis.⁴²⁶ For the purposes of our competitive assessment, it was not necessary to conclude on the precise geographic scope of these product markets; therefore, we do not consider geographic market definition further.

MHC

Product market definition

11.22 The Parties did not submit any views regarding the appropriate product market in relation to MHC.

11.23 We note that the Parties' classified MHC as a 'quay crane' and noted several differences between different types of quay crane. For example, they explained that STS 'are usually found in medium to large sized terminals' whereas MHC 'are typically only used in lower-volume ports and in bulk and general cargo areas of large container terminals'.

11.24 These points were supported by the views of a third party, which also noted some differences between MHC and other quay cranes from a demand-side perspective. In particular, it stated that STS are 'not very moveable' and are 'usually used for container handling', while MHC are 'much more mobile' and 'can be used for bulk handling and heavy lifting as well as container handling'. It also said that STS cost around 'twice the price of a similarly sized MHC' but typically have 'twice the productivity'.

⁴²⁶ For example, for crane spreaders, Bromma's share was [50–60] % in Europe and [50–60] % worldwide over 2017 to 2019 on the basis of volumes; for mobile spreaders, Elme's share was [60–70] % in both Europe and worldwide over the same period. Source: [REDACTED].

- 11.25 Overall, the evidence that we have reviewed indicates that demand-side substitutability between MHC and other types of crane is limited.
- 11.26 In relation to supply-side substitution, we note that there are significant differences in the competitor set for MHC as compared with other cranes. For example, Cargotec is not active in the supply of MHC, despite supplying a wide range of other types of crane. Also, a third party said that it is 'highly unlikely' that a manufacturer of other cranes would be able to switch production to MHC due to 'technical know-how' that would be 'difficult to replicate'.
- 11.27 Overall, the evidence that we have reviewed indicates that supply-side substitutability between MHC and other types of crane is limited.
- 11.28 Our provisional conclusion is that MHC are in a separate product market from other types of crane.

Geographic market definition

- 11.29 The Parties did not submit any views regarding the appropriate geographic market definition in relation to MHC.
- 11.30 We note that the structure of supply for MHC is similar when considered on a European-wide basis and on a worldwide (excluding China) basis.⁴²⁷ For the purposes of our competitive assessment, it was not necessary to conclude on the precise geographic scope of the MHC product market; therefore, we do not consider geographic market definition further.

Input foreclosure in the supply of crane spreaders to MHC suppliers

Parties' views

- 11.31 The Parties submitted that the Merged Entity would have no ability to engage in a foreclosure strategy in MHC and that it would not be plausible for it to do so:
- (a) crane spreaders are not a significant input (they account for only [X] % of the crane price),⁴²⁸ so increasing spreader prices would not be a plausible foreclosure mechanism. In addition, the Parties estimated that just under

⁴²⁷ Konecranes and Liebherr have high shares, and a combined share of over 90%, both in Europe and worldwide (excluding China) over 2017-19 on a volume basis. [X].

⁴²⁸ The Parties' response to Issues Statement, paragraph 9.11.

half of MHC are used for bulk, rather than container handling and use ‘grabbers’ instead of spreaders.

- (b) There is significant competition in the supply of spreaders, with standalone spreader suppliers already accounting for around [40 – 50]% of crane spreader sales worldwide.⁴²⁹
- (c) crane spreader customers may be expected to switch in response to any hypothetical foreclosure strategy. This behaviour would be facilitated by the fact that some manufacturers of MHC multi-source spreaders ([X]).⁴³⁰ End customers (such as ports) could also directly source Bromma spreaders post-Merger.⁴³¹

11.32 Overall, the Parties submitted that there is no evidence to suggest that the Merged Entity would have the ability and the incentive to engage in input foreclosure.

Our assessment

11.33 We have considered whether, as a result of this Merger, the Merged Entity may attempt to restrict rivals’ access to Bromma crane spreaders, or offer spreaders on worse terms (such as offering inferior delivery slots), directly harming the rivals’ competitiveness and therefore competition in the downstream market for MHC.

11.34 Together, Konecranes and Liebherr account for over [X] of the downstream MHC market. [X] expressed concerns that the Merged Entity could ‘increase the price it charges to [X] [for Bromma spreaders] or reduce their current delivery slots’.

11.35 In relation to ability to foreclose, we note that spreaders represent a small proportion of the cost of a crane, but can have a significant impact on crane reliability. We also note that Bromma has a significant position upstream in the supply of crane spreaders:

- (a) The Parties’ data shows that Bromma had a [50–60] % share in the supply of crane spreaders to third parties worldwide from 2017 to 2019 (volume based), followed by RAM with [20–25]%, Stinis with [10–20]%, ZPMC with [0–5]%, Elme with [0–5]%, and others with [5–10]%

⁴²⁹ The Parties’ response to Issues Statement, paragraph 9.12.

⁴³⁰ The Parties’ response to Issues Statement, paragraph 9.11.

⁴³¹ The Parties’ response to Issues Statement, paragraph 9.14.

- (b) An internal document from 2020 suggests that Bromma has a higher share in relation to MHC spreaders; it states that Bromma has around [REDACTED].
- (c) [REDACTED] said that 70% of its spreader purchases for MHC are from Bromma and that this is primarily driven by customer choice, as customers see Bromma as an established brand in the market and most customers insist on Bromma spreaders.

11.36 However, most MHC are not supplied with spreaders. Spreaders are required for MHC that are used for container handling, but not for MHC that are used for bulk cargo handling. Around 85% of the [REDACTED] MHC sold by Liebherr in Europe over 2018-20, and around [REDACTED]% of the [REDACTED] MHC sold by Konecranes in Europe over the same period, were not supplied with spreaders.⁴³²

11.37 Where MHC are supplied with spreaders, the evidence available to us suggests that end-users specify the spreader brand required, and have a firm preference for Bromma in only a minority of cases:

- (a) Data submitted by Konecranes shows that, of [REDACTED] MHC tenders in Europe that it participated in over 2018 to 2020 that included a spreader, only [REDACTED] specified a spreader brand. In most of those tenders [REDACTED] the brand specified was Bromma.
- (b) Evidence from third parties also suggests that some MHC end-users requiring spreaders have a specific preference for Bromma, or prescribe another specific spreader brand, whereas others do not.

11.38 Bromma also sells crane spreaders directly to end users (for example, [REDACTED]). Cargotec said that, to the best of Bromma's knowledge, [REDACTED]. However, we received some third-party evidence suggesting that, while there may be added convenience to purchasing cranes and spreaders as a package, customers buying new cranes may be able to source and fit their preferred spreaders directly (rather than through their crane supplier).⁴³³

11.39 Overall, the evidence above suggests that the number of MHC sales opportunities where the Merged Entity may have the ability to reduce

⁴³² Konecranes' submitted that, of [REDACTED] MHC sold in Europe over 2018-20, [REDACTED] were supplied with no spreader, whereas [REDACTED] were supplied with a spreader. [REDACTED].

⁴³³ [REDACTED] said that 'end-users normally prefer a combined package' of MHC and spreader, because in that case they do not have to worry about interface issues between the crane and the spreader. However, [REDACTED] also said that it is 'not difficult' for end users end users buying new MHC to source and fit the spreader themselves and that '[REDACTED] is able to ensure proper communication with all types of cranes and to support the customer with the commissioning of the spreader under the crane'.

Liebherr's competitiveness (for example, by raising prices on Bromma spreaders or offering inferior delivery slots) in MHC is relatively small.

11.40 We therefore provisionally conclude that the Merged Entity would not have the ability to successfully engage in input foreclosure in the supply of crane spreaders to MHC suppliers. As we are provisionally concluding that the Merged Entity would lack the ability to foreclose rivals in the supply of crane spreaders to MHC suppliers, we have not considered in further detail whether the Merged Entity would have the incentive to pursue such a strategy or the overall effect of a foreclosure strategy on competition.

11.41 Our provisional conclusion is that the Merger is not likely to give rise to an SLC as a result of input foreclosure in relation to the supply of crane spreaders to MHC suppliers.

Customer foreclosure in the supply of mobile spreaders

Parties' views

11.42 The Parties submitted that the Merged Entity would have no ability or incentive to engage in customer foreclosure strategies by diverting Konecranes' demand for mobile spreaders from its current supplier, Elme,⁴³⁴ to the Merged Entity (Bromma) and therefore foreclosing access by Elme to a sufficient customer base.

11.43 The Parties submitted that Konecranes is not an essential customer for Elme. Konecranes estimated that it accounted for [X]% of Elme's total spreader sales for Mobile Equipment over the period 2018 to 2020. The Parties further submitted that Konecranes accounted for only [X]% of all externally supplied mobile spreaders over the same period. As such, the Parties submitted that Elme would still have a sufficiently large customer base in the downstream market to compete for, even if it lost some or all of its sales to Konecranes.⁴³⁵

11.44 The Parties further submitted that, in response to hypothetical foreclosure, Elme could switch its production capacity from mobile spreaders to crane spreaders without incurring significantly higher costs, thus limiting any potential loss of efficiency.⁴³⁶

⁴³⁴ Konecranes currently purchases all of its spreaders for MEQ from Elme. [X]

⁴³⁵ The Parties' Response to Issues Statement, paragraphs 10.3–10.4.

⁴³⁶ The Parties' Response to Issues Statement, paragraph 10.5.

- 11.45 The Parties submitted that Bromma's internal customers (ie, Cargotec) currently do not enjoy preferential prices in comparison to Bromma's external customers and there is no reason why this would change post-Merger.
- 11.46 The Parties submitted that a customer foreclosure strategy would not affect the competitiveness of rivals to the Merged Entity that are vertically integrated with their own spreader production because these rivals could easily shift capacity towards producing mobile spreaders in-house.

Our assessment

- 11.47 We have considered whether, as a result of this Merger, the Merged Entity may attempt to harm its rivals' competitiveness in the Mobile spreader market by reducing its demand for Elme's mobile spreaders, and therefore harm competition in this market.
- 11.48 In relation to ability to foreclose, the evidence that we have reviewed shows that Konecranes is an important customer of mobile spreaders for Elme and that scale brings cost efficiencies in the manufacture of these spreaders:
- (a) In relation to Konecranes' significance as a customer, Elme submitted that, between 2016 and 2020, the value of sales of mobile spreaders to Konecranes accounted for [30–40%] of its total sales of mobile spreaders. Elme's other Mobile spreader customers include Hyster (which buys all of its spreaders from Elme) and Sany (which buys some of the spreaders that it requires from Elme).
 - (b) In relation to the importance of scale, Elme submitted that 'it is more cost efficient to manufacture bigger volumes of spreaders'. This is supported by Hyster, which told the CMA that 'to be competitive you need volume' in the supply of spreaders. A Cargotec internal document also states that [redacted].
- 11.49 However, it is not clear whether the potential reduction in scale for Elme (due to the Merged Entity favouring Bromma) and any consequent rise in its prices would have a significant impact on demand for Elme's spreaders. This is because of the following factors:
- (a) First, we note that Elme offers a wider portfolio range of mobile spreaders than Bromma, with non-standard and specialised spreaders accounting for around [30-40%] of Elme's sales, which may make it difficult for some purchases to be switched to Bromma.
 - (b) Second, the evidence available to us indicates that purchasers of mobile spreaders do not like being reliant on a manufacturer of spreaders that is

a competitor in downstream Mobile Equipment markets. For example, Cargotec states in an internal document that [REDACTED].

- (c) Third, the scale of the potential rise in price of Elme's mobile spreaders is unlikely to lead to a significant increase in the price that downstream suppliers would need to charge for their Mobile Equipment. Elme estimated that a direct price increase of at least [REDACTED] would be necessary to maintain its current profit level if it were to lose Konecranes as a customer. Since spreaders represent around [REDACTED]% of the price of Mobile Equipment, a [REDACTED] increase in spreader price would be equivalent to around [REDACTED]% of the price of a unit of Mobile Equipment.⁴³⁷ Given that price is only one of several important purchasing criteria for end users, Mobile Equipment manufacturers that continue to buy from Elme may not lose many sales in downstream Mobile Equipment markets.

11.50 The potential for Elme to be able to retain customers was reflected in [REDACTED] comments on the potential impact of the Merger. While it expressed concerns that it could be forced to buy Bromma spreaders to stay competitive, it also noted that switching spreader supplier was difficult and involved high costs, and listed reasons including Elme's quality and 'full line' as reasons for currently buying from Elme.

11.51 In terms of alternative sales channels that are available to Elme, we consider that self-supply of mobile spreaders by other Mobile Equipment manufacturers (in respect of standard mobile spreaders) may limit the scope for Elme to grow its demand from other sources. However, to the extent that the Merger may lead to a small number of end users of Mobile Equipment switching their purchases away from the Merged Entity and towards competitors such as Hyster that favour Elme spreaders (for example, due to the Merged Entity increasing its prices), this could lead to a small increase in the demand for Elme mobile spreaders. We also note Elme's submission that, if the Merged Entity decided to phase out Konecranes Mobile Equipment and thereby reduce its demand for Elme spreaders, this would take 3 to 5 years. This suggests that Elme would have some time to explore alternative sources of demand.

11.52 Overall, for the reasons above, we provisionally conclude that the Merged Entity may not have the ability to foreclose Elme in the Mobile spreader market.

⁴³⁷ ECH spreaders bought by Konecranes had an average unit price of £[REDACTED], and ECH sold for an average unit price of £[REDACTED]. [REDACTED]. RS spreaders bought by Konecranes had an average unit price of £[REDACTED] and RS sold for an average unit price of £[REDACTED] to £[REDACTED].

11.53 For completeness, even if the Merged Entity were to be considered to have the ability to engage in customer foreclosure (which we do not consider to be the case), we believe that such a strategy would not have a material effect on competition. In this regard, we considered whether, by reducing its demand for Elme mobile spreaders, the Merged Entity could weaken Elme's competitiveness and, in turn, lead to a loss of competition in downstream Mobile Equipment markets. We believe, however, that an increase in the price of Elme spreaders would not have a significant adverse effect on the competitiveness of Mobile Equipment suppliers that currently favour Elme (for the reasons set out in paragraph 11.49(c) above), and therefore would not have a significant adverse effect on competition in these downstream Mobile Equipment markets.

11.54 Our provisional conclusion is therefore that the Merger is not likely to give rise to an SLC as a result of customer foreclosure in relation to the supply of mobile spreaders.

12. Countervailing Factors

12.1 When considering whether a merger may be expected to result in an SLC, we consider countervailing factors that may mitigate the effect of a merger on competition (often known as countervailing factors) which in some cases may mean there is no SLC.

12.2 There are two main countervailing factors:

(a) the entry and/or expansion of third parties in reaction to the effects of a merger; or

(b) merger efficiencies.⁴³⁸

Countervailing factors: entry and expansion

12.3 As set out in our Merger Assessment Guidelines (Guidelines),⁴³⁹ any analysis of a possible SLC includes consideration of the direct responses to the merger by rivals, potential rivals, and customers. If effective entry and/or expansion occurs as a result of the merger and any consequent adverse effect (for example, a price rise), the effect of the merger on competition may be mitigated. In these situations, the CMA might conclude that no SLC arises as a result of the merger.⁴⁴⁰

⁴³⁸ CMA129, paragraph 8.1.

⁴³⁹ CMA129.

⁴⁴⁰ CMA129, paragraph 8.28.

- 12.4 The CMA considers that entry and/or expansion preventing an SLC from arising would be rare.⁴⁴¹
- 12.5 The CMA will seek to ensure that the evidence is robust when confronted with claims of entry or expansion being timely, likely, and sufficient to prevent an SLC from arising. It is likely to place greater weight on detailed consideration of entry or expansion and previous experience of entry and expansion (including how frequent and recent it has been).⁴⁴²
- 12.6 In the Chapters about each theory of harm, we take account of evidence relating to entry and expansion in each of the relevant markets that would have occurred irrespective of the Merger.
- 12.7 In this section, we assess any barriers to entry or expansion in the relevant markets affected by the Merger and whether any particular supplier is likely to enter or expand in the relevant markets as a result of the Merger, in a timely and sufficient manner to offset the adverse effects of the Merger.
- 12.8 This section is structured as follows:
- (a) We set out the CMA's framework for assessing entry and expansion.
 - (b) We discuss barriers to entry and / or expansion and other market conditions, including the views of the Parties and evidence from third party and internal documents, that may affect the extent, timing and likelihood of entry following the Merger.
 - (c) We identify potential sources of entry and expansion in the relevant markets, looking both at examples of recent entry and at any evidence of specific entry plans as a result of the Merger.
- 12.9 The Parties have suggested that the entry and expansion of Chinese competitors has already significantly altered the competitive landscape in the UK and Europe, which we are considering within our competitive assessment. For the most part, the Parties' submissions appear to focus on developments that would occur irrespective of the Merger. The analysis of entry and expansion as a countervailing factor would instead consider how rivals, potential rivals and customers might respond to the Merger.

⁴⁴¹ [CMA129](#), paragraph 8.29.

⁴⁴² [CMA129](#), paragraph 8.30.

CMA framework for assessing entry and expansion

12.10 Our Guidelines state that in determining whether entry or expansion as a result of the Merger would prevent an SLC, we will consider whether such entry or expansion would be: (a) timely;⁴⁴³ (b) likely;⁴⁴⁴ and (c) sufficient.^{445,446}

12.11 These conditions are cumulative and must be satisfied simultaneously.⁴⁴⁷

12.12 Our Guidelines also state that potential or actual competitors may encounter barriers which reduce or even severely hamper their ability to enter or expand in the market.⁴⁴⁸

12.13 Barriers to entry and/or expansion are specific features of a market that give incumbent firms advantages over potential competitors. Where such barriers are low, the merged entity is more likely to be constrained by entry; conversely, this is less likely where barriers are high.⁴⁴⁹ Our Guidelines identify the following common barriers to entry and expansion, relevant for the assessment below:

- (a) Initial set-up costs: Initial set-up costs and costs associated with investment in specific assets are more likely to deter entry or expansion where a significant proportion of them are sunk.^{450,451}
- (b) Reputation: Customers may place a high value on the reputation and strong track record and reputation of suppliers.⁴⁵² This might be especially true where the product or service being provided is important for the customer, and where the quality of the product is difficult to ascertain in advance.
- (c) Brand loyalty: Consumers may demonstrate a high level of brand loyalty, be tied into long contracts or exclusivity agreements, or face other significant switching costs, which may make entry or expansion more difficult and require investment.⁴⁵³

⁴⁴³ CMA129, paragraph 8.33-8.34.

⁴⁴⁴ CMA129, paragraph 8.35.

⁴⁴⁵ CMA129, paragraph 8.37.

⁴⁴⁶ CMA129, paragraph 8.31.

⁴⁴⁷ CMA129, paragraph 8.32.

⁴⁴⁸ CMA129, paragraph 8.40.

⁴⁴⁹ CMA129, paragraph 8.5.

⁴⁵⁰ In this context, 'sunk' costs refers to costs which cannot be recovered when exiting from the market.

⁴⁵¹ CMA129, paragraph 8.41 (a).

⁴⁵² CMA129, paragraph 8.41 (b).

⁴⁵³ CMA129, paragraph 8.41 (c).

- (d) Economies of scale: Economies of scale may be present.⁴⁵⁴ These may prevent small-scale entry from acting as an effective competitive constraint in the market. Further, in the presence of economies of scale, large-scale entry or expansion will generally be successful only if it expands the total market significantly, or substantially replaces one or more existing firm; and if the entrant can afford the risk that such investment will involve, especially in terms of sunk costs.⁴⁵⁵
- (e) Technology: Technology and production methods used in the market may need to be taken into account by entrants (for example, intellectual property rights of rivals and interoperability requirements).⁴⁵⁶
- (f) Early mover advantages: Incumbents may have early mover advantages as a result of branding or creating switching costs. The data held by many digital market firms allow them to hone, improve and personalise their products and services, and this may be difficult for an entrant to replicate in a timely manner. Early mover advantages may be strengthened by the combination of the merger firms.⁴⁵⁷

12.14 Barriers to entry and expansion might be particularly high if some of these factors are present in combination.⁴⁵⁸

12.15 When considering the likelihood of successful entry by third parties, we may consider the strategic behaviour of the merged entity or other incumbents which itself might create or strengthen a barrier to entry or limit the ability of a new entrant to gain a foothold in the market.⁴⁵⁹

Barriers to entry or expansion

12.16 The Parties told us that, in their view, barriers to entry are ‘generally low’. The Parties provided two main reasons for this opinion:

- (a) ‘[C]ontainer handling equipment manufacturing is largely an assembly business with widespread outsourcing of component production. Heavy CHE (cranes and horizontal transport equipment) is often assembled in the same versatile facilities and the same is true for different types of mobile equipment. This reduces the investment costs of entry or expansion’.

⁴⁵⁴ These arise where average costs fall as the level of output rises over a range of output volume.

⁴⁵⁵ CMA 129, paragraph 8.41 (d).

⁴⁵⁶ CMA 129, paragraph 8.41 (f).

⁴⁵⁷ CMA 129, paragraph 8.41 (g).

⁴⁵⁸ CMA 129, paragraph 8.42.

⁴⁵⁹ CMA 129, paragraph 8.43.

(b) '[T]here are no significant impediments in terms of intellectual property rights or know-how that would constitute significant barriers to entry'.

12.17 The Parties told us that 'there may be certain customary barriers to entry and expansion to the CHE industry (similar to other industries), such as product development costs or the need for proven references. However, the Parties submitted that these barriers, are 'by no means insurmountable, as demonstrated by successful recent entrants, such as ZPMC in the area of straddle and shuttle carriers'.

12.18 We consider below whether there are barriers to entry and / or expansion in each of the following markets for CHE:

(a) **Gantry Cranes**, which includes the following relevant markets affected by the Merger:

(i) RTG; and

(ii) ASC.

(b) **Horizontal Transport Equipment** (SC and ShC); and

(c) **Mobile equipment**, which includes the following relevant markets affected by the Merger:

(i) RS;

(ii) ECH; and

(iii) HDFLT.

The investment and time required to enter and/or expand, and the importance of economies of scale

12.19 Suppliers must invest in facilities and staff in order to be able to produce CHE and provide customers with maintenance and repair services (for example, having suitably skilled engineers available at the right time and at the right location to provide servicing). We assessed whether there are economies of scale and, if so, whether the investment required to be able to offer the necessary production facilities and aftersales capability may be a barrier to small scale entry.

12.20 We also considered whether these initial set-up costs are likely to deter entry or expansion where a significant proportion of them are sunk.

Strategic advantages related to incumbency and the importance of having a strong track record and reputation

- 12.21 The evidence received from customers indicates that they place a high value on CHE being reliable and fully operational in order to maintain throughput at container ports. We assessed whether it is important for suppliers to be able to demonstrate that they have a strong track record and reputation, and if so, the extent to which this may constitute a barrier to entry.
- 12.22 We also assessed whether incumbent suppliers of CHE have an advantage over potential new entrants as a result of their existing customer relationships and, if so, whether this could manifest itself as a barrier to switching and give incumbent suppliers advantages over potential competitors wishing to enter or expand.

Strategic advantage related to the importance of having a broad interoperable product portfolio or CHE with characteristics already familiar to customers

- 12.23 As set out in the Chapter 2, loading and unloading containers at port terminals typically involves multiple CHE operating closely together.
- 12.24 We considered the importance that customers place on new CHE being interoperable with their existing CHE. This would give incumbent suppliers advantages over potential competitors wishing to enter or expand.
- 12.25 We also considered the importance that customers place on potential new entrants having a broad interoperable product portfolio, or CHE which has characteristics already familiar to customers, which they perceive will offer operational efficiencies (for example, in regards to purchasing spare parts and/or improved reliability), and whether this may be a barrier, especially for potential entrants which cannot offer such a broad portfolio.
- 12.26 We considered other possible barriers for entry but did not find them to be material. For instance:
- (a) Generally, whilst we note that the supply of CHE is subject to European and UK standards and regulations, and these may be different from the rest of the world,⁴⁶⁰ we observe that these regulations can be overcome through investment by competitors and potential entrants, so these standards and regulations are considered in our assessment of the

⁴⁶⁰ For example, in relation to CHE emissions ([REDACTED]) and/or safety documentation ([REDACTED])

investment and time required to enter and/or expand, and the importance of economies of scale.

- (b) Whilst the Parties do own some intellectual property rights,⁴⁶¹ they do not appear to act as an absolute barrier to entry or expansion.
- (c) Whilst customers have regard to the geopolitical environment when making their purchasing decisions, they do not appear to consider this to be a key factor in their selection of a supplier of CHE.⁴⁶²
- (d) We found that there is an industry trend towards electrification, and both the European Union⁴⁶³ and UK government⁴⁶⁴ have set targets for the reduction of greenhouse gas carbon emissions⁴⁶⁵. The evidence indicates that customers take into account the potential impact of carbon emissions. The Parties told us that, ‘Suppliers are increasingly having to react to the technological and environmental transition that is happening in the industry and society at large’. DP World awarded a contract to Konecranes to retrofit electrification to a mobile harbour crane in 2019 and announced that, ‘[DP World] always strives to reduce its environmental impact on the community that it is part of. The project to electrify our hard-working mobile harbour crane will make it quieter and reduce its local emissions’.⁴⁶⁶ [REDACTED] also noted that ‘environmental concerns’ is one of the factors taken into account at the pre-qualification stage in its tender process for CHE. We consider the importance placed by customers on suppliers’ CHE having low emissions in our assessment of the importance of having a strong track record and reputation, rather than as a barrier to entry or expansion in itself.

⁴⁶¹ For example, in relation to Cargotec’s control interface. [REDACTED].

⁴⁶² We note that the Parties and their competitors produce in CHE in locations around the world, including China. As explained in Chapter 5, however, all RTG and most ASC delivered by Konecranes in Europe were produced in Europe ([REDACTED]).

⁴⁶³ European Commission, Climate action [online], available at https://ec.europa.eu/info/topics/climate-action_en [accessed 24 November 2021].

⁴⁶⁴ Department for Business, Energy & industrial Strategy (April 2021), [UK enshrines new target in law to slash emissions by 78% by 2035](#) [online], available at: [UK enshrines new target in law to slash emissions by 78% by 2035 - GOV.UK \(www.gov.uk\)](#) [accessed 23/11/2021].

⁴⁶⁵ DS Research (January 2020), Container Terminal Foresight 2024, p 87.

⁴⁶⁶ Ship Technology (August 2019), Konecranes to electrify mobile harbour crane in Liège Terminal [online], available at <https://www.ship-technology.com/news/dp-world-konecranes/> [accessed 12 October 2021].

Gantry Cranes

The investment and time required to enter and/or expand and importance of economies of scale

Parties' views

12.27 In relation to the investment in facilities needed to produce Gantry Cranes, the Parties told us that '[b]arriers to entry and expansion in gantry cranes are modest, and with adequate resources, suppliers of industrial equipment can and do enter this product area with relative ease. The resources and equipment required to manufacture gantry cranes does not materially differ from other types of port or industrial cranes'.

12.28 The Parties elaborated on this submission by telling us that:

- (a) 'All types of heavy container handling equipment, like quay cranes, gantry cranes and straddle carriers, are produced/assembled in versatile manufacturing facilities and manufacturers can relatively easily divert capacity to produce other types of heavy equipment. For example, a company active in the production of gantry cranes could generally start producing straddle carriers without significant additional investments'.
- (b) 'The Parties are of the view that any large scale manufacturing facility can be used to construct or assemble the legs and beams associated with, for example, gantry cranes, and the finished product can be erected using commonly available crane equipment at a customer's site. Most technical solutions are based on commercially available solutions.
- (c) In terms of time and cost, the Parties estimate that it would take an industrial manufacturer (ie one not active in port equipment):
 - (i) '[Around] one to two years and less than EUR 1 million (GBP 868,000) to bring a new [RMG or ASC] product to market'.
 - (ii) [Around] one to two years and approx. EUR 2-3 million (GBP 1.7-2.6 million) to bring a new A-RTG product to market'.
- (d) 'Major suppliers commonly use sub-contractors to design and manufacture crane components that are common to multiple types of gantry cranes, including to [RTG and ASC]'. None of these relationships are exclusive, and as far as the Parties are aware, these subcontractors typically work with several manufacturers. The Parties submitted that, under this business model, 'no upfront investment is required to develop manufacturing capacity'.

12.29 In relation to economies of scale, the Parties submitted that:

- (a) From a supplier perspective, it is generally more beneficial to centralise production in order to achieve economies of scale, rather than having a dispersed production set-up to save transport costs. However, the Parties submitted that transport costs typically do not exceed 5-10% of the total purchase price, and so are not an obstacle to inter-continental shipments.
- (b) 'The necessary investment should be considered in the appropriate context' 'including in relation to the value of the equipment and resources of potential entrants.
- (c) 'Economies of scale can be achieved on a global rather than national or even regional basis'.

12.30 The Parties also submitted that the costs for an existing supplier planning to enter the UK are likely to be lower and there are a number of suppliers globally with existing facilities that could supply the UK. 'Participating in tenders in the UK would not require any additional investments' for competitors that already participate in tenders worldwide.

12.31 In relation to servicing facilities and capabilities, the Parties told us that:

- (a) '[A] local manufacturing, servicing and/or sales capability is not a necessity (or a barrier) for a supplier to compete successfully in the UK more widely'. Therefore, 'the absence of a local after-sales presence is not a barrier to entry for a cranes [supplier].
- (b) 'Customers often have in-house stand-by repair capacity, and extensive stocks of spare parts for these types of equipment.
- (c) After-sales services are usually performed by a wide range of players, including independent service providers, spare part trading companies, OEMs and, as mentioned above, by the customers themselves.
- (d) 'ZPMC was able to win contracts with UK customers before establishing [a] local presence'.

Third-party evidence

12.32 In relation to the investment in facilities needed to produce Gantry Cranes:

- (a) A competitor noted, based on its experience, that,
 - (i) In relation to RTG, it is difficult to achieve an acceptable return on investment, because of the prolonged development/ramp up time and

the technical skills required to achieve a competitive quality product. Given the current and potential market in the UK/EU, it seems hard to justify the required investment to enter with the necessary scale. A new entrant would find it difficult to achieve an acceptable return on investment without scale, especially if using western manufacturing facilities with a high-cost base. Following entry, it takes at least two to three years to convince the customer of product reliability and service quality in the field.

- (ii) In relation to ASC, this competitor noted that it took it three to four years to develop design, gain reference projects and gather product market experience. This competitor said that to show customers the added value of a new product could take additional years.

(b) A competitor told us, based on its experience, that:

- (i) It is essential to have a very high standard of manufacturing facilities and engineering experience to produce high quality cranes. This requires a high degree of know-how as there is a lot of technical detail and intellectual property the company would need to develop or acquire. It would not be straightforward for a new company to replicate the current designs in the market.

(ii) [✂].

- (iii) While it would be difficult for a new company to enter the market for the supply of cranes, a company active in a similar market, such as shipbuilding, could have transferrable skills and equipment. It would still take it around three to five years, maybe even longer.

(c) A competitor highlighted as a high barrier of entry and expansion the need to have access to 'sufficient production capacities' to produce large volumes and the need to have a sufficient volume of sales 'to achieve low unit cost. This competitor also noted that it is may be difficult to achieve material scale in a timely fashion in markets which are characterised by 'very little activity followed by years with very strong demand'.

12.33 In relation to economies of scale, some competitors present in the supply of cranes estimated the investment needed to achieve a five per cent market share in the supply of Gantry Cranes in the UK as set out in Table 50 below:⁴⁶⁷

⁴⁶⁷ The question posed was as follows: Approximately how long and how much expenditure do you think an entrant would need to incur to reach a market share of about 5%.

Table 50: Third party estimates of investment needed to achieve a five per cent market share in the supply of Gantry Cranes

Third party	Estimate of investment needed to achieve a five per cent market share	
	Time	Cost
[Competitor]	3 to 5 years	£5 million to £10 million
[Competitor]	More than 3 to 4 years	No estimate given.

Source: [REDACTED]

12.34 In relation to servicing facilities and capabilities, we note that customers consider this to be an important factor in their purchasing criteria for RTG and ASC as set out in the Chapter 7. This is supported by third-party evidence, which also indicates that a potential new entrant would require to make a material investment to be able to offer a local servicing capability.

(a) A competitor told us that:

- (i) It considers that it is important for it to have a local presence in the UK in order to be competitive in UK RTG tenders.
- (ii) Terminals 'usually stock an inventory of spare parts to ensure the continuity of port operations'.
- (iii) [REDACTED].

(b) A customer told us that:

- (i) It 'would be concerned about purchasing equipment from a supplier without presence in the UK or Europe'.
- (ii) 'Generally, in order to win a service contract, [the customer] requires a supplier to have a certain amount of stock holding in the UK'.
- (iii) 'There is a tendency to use a manufacturer for specialist services, but it is possible to procure them from other third parties'.

(c) Another customer told us that, when buying spare parts, it would look for parts to be delivered to the UK from mainland Europe within 24 hours.

Internal documents

12.35 The Parties provided a pitch document by Bain & Company titled, 'Cargotec – Konecranes Merger Proposal for support', dated 17 November 2020 (around seven months after the Parties first entered into discussions regarding the

Merger).⁴⁶⁸ The document states that, '[Bain & Company] have an in-depth understanding of the material handling industry and the merging companies, having worked with both companies across all businesses in the combined portfolio'. A slide on barriers to entry states that 'Local presence and capabilities key to win, global scale less relevant'.⁴⁶⁹

Provisional assessment

- 12.36 From the evidence we have received, our provisional assessment is that significant investment is needed and a long period of time is required, to develop Gantry Cranes and set up the necessary production facilities. We consider that these set-up costs cumulatively constitute a significant barrier to entry and expansion.
- 12.37 In relation to servicing facilities and capabilities, our provisional assessment is that some customers require suppliers to have a local presence in order to provide the standard of maintenance and repair services which are expected in the industry, and that establishing this local presence would require significant investment. The evidence indicates that suppliers do not currently use UK distributors to provide servicing capabilities in relation to the supply of large CHE such as Gantry Cranes, as set out in Chapter 7. We note that ZPMC won some contracts in the UK because, as part of the tender, ZPMC offered to set up a base in Liverpool. Our provisional assessment is that these initial set-up costs are likely to raise barriers to entry and/or expansion by potential new entrants because, in the case of incumbent firms, these are sunk costs.
- 12.38 Finally, we consider that a new entrant, or an existing supplier willing to expand, would require a minimum volume of sales (i.e. minimum economic scale) in order to achieve a commercially viable return on this investment. Some of the costs mentioned above relate to the importance of having facilities and capabilities which are local to customers in a particular region, which means that a new entrant would need to achieve economies of scale at the regional level. This suggests that these economies of scale can act as a high barrier to entry.
- 12.39 We found that the combination of the initial investment and time needed to set up production and servicing facilities, and economies of scale, in aggregate,

⁴⁶⁸ We consider that the context for the Parties receiving this report is [REDACTED].

⁴⁶⁹ [REDACTED]. We note that this document states that 'Reachstackers, Straddle carriers and Gantry cranes have all seen many recent market entries from multiple manufacturers' and identifies Genma as having entered in the Gantry Cranes in the last five years. We note, however, that this assessment of specific entry and expansion is a global analysis, not specific to Europe and the Parties did not submit that Genma was a competitor in this market and we did not find other evidence that Genma had entered.

constitute an even higher barrier to entry which is likely to materially reduce the extent, timing and likelihood of entry following the Merger.

Strategic advantages related to incumbency and the importance of having a strong track record and reputation

Parties' views

12.40 The Parties told us that, 'there may be certain customary barriers to entry and expansion to the container handling equipment industry (similar to other industries), such as product development costs or the need for proven references'.

12.41 In relation to the importance of having a strong track record and reputation, the Parties submitted that:

- (a) Chinese suppliers like ZPMC (in the context of Cranes, in particular), Sany (in the context of MEQ) and Shacman (in the context of HTE) have been able to enter the UK market, despite their lack of prior track record.
- (b) GTOs do not make their procurement decisions locally in the UK but centrally in their overseas headquarters. Suppliers can obtain references by supplying GTOs at different regions of the world.
- (c) The entry of ZPMC is an example that '[T]o the extent that having a strong track record is one of several considerations that a tendering party may take into account, there is no need to have a strong track record in the UK, or even in Europe to win new tenders'.

12.42 In relation to the importance of having developed customer relationships and knowledge of customers' existing CHE and future requirements, the Parties told us that they consider that there is no material incumbency advantage and almost all equipment is tendered, including for brownfield terminals. There are many examples of brownfield terminals purchasing equipment from a different supplier to the incumbent.

Third-party evidence

12.43 Evidence from third parties suggests that it is necessary for a potential new entrant to establish a strong track record and reputation in order to satisfy customers' purchasing criteria:

- (a) A competitor told us that it is difficult to enter the ASC market because references are needed. It stated that it 'tends to be excluded from tenders

because it does not have references' and, by way of an example, it referred to its attempt to bid in a recent tender [redacted].

- (b) A customer told us that a supplier's track record and reputation is 'extremely important'. This customer states that it carries out a lot of due diligence in order to identify suppliers of reliable CHE.

12.44 Evidence from third parties also suggests that current market players may have a strategic advantage from having developed customer relationships and knowledge of their existing CHE and future requirements. A potential competitor may be deterred from entering or expanding in the relevant market due to the cost and difficulty of establishing these relationships and knowledge, and uncertainty over the return from it through future sales.

- (a) A competitor told us that there are many barriers to entering the automated RTG market, including difficulty in convincing customers to change from their existing supplier. This competitor stated that 'existing suppliers have a distinct advantage'.
- (b) A competitor also noted that brownfield terminals customers will usually choose the same brand and specification as they did previously when replacing their handling equipment, which makes it more difficult for new entrants to win those contracts. This competitor told us that if a terminal is already using cranes from an OEM, it is incentivised to replenish its stock from the same OEM, so that all its cranes use the same components and to reduce the stock of spare parts needed.
- (c) A competitor told us that, 'it is unusual that any supplier other than the winning bidder [of an ASC tender] gets a follow-up order'.

12.45 We also note that the evidence we have received does not seem to support the Parties' submission that GTOs make their purchasing decisions solely in overseas headquarters with little or no input from local terminals, such as in the UK. Purchasing decisions seem to be the result of a combination of both central and local considerations. Evidence from third parties indicates that local engagement is relevant for at least some customers.

Internal documents

12.46 The slide by Bain & Company on barriers to entry (referred to in paragraph 12.35 above) makes the following statement:

- (a) 'Industry generally slow-moving and values reference cases, but there have been new entrants in all segments'.

(b) 'Geographical expansion requires dealer relationships'.

12.47 Internal documents from Cargotec also suggest that having a strong track record and reputation is an important advantage for Cargotec. For example, Cargotec lists one of the key purchasing criteria for ASC as [REDACTED] and considers that its [REDACTED].

12.48 Cargotec's internal document related to its [REDACTED] notes that:

(a) Cargotec already [REDACTED].

(b) [REDACTED].

12.49 Internal documents from Konecranes also indicate that having a strong track record and an established customer relationship gives it an important advantage. In its '[REDACTED]' strategy, the company dedicates five of the 19 slides to customer and partner relationships. The document states 'Customers. Strength in customer satisfaction.... Customer confidence that we are a trustworthy partner is the key to winning new customers'

Provisional assessment

12.50 Our provisional assessment is that having a strong track record and reputation is a very important part of generating sales as a supplier of Gantry Cranes. We consider that potential entrants would be required to establish a strong track record and reputation, and this is likely to constitute a high barrier to entry. Based on the evidence in relation the appropriate geographic market for the supply of RTG and ASC (summarised in Chapter 5), we consider that customer references and a strong track record at the regional level are important for some customers. Whilst we note that one non-European supplier, ZPMC, has managed to overcome this barrier and has managed to enter in Europe without having a previous track record, we do not consider that that this diminishes the scale of this barrier which must be overcome.

12.51 The evidence we have seen also shows that current market players have strategic advantages from having developed customer relationships and knowledge of customers' existing CHE and future requirements (amongst other factors). Although contracts are typically awarded in the form of a tender process and customers may switch supplier, we consider that the incumbent supplier's knowledge and relationship with the customer makes it difficult for potential competitors to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.

Strategic advantages related to the importance of having a broad interoperable product portfolio or CHE with characteristics already familiar to customers.

Parties' views

12.52 The Parties submitted that, [t]here are many terminal operators using automated equipment from different suppliers.

12.53 Konecranes told us that:

(a) 'Konecranes' ECS TEAMS is designed for interoperability with third-party equipment and TOS. TEAMS' open application programming interface facilitates seamless and modular integration. Konecranes has [REDACTED]. Konecranes uses [REDACTED]. Konecranes has [REDACTED].

(b) [REDACTED].

12.54 Cargotec told us that:

(a) '[I]ts equipment control systems (ECS) are [REDACTED].

(b) [REDACTED].

Third-party evidence

12.55 The third-party evidence we have seen indicates that customers place some importance on their CHE being interoperable and that this may represent an advantage for incumbent suppliers of CHE and/or those suppliers which have a broad portfolio of CHE.

12.56 In relation to evidence from competitors:

(a) A competitor told us that, '[s]everal different equipment types need to work together to make a port productive. Post-Merger, the Merged Entity can supply every single type of equipment for the port which gives it a distinct advantage against smaller competitors in terms of costs and integration. This competitor believes that it would push other suppliers out of the market'.

(b) A competitor told us that it believes that, 'for port productivity, there is a need for a symbiotic relationship which in turn locks in customers to a single supplier. This competitor considers that integration makes it harder to get a new crane by another supplier as all equipment needs to 'talk' to each other. It also explained that '[i]nteroperability is currently possible if a customer has a highly experienced technical team at the port, but if a customer does not have a technical team, lock-in can occur'.

- (c) A competitor told us that, '[i]t is always a challenge for the ASC's software to interoperate with other equipment-level software and ECS (as applicable). It is a topic to consider at the tender stage, especially in brownfield projects with existing equipment from another manufacturer, and this has sometimes been a hurdle for this competitor to overcome in order to convince a customer'. This competitor believed that the consideration of interoperability was a reason why its bid in [redacted] was unsuccessful.
- (d) A competitor told us that 'issues with interoperability are different depending on whether the terminal is already operating as a brownfield site, or if it is a greenfield site: for a brownfield site, which already has its own systems and also existing handling equipment. It will be difficult for a new supplier to make its equipment interoperable with that control system'. This competitor also noted that, usually, customers want to integrate new cranes into their existing systems, so they will be incentivised to purchase all of their cranes from the same manufacturers to ensure all of their cranes use the same components and to reduce the stock of spare parts which are needed.
- (e) A competitor identified high barriers to entry in RTG, such as the need to have an interface with existing terminal operation system.
- (f) A competitor told us that, 'it is unusual that any supplier other than the winning bidder [of an ASC tender] gets a follow-up order'.

12.57 In relation to evidence from customers:

- (a) A customer told us that:
 - (i) 'Because [this customer] selects suppliers based] on the lowest competitive bid price, [the result is] multiple vendor equipment in the same operation' and it is generally able to 'mix and match' between different suppliers, but it is still 'coming to grips with' software interoperability.
 - (ii) Different suppliers offer their own ECS 'and the purpose of that is to try and lock [the customer] in. So if [the customer buys] the first system from company A, and then [goes] back to the market to buy additional equipment, [the customer has] got the complication of [interfacing] the two together'.
 - (iii) 'If you tackle it purely from an asset management point of view, it is perfect if you can buy all of your equipment from one vendor because it minimises the amount of spare parts variation, the technical training

that you need to undertake and you end up with your incumbent technicians very familiar with the equipment and your ability to maintain it and keep it working at its optimum is much easier because your team become very familiar with it’.

(iv) ‘The degree of interoperability is important for [RTG] due to the specific / specialist nature of the deployment application and systems’.

(b) A customer told us that it considers that practically the only possibility for it is to use the equipment supplier’s automation software. This customer considers that ‘the technical challenges of using another automation [system] are not usually offset by price benefits of purchasing equipment from another equipment supplier’.

(c) A customer, told us that, ‘[i]t is possible to combine one manufacturer’s ECS with software from other manufacturers’.

12.58 We also note that customers’ ratings of the importance of different purchasing criteria for RTG and ASC show that interoperability tends to be an important factor for customers of ASC and for some customers of RTG, especially in relation to future sales. In fact, a customer told us that the degree of interoperability with other equipment and already having an installed base of equipment from a particular supplier will be rated 5 in future tenders and that Cargotec would have an advantage in the future as it has an established installed base of RTGs, and it expects that new CHE from an alternative supplier would not be as interoperable with it as new CHE from Cargotec.

12.59 Third-party evidence also suggests that some customers prefer to source CHE (including manual equipment) from a single source supplier, including because the operators are already familiar with one supplier’s operating controls and handling across the different equipment used at the port. A potential competitor wishing to enter or expand into the relevant market might have difficulty overcoming this barrier:

(a) A competitor explained that it is aware of port terminals trying a combination of products from different suppliers, but usually only on a trial basis to see if the equipment of these suppliers is interoperable. As handling equipment from different suppliers is usually not interoperable, This competitor noted it can be very difficult for a new supplier to win a contract.

(b) A customer told us that its biggest complexity is liaising with around ten to fifteen different suppliers, so a supplier can give ‘good value’ if it offers a ‘turnkey’ package for a range of equipment types.

- (c) A customer told us that there is an ‘advantage to having a single brand supplier for a specific equipment type’, and it does not typically operate a ‘mixed-fleet’.
- (d) A customer also told us that it would probably purchase Gantry Cranes from the same supplier to ensure interoperability with its existing equipment.

Internal documents

12.60 Internal documents from Konecranes suggest that interoperability is important for customers and that this gives an advantage to suppliers with a wide portfolio of CHE, such as the Parties:

- (a) A Konecranes’ internal document regarding a ‘Proposal to Board of Directors’ on automated terminal tractors, dated September 2019, quotes an ‘industry expert’ as saying, ‘[REDACTED]’.
- (b) A briefing and Q&A document used by Konecranes in the onboarding of Leadership Team Members states [REDACTED]. It also states that [REDACTED].
- (c) Another Konecranes’ internal document about an [REDACTED], refers to a discussion with [REDACTED] and states that, ‘[Konecranes]’ [REDACTED]. We consider that this document highlights the importance some customers place on the interoperability of their CHE.
- (d) Another internal document – a presentation with the title ‘[REDACTED]’ produced states: ‘[REDACTED].’⁴⁷⁰ We consider that this indicates that customers have a preference for using equipment with features they are familiar with, which gives an advantage to incumbent suppliers, and suppliers with a broad range of CHE.

12.61 Internal documents from the Parties indicate that they have a broader range of CHE than other suppliers, and they perceive that as an advantage:

- (a) One strategy document prepared by Konecranes’ senior team notes that [REDACTED], as illustrated in Figure 28.

Figure 28: [REDACTED]

[REDACTED]

Source: [REDACTED].

⁴⁷⁰ [REDACTED] (underlined by the CMA).

(b) Another internal document from Konecranes highlights that Kalmar [✂].

Provisional assessment

- 12.62 Based on the evidence we have seen, we provisionally consider that some customers are averse to multi-sourcing CHE (including CHE which has little or no automation), and that some customers consider that it is important to choose a supplier which they perceive will ensure interoperability across the range of CHE they operate, and between their existing Gantry Cranes and any new additions.
- 12.63 Therefore, current market players have strategic advantages from having their CHE already in use by customers. We consider that this makes it more difficult for potential competitors to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.
- 12.64 Even if it is technically possible to integrate CHE products from different suppliers without difficulty, our provisional assessment is that some customers perceive a lack of interoperability to be a risk, or have a preference for procuring the same brand of CHE with the aim of achieving operational efficiencies.
- 12.65 The Parties' internal documents indicate that they consider that they have an advantage in terms of having a broad range of CHE, and potentially an advantage in setting the standards for interoperability as the incumbent. Our provisional assessment is, therefore, that interoperability can become a barrier to expansion for suppliers of Gantry Cranes with a narrow portfolio of CHE.

Horizontal Transport Equipment

The investment and time required to enter and/or expand and importance of economies of scale

Parties' views

- 12.66 In relation to the investment in facilities needed to produce horizontal transport equipment, the Parties told us that, '[i]t is generally easy for horizontal transport equipment suppliers to expand their portfolio ..., not least because most equipment can be (and is) produced in the same facilities'.
- 12.67 The Parties clarified their submission by telling us that:

- (a) 'Key components needed for the production/assembly of horizontal transport equipment are widely available in the market. Access to these input products does not constitute a barrier to entry or expansion in horizontal transport equipment markets'.
- (b) 'Most of the critical components used to produce straddle carriers are readily available and commonly sourced from third parties. For example, the Parties subcontract the manufacture of large parts of the steel structures required for straddle carriers to third-party suppliers'.
- (c) 'Barriers to entry to the market for terminal tractors are generally low. Terminal tractors are commoditized products and there are generally no specific customer preferences or regulatory hurdles that could hinder upcoming suppliers from entering the market'.
- (d) '[T]here are no insurmountable barriers to entry into automated horizontal transport equipment markets'. 'It is generally easy and common for OEMs to team up with tech companies and jointly develop automated solutions. Thus, also from this perspective, there are no insurmountable hurdles to entry into production of automated straddle carriers'.
- (e) It 'estimated that SC product development costs may be around €1 million and the development time could be approximately one to two years, which would not be insurmountable barriers to entry'.

12.68 The Parties also told us that 'the introduction of a new straddle carrier indeed involves product development costs (even if the supplier is already active in the supply of gantry cranes), but, in [their] view, certain development costs are always involved when a new product line is introduced and certainly do not constitute an insurmountable barrier to market entry'.

12.69 In relation to economies of scale, the Parties submitted that:

- (a) '[C]osts (and relatedly, considerations regarding economies of scale) are unlikely to be a deterrent to entry for Chinese SOEs'.
- (b) '[E]conomies of scale can be achieved on a global rather than national or even regional basis.
- (c) '[I]n order to profitably supply straddle carriers, it is important to achieve sufficient economies of scale, which can be difficult in a market as small as the potential market for straddle carriers'.

12.70 In relation to servicing facilities and capabilities, the Parties told us that:

- (a) '[E]ntrants can in any event avoid the costs of both setting up and providing a direct sales and after-sales network by instead relying on distributors'.
- (b) '[S]uppliers could decide not to supply after-sales services except for spare parts. Indeed, ZPMC and Liebherr operate on this basis. [...] Customers can instead either service HTE products in-house [...] or pick from a wide range of alternative service providers.

12.71 The Parties also submitted that, in respect of potential competitors in adjacent markets, the initial investment and time needed to set up production and servicing facilities, and economies of scale, 'would not apply, because they already have the distribution network, service network and the brand recognition to facilitate a quick entry', as exemplified by ZPMC's entry into straddle carriers.

Third-party evidence

12.72 Some third parties estimated the investment needed to achieve a five per cent market share in the supply of horizontal transport equipment in the UK as set out in Table 51 below:⁴⁷¹

Table 51: Third-party estimates of investment needed to achieve a five per cent market share in the supply of horizontal transport equipment

Third party	Estimate of investment needed to achieve a five per cent market share	
	Time	Cost
[Competitor]	3 to 5 years	£5 million to £10 million
[Competitor]	More than 5 years	No amount given.

Source: CMA Assessment

12.73 In relation to the investment in facilities needed to produce horizontal transport equipment:

- (a) A competitor explained that a new entrant in the supply of straddle carriers needs more than five years to gather product market experience, develop prototype series, and set up sales and service network. This competitor told us that [REDACTED].
- (b) A competitor told us that the prices it has tendered for the supply of straddle and shuttle carriers [REDACTED] because the cost of transporting this

⁴⁷¹ The question posed was as follows: Approximately how long and how much expenditure do you think an entrant would need to incur to reach a market share of about 5%.

equipment from its manufacturing facilities in [REDACTED] is higher than its competitors. It told us that ‘it had proved to be easier to enter the market and prove the reliability of its products in RTG and ASC than in relation to straddle and shuttle carriers’. It believes that a significant reason for this is that, in general, ‘the shipping costs for RTG and ASC – as a proportion of the total cost of the contract – is much lower for them than for straddle and shuttle carriers’.

12.74 In relation to required servicing facilities and capabilities, third-party evidence suggests that material investment is necessary to meet customer requirements:

(a) A competitor told us that:

- (i) aftersales service is ‘quite important, especially as the complexity of equipment increases’. It stated that its competitors are ‘trying to sell customers lifetime aftersales services (“life cycle management”)’.
- (ii) ‘[s]traddle carriers require a large amount of spare parts for stock which some ports are already heavily invested in’.

12.75 A competitor told us that it is important for it to have a local presence in the UK in order to be competitive.

12.76 A distributor told us that ‘Chinese suppliers often suffer from long delays in providing spare parts which makes them relatively unattractive both to end customers and probably distributors’. This distributor told us that ‘it is expensive to set up and provide a direct sales and aftersales network, which is a factor in some [suppliers] choice to rely on distributors’.

12.77 [REDACTED].

Provisional assessment

12.78 In relation to the investment in facilities needed to produce horizontal transport equipment, our provisional assessment is that significant investment is needed, and a long period of time is required, to develop horizontal transport equipment and set up the necessary production facilities.

12.79 In relation to servicing facilities and capabilities, our provisional assessment is that some customers require a local presence in order to provide the standard of maintenance and repair services which is expected in the industry, and that establishing this local presence would require significant investment. The evidence in Chapter 8 indicates that OEM suppliers do not currently use UK distributors to provide servicing capabilities in relation to the supply of

horizontal transport equipment. This means that, in this market, a new entrant is likely to require to incur the costs of setting up a direct presence.

- 12.80 In any case, for the reasons explained in relation to Mobile Equipment below (paragraphs 12.112 to 12.119), entering into a distribution agreement with a suitable distributor is also likely to be difficult. Some of the set up costs mentioned above in relation to servicing facilities and capabilities relate to the cost of entering and expanding in a certain region, which means that a new entrant would need to achieve certain scale at regional level.
- 12.81 We also note ZPMC only has a very small presence in SC and ShC and, therefore, the evidence does not support the Parties' claim that a supplier present in other markets can use its distribution network and brand recognition to achieve timely entry. Our provisional assessment is that these initial set-up costs are likely to raise barriers to entry and/or expansion by potential new entrants because, in the case of incumbent firms, they are sunk costs.
- 12.82 Finally, we consider that a new entrant, or an existing supplier wishing to expand would require a minimum volume of sales (i.e. minimum economic scale) in order to achieve a commercially viable return on this investment. This suggests that economies of scale are important in relation to the supply of horizontal transport equipment, and can act as a high barrier to entry.
- 12.83 Our provisional assessment is that the combination of the initial investment and time needed to set up production and servicing facilities, and economies of scale, in aggregate, constitute an even higher barrier which is likely to materially reduce the extent, timing and likelihood of entry following the Merger.

Strategic advantages related to incumbency and the importance of having a strong track record and reputation.

Parties' views

- 12.84 The Parties told us that:
- (a) '[w]hile horizontal transport equipment from non-Western (especially Chinese) suppliers may have been perceived as lower-quality in the past by some customers, this certainly no longer applies today (not least evidenced by the global success of Chinese companies like ZPMC across equipment types)'.

- (b) 'It is important for suppliers to have references proving their capability to supply reliable equipment. However, new entrants can always supply test units to customers, as ZPMC is currently doing, to convince customers and secure future business with these customers'.
- (c) 'The top five ports in the UK are owned by GTOs (DP World / HPH) or major port operators (Peel Ports, ABP).' They 'operate sophisticated procurement processes and are essentially indifferent to local track records'.

Tenders used by most ports 'are designed to, and in fact do, systematically eliminate any advantage that one supplier might have over another on the strength of individual relationships'. '[T]o the extent that having a strong track record is one of several considerations that a tendering party may take into account, there is no need to have a strong track record in the UK, or even in Europe, to win new tenders'.

- (d) 'Where no prior relationship with a customer exists, OEMs can also use distributors whose broad market knowledge and pre-existing customer relationships may facilitate entry'.

Third-party evidence

12.85 Evidence from third parties suggest that it is necessary for a new entrant to establish a strong track record and reputation in order to satisfy customers' purchasing criteria:

- (a) A competitor told us that it does '[redacted]' as it requires time to prove to customers the reliability and performance of the products'.
- (b) A customer told us that it, considers that ZPMC is still behind Konecranes and Kalmar [Cargotec] in terms of experience. This customer said that, in order for it to be comfortable awarding a contract to ZPMC, it would need to see a 'proof of concept'. This customer considers that ZPMC has delivered thousands of straddle carriers and shuttle carriers around the world, but it has information suggesting that these products suffer from reliability issues. This customer believes that ZPMC still has a long way to go before it can be considered as a potential supplier.
- (c) Another customer told us that it is, 'constantly reviewing the market but considers that it is a big business decision to change to another supplier'. It considered that 'it is possible to use other suppliers, but it would need to be confident that [the] safety and specifications of the equipment are good'.

12.86 Evidence from third parties also suggests that factors such as the importance of customer relationships and customers' familiarity with their existing suppliers' CHE makes it difficult for new entrants to win business from incumbent suppliers:

- (a) A competitor told us that it is currently tendering [REDACTED], however, it believed that the [REDACTED] because, in its view, DP World is more familiar with its competitors' products.
- (b) A competitor told us that it very difficult to achieve market penetration in the supply of straddle carriers because of the domination of the existing players.

Internal documents

12.87 An internal document from Cargotec suggests that having a strong track record and reputation is an important advantage for Cargotec [REDACTED].

Provisional assessment

12.88 Our provisional assessment is that having a strong track record and reputation is a very important part of generating sales as a supplier of horizontal transport equipment.

12.89 Third-party evidence does not support that customers are indifferent to suppliers having a local track record. OEM suppliers do not currently use UK distributors in relation to SC and ShC and, as explained below in relation to Mobile Equipment (paragraphs 12.112 to 12.119), there are very few distributors with the necessary market knowledge and pre-existing customer relationships to overcome this barrier to entry.

12.90 Furthermore, third-party evidence and the Parties' internal documents indicates that the tender processes typically used by customers do not mean that customers do not take into account the track record and reputation of suppliers. We consider that potential entrants would be required to establish a strong track record and reputation and this is likely to constitute a high barrier to entry.

12.91 The evidence ([REDACTED] suppliers) also shows that current market players have strategic advantages from having developed customer relationships and knowledge of customers' existing CHE and future requirements (amongst other factors). We consider that this makes it difficult for potential competitors to win market share and gives incumbent suppliers an advantage over

potential competitors entering the market and/or competitors wishing to expand.

Strategic advantages related to the importance of having a broad interoperable product portfolio or CHE with characteristics already familiar to customers

Parties' views

12.92 The Parties submissions set out in paragraph 12.52 and 12.54 apply to the supply of horizontal transport equipment.

12.93 The Parties made the following specific statements in relation to the supply of SC:

(a) 'there are no significant technical, IP related or other legal barriers to entry that could have hindered competitors from entering the potential straddle carrier market or expanding their existing straddle carrier business in the past'.

(b) 'the Parties' do hold certain IP rights in relation to straddle carriers. By way of example, [REDACTED]. Konecranes' basic straddle carrier product is decades old. In Konecranes' view, [REDACTED]. The Parties maintain that none of their IP rights in relation to straddle carriers can be perceived as necessary to enter or expand in the straddle carrier area'.

12.94 The Parties submitted that ECS are not specific to a specific OEM's CHE and can be used with a variety of ECS solutions (mix and matching is possible).

12.95 Furthermore, the Parties claimed that '[e]ven if interoperability were a key consideration for a customer's procurement decisions, suppliers' HTE offerings would not be the primary driver of their decision'.

Third-party evidence

12.96 The third-party evidence described above in paragraphs 12.55 and 12.59 shows the importance of interoperability for some customers. We consider that it may represent an advantage for incumbent suppliers of CHE, and those suppliers which offer a wide portfolio of CHE products. This evidence is also relevant to the market for shuttle and straddle carriers.

12.97 Evidence from third parties specifically in relation to horizontal equipment also indicates that some customers are averse to multi-sourcing their CHE, which gives an advantage to incumbent suppliers and to suppliers which offer a wide portfolio of CHE products:

- (a) A competitor told us that, '[t]he [customer's] choice of supplier of automated RTG or ASCs does not determine the supplier of horizontal transport equipment. However, it gives the supplier a distinct advantage'.
- (b) A competitor told us that it believes that customers take into account their operators' level of familiarity with the system of controls when making purchasing decisions. This competitor also said, 'Chinese competitors' products are less developed, but also less expensive'. It considers that, 'a driver in Europe would not drive a Chinese competitors' machine'.

Provisional assessment

- 12.98 Based on the evidence we have seen, our provisional assessment is that some customers are averse to multi-sourcing CHE (including CHE which has little or no automation), and that some customers consider that it is important to choose a supplier which they perceive will ensure interoperability across the range of CHE they operate and any new additions. We consider that some customers prefer to purchase CHE which has characteristics which they are already familiar with, such as in regards to the system of controls.
- 12.99 Therefore, current market players have strategic advantages from having their CHE already in use by customers. We consider that this makes it difficult for potential competitors to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.
- 12.100 As noted in paragraph 12.64 above, even if it is technically possible to integrate CHE products from different suppliers, our provisional assessment is that some customers still believe that it is preferable to purchase their CHE from the same supplier.
- 12.101 The evidence considered in relation to other types of CHE also indicates that customers perceive suppliers with a broad portfolio of CHE to be more likely to meet their requirements in relation to interoperability.
- 12.102 Our provisional assessment is, therefore, that the importance which customers place on CHE being interoperable can be a barrier to entry and/or expansion to competitors and potential entrants with a narrow portfolio of CHE.

Mobile equipment

The investment and time required to enter and/or expand and importance of economies of scale

Parties' views

- 12.103 In relation to the investment in facilities needed to produce Mobile Equipment, the Parties submitted that:
- (a) 'The barriers to entry and expansion are relatively low for all types of mobile equipment'.
 - (b) '[M]anufacturers can easily divert capacity to produce other types of mobile equipment'.
 - (c) Most of the critical components used to produce RS are readily available and commonly sourced from third parties. ECH are relatively commoditised and ECH's 'safety and regulatory standards [...] can be met without difficulties'.
- 12.104 In relation to economies of scale, the Parties submitted that this 'can be achieved on a global rather than national or even regional basis, and in any event is (together with investment costs) a less important consideration for Chinese SOEs, such as ZPMC, who are now targeting UK customers with some success.
- 12.105 In relation to servicing facilities and capabilities, the Parties told us that:
- (a) '[t]he cost of investing in direct supply would not be a significant barrier to entry'.
 - (b) To the extent deemed necessary by a potential new entrant, a distributor could be set up to provide local aftersales services at a relatively low cost. '[W]hether investment may be needed for suppliers to set up a distribution network needs to be set in the context of the expected return on the investment'.
 - (c) There are a number of distributors with the expertise and coverage to supply customers across the UK, and multi-sourcing is common. [X].
 - (d) '[S]ales and marketing materials for the dealers are typically made available online so sales and marketing support costs are very [X].'

Third-party evidence

- *Investment in production facilities*

12.106 The evidence in relation to the investment in facilities needed to produce Mobile Equipment was mixed. The third parties which provided evidence of the amount of investment needed to achieve a five per cent market share in the supply of Mobile Equipment in the UK gave a wide range of estimates, as set out in Table 52 below:⁴⁷²

Table 1: Third-party estimates of investment needed to achieve a five per cent market share in the supply of Mobile Equipment

Third party	Estimate of investment needed to achieve a five per cent market share	
	Time	Cost
[Distributor]	2 years	£200,000
[Distributor]	2 years	£500,000
[Competitor]	3 to 5 years	£5 million to £10 million
[Competitor]	3 to 5 years	No amount given.

Source: CMA Assessment

- *Investment in servicing facilities and capabilities*

12.107 In relation to servicing facilities and capabilities, we found that it is important to have a local servicing presence in order to be able to compete effectively.⁴⁷³ For example, a distributor, told us that, ‘one of the [key performance indicators] for a contract is generally providing a specified level of uptime for the product – usually around 98% uptime. It relies on its team of engineers to maintain this level of uptime.

12.108 Third parties told us that suppliers of Mobile Equipment broadly have two routes to market, which both require time and investment:

- (a) Direct supply, where the OEM supplier sells CHE directly to customers and can meet their servicing requirements.

⁴⁷² The question posed was as follows: Approximately how long and how much expenditure do you think an entrant would need to incur to reach a market share of about 5%

⁴⁷³ See Chapter 9.

(b) Indirect supply using a distributor, where an intermediary sells CHE to customers and meets their servicing requirements.

- *Direct supply of Mobile Equipment*

12.109 Third parties told us that the investment needed for an OEM to establish its own servicing facilities and capabilities was a barrier to entry in the supply of Mobile Equipment:

(a) A competitor told us that it struggles to match local suppliers' delivery times, shipment costs and service costs. It said that local engineers are not very familiar with its products and this is likely to prevent it from entering the Mobile Equipment market.

(b) A competitor stated that '[f]ast and appropriate service are customer critical for this capital intensive/specialized equipment' and that 'building a proper service network takes effort'. It told us that '[s]elling a critical mass of equipment to a particular customer allows it to offer better servicing'.

12.110 Another third party told us that 'new entrants can set up their own servicing divisions. This is something that many of the Chinese companies have done in countries across Europe'. It said that an initial start-up operation could be as little as €200,000 to €300,000. We note that this amount only refers to the initial investment and further investment may be needed in order to achieve economies of scale.

12.111 Overall, this evidence suggest that some investment and effort is required for an OEM supplier to establish its own servicing network for the supply of Mobile Equipment .

- *Indirect supply of Mobile Equipment using a distributor.*

12.112 Third parties told us that the investment needed in servicing facilities and capabilities was lower if the OEM supplier appointed a distributor. For example:

(a) A distributor told us that, '[whereas] it would need a very significant level of investment for a company (eg OEM) to set up a new distribution network for mobile equipment, it is more feasible to leverage an existing service chain and use this as the way to enter and expand in the market, as Sany appears to be trying to do with the Cooper team'.

(b) A competitor similarly, told us that, '[i]t is difficult to sell, even with a competitive container handling offering, without distributors providing 24/7

support' and that it considers aftersales support to be a 'key factor' for customers.

12.113 We note, however, that OEM suppliers will typically lose the opportunity to generate additional revenue by providing aftersales support to customers if they appoint a distributor to supply their Mobile Equipment.

12.114 Contrary to what the Parties submitted, the evidence does not support that there are many effective distributors available in the UK.

12.115 First, we observe that, while many distributors exist in the UK, the evidence from third parties indicates that only a small number of them have been used in the UK by the main OEM suppliers. For example:

(a) Cooper was Konecranes' distributor until 2014 and is now a distributor for Sany and Svetruck,

(b) Impact Handling was Cargotec's distributor and is now a distributor for Konecranes.

12.116 Second, evidence from third parties supports that there are few effective distributors available in the UK:

(a) One third party noted that there is no other distributor available to which a new entrant can 'attach' to 'give it the success it needs'. This third party told us that it has 'readymade database to go to the customer' and that 'somebody [that] starts from afresh, they don't have that database, they don't have that experience, they don't have that relationship'.

(b) Another third party told us that there are few distributors in the UK that can offer a distribution infrastructure with the 'size and spread' [✂].

12.117 Third, evidence from current distributors in the UK suggests that it would be difficult for them to serve another OEM or to switch OEM:

(a) A distributor submitted that it is difficult for distributors to serve another OEM [supplier] or to switch OEM [supplier], and this is partly as a result of the duration of their agreements or exclusivity obligations. This distributor further noted that changing OEM partner is a significant change for a distributor.

(b) Similarly, a distributor told us that it would have more to lose than win if it were to switch to another OEM [supplier].

12.118 Finally, we note that many of the distributors identified by the Parties distribute mainly or only light FLT, rather than the other Mobile Equipment that

we are considering. Furthermore, very few of the distributors listed by the Parties seem to distribute CHE to port terminal operators and having established customer relationships in the industry is important for a distributor to be effective in gaining business.

12.119 Accordingly, competitors wishing to expand, or potential new entrants, may not be able to easily enter into a selling arrangement with a distributor.

12.120 As mentioned before, Konecranes currently uses Impact Handling as its Mobile Equipment distributor in the UK. We investigated whether, after the Merger, if Konecranes stopped using Impact Handling as its distributor, whether a new entrant could enter or expand in the supply of Mobile Equipment using Impact Handling as its distributor.

12.121 We consider that the evidence is unclear on what route to market the Merged Entity would use in the UK for its Mobile Equipment, but it is possible that the Merged Entity would [REDACTED]:

(a) Konecranes provided an internal document prepared by McKinsey & Company dated 16 June 2020 (around three months after the Parties first entered into discussions regarding the Merger) which refers to a [REDACTED]. We observe that Konecranes has identified [REDACTED] in relation to its servicing business, but do not consider this to be determinative evidence that the Merged Entity would no longer use Impact Handling as a distributor.

(b) A distributor told us [REDACTED].

- *Economies of scale*

12.122 Third parties told us that economies of scale are important in order for the supply of Mobile Equipment to be profitable. For example:

(a) A distributor told us that, 'it needed to maintain a certain volume of activity to enable it to generate a profit whilst maintaining its service levels (such as its three-hour response time) across the whole of the UK. Its service operation only becomes cost effective with a high volume of business. More than 90 engineers are needed in order to offer customers UK wide coverage. It is important to have a large scale of operation across the whole of the UK.

(b) A distributor told us that, in addition to the initial cost of entering, 'an engineer will cost roughly £60,000 to £70,000 per year to keep them on the road. National coverage, requires at least six engineers, so, with all the support services, a new startup would need to invest £0.5m to £0.75m a year to provide a minimum level of after-sales service.

Provisional assessment

- 12.123 Our provisional assessment is that the combination of the initial investment and time needed to set up production and servicing capabilities, and economies of scale, in aggregate, constitute a high barrier to entry which is likely to materially reduce the extent, timing and likelihood of entry following the Merger.
- 12.124 In relation to the investment in facilities to produce CHE, the evidence is mixed. However, even if it is (as submitted by the Parties) easy for suppliers to switch between the production of different types of Mobile Equipment, this does not mean that a supplier which does not currently supply Mobile Equipment would not need to make any investment.
- 12.125 We consider that the initial investment needed to be able to provide the standard of servicing which is expected in the industry, and have engineers available on an ongoing basis (either directly or through a distributor), constitutes a barrier to entry and expansion. These initial set-up costs are likely to deter entry or expansion by potential new entrants who have not yet incurred these costs because, in the case of incumbent firms, they are sunk costs.
- 12.126 We consider that OEM suppliers can outsource their servicing to distributors as an alternative to setting up their own facilities and capabilities, however, some investment would still be needed to support the distributor. In any case, we note that:
- (a) There are not many specialised distributors with necessary expertise in the UK that can support entry or expansion.
 - (b) Even if a competitor or potential entrant was able to identify a suitable distributor, it would still need to invest some time and resources in order to facilitate the distribution of its products⁴⁷⁴ and continue to face the other barriers set out below.
- 12.127 A new entrant or an existing supplier willing to expand would require a minimum volume of sales (i.e. minimum economic scale) in order to achieve a commercially viable return on this investment. Some of the set up costs in relation to servicing relate to the cost of entering and expanding in a certain region, which mean that a new entrant would need to achieve certain scale at the regional level. Therefore, we consider that economies of scale are

⁴⁷⁴ A distributor notes that it is a long and difficult process for a distributor to start distributing the products of new Mobile Equipment supplier

significant in the supply of Mobile Equipment and can act as a high barrier to entry.

Strategic advantages related to incumbency and the importance of having a strong track record and reputation.

Parties' views

12.128 The Parties told us that:

- (a) 'The top five ports in the UK [...] operate sophisticated procurement processes and are essentially indifferent to local track records [...] In particular, three of the five largest terminals in the UK are owned by GTOs (London Gateway, Felixstowe and Southampton) and together account for c. 70% of UK container throughput. The GTOs do not make their procurement decisions locally in the UK but centrally in their overseas headquarters.'
- (b) Tender processes used by State-owned terminals and private customers "are designed to, and in fact do, systematically eliminate any advantage that one supplier might have over another on the strength of individual relationships". '[T]o the extent that having a strong track record is one of several considerations that a tendering party may take into account, there is no need to have a strong track record in the UK, or even in Europe to win new tenders. GTOs purchase equipment globally and have established relationships and experience with suppliers globally, including many who have not yet supplied product in the UK'.
- (c) '[N]ew entrants can always supply test units to customers, as [Sany] did with the global port operator PSA in 2011, thereby winning its recognition and securing PSA as a long-standing customer'.

12.129 In relation to the role of distributors, the Parties submitted that:

- (a) 'Where no prior relationship with a customer exists, OEMs can also use distributors whose broad market knowledge and pre-existing customer relationships may facilitate entry'.
- (b) '[Reach stackers, empty container handlers and forklift trucks] are often sold through knowledgeable dealer networks, which work together with suppliers to demonstrate the quality of their offering.
- (c) The fact that a supplier has concluded a distribution agreement with a distributor already demonstrates that its products have a sufficiently high

quality from the perspective of knowledgeable distributors who expect to be able to resell it’.

Third-party evidence

12.130 Evidence from third parties suggests that current market players may have a strategic advantage from having established a strong track record, developed customer relationships and knowledge of customers’ existing CHE and future requirements. This evidence suggests that a potential competitor may be deterred from entering or expanding in the relevant market due to the cost and difficulty of establishing these relationships and knowledge, and uncertainty over the return from it through future sales:

- (a) A competitor told us that building up relationships with decision makers in the industry helps it to ‘open the door’, but it does not help it to win contracts. It needs to demonstrate the product and establish its credentials in financing and servicing. This competitor further explained that the container handling industry ‘is a capital intensive industry and having products on the ground is very important. Future potential customers will want to see proof of the product’s performance in real life conditions’. This competitor also stated that it has so far struggled to supply HDFLT to UK ports due to the reliance on ‘word of mouth’ and a preference to use suppliers that also supply other CHE to the port (such as the Parties).
- (b) A distributor told us that ‘the mobile equipment market is a relationship business. Suppliers or distributors have to build up relationships with customers over years before gaining contracts from those customers. It also explained that the time spent building up relationships with potential new customers is ‘often speculative as [they] are essentially waiting for the incumbent [supplier or distributor] to “fail” before [they] will be given a chance’.
- (c) A customer told us that its ‘preferred supplier’ of Mobile Equipment is [redacted] and is has not purchased Mobile Equipment from any other supplier since 2016.
- (d) A distributor told us that ‘a local presence helps with customer retention as the relationship with the customer is important’. It also ‘found that breaking into the market was difficult’ when it was a new entrant, but now Impact Handling is able to demonstrate its capability to potential customers. This distributor believes ‘that an operator of a machine prefers either Cargotec’s or Konecranes’ equipment’.

(e) A distributor told us that it 'would see a potential supplier building up a relationship through supply of products in an adjacent market (such as cranes) as a potential threat, as the supplier would be building up a trust relationship with the customer with could transfer across to heavy machines'.

Internal documents

12.131 Internal documents from Cargotec also suggest that customer relationships are an important advantage for it. For example, a recent market analysis document produced by Cargotec states that [REDACTED].

12.132 An internal document from Konecranes notes that one of its strengths is [REDACTED]. It notes that an ongoing threat to the company is [REDACTED].

Provisional assessment

12.133 The evidence we have received from both the Parties and third parties shows that having a strong track record and established reputation is a very important part of generating sales as a supplier of Mobile Equipment. We therefore consider that potential entrants would be required to establish a strong track record and reputation, and this is likely to constitute a high barrier to entry.

12.134 The evidence we have received shows that current market players have strategic advantages from having developed customer relationships and knowledge of customers' existing CHE and future requirements (amongst other factors). We consider that this makes it difficult for potential competitors to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.

12.135 We consider that, based on the evidence summarised at paragraphs 12.114 to 12.119, even if it is possible to overcome the need to have a strong track and reputation by using a distributor, there are likely to be few (if any) available distributors which can fulfil this role since the distributors will not be able to sell to end customers without themselves having a strong track record and established customer relationships.

12.136 Furthermore, third-party evidence and the Parties' internal documents indicates that the tender processes typically used by customers take into account the track record and reputation of suppliers. We also note that a significant portion of Mobile Equipment is not sold following a tender

process.⁴⁷⁵ Based on the evidence in relation to the appropriate geographic market for the supply of Mobile Equipment (summarised in Chapter 5), we consider that customer references and a strong track record at the regional level are important for some customers.

Strategic advantages related to the importance of having a broad interoperable product portfolio or CHE with characteristics already familiar to customers

Parties' views

12.137 Konecranes told us that, '[it] does not supply automated mobile equipment, therefore there are no relevant protocols for the exchange or transmission of data between Konecranes mobile equipment and third-party ECS'.

12.138 Cargotec told us that: [REDACTED].

12.139 More generally, the Parties told us that, '[i]nteroperability is not yet an important consideration for [mobile equipment]:

(a) '[Mobile equipment] are still manually operated. They are not (yet) automated, but rather are commodity products with no proprietary technology (other than in relation to the control system, which does not need to be maintained in connection with servicing the equipment). In reality many operators are happy to operate a mixed fleet of [mobile equipment] without interoperability concerns.

(b) '[Mobile equipment] are a commoditised product with a faster replacement cycle than the rest of CHE, therefore interoperability is not an issue for customers, and this also gives the opportunity to new entrants to penetrate the market.

Third-party evidence

12.140 Evidence from third parties indicates that customers tend to prefer having a single supplier for mobile equipment (irrespective of whether it is manually operated or automated), which gives an advantage to the incumbent supplier, and to suppliers that can offer a wide portfolio of CHE:

(a) A distributor told us that it considers 'that an operator of a machine prefers either Cargotec's or Konecranes' equipment'.

⁴⁷⁵ Cargotec told us that around [REDACTED] of its Mobile Equipment is not sold through a tender process. [REDACTED]. Konecranes told us that around [REDACTED] of its Mobile Equipment is not sold through a tender process. [REDACTED].

- (b) A customer told us that RS CHE 'is standalone, however, familiarity with service requirements and commonality of spare parts is a consideration'.
- (c) A customer told us that it likes 'to keep all [ECH] of the same brand where possible'.
- (d) One customer told us that, 'the degree of interoperability is important for [HDFLT] due to the specific / specialist nature of the deployment application and systems'.

Internal documents

12.141 We note that Konecranes' internal documents refer to the ability of equipment to connect to a surrounding machine ecosystem, such as a cloud-based information network, as being one of the emerging trends within the market.

Provisional assessment

- 12.142 As set out in Chapter 9 (Mobile Equipment), we note that interoperability was not ranked as high as other purchasing criteria by customers, however, we consider that customers prefer to purchase CHE with characteristics which they are already familiar with, such as in regards to the brand, commonality of spare parts, or system of controls.
- 12.143 Based on the evidence we have seen we have found that some customers are averse to multi-sourcing CHE and believe that it is important to choose a supplier which ensures interoperability across the existing range of CHE which they operate and any new additions.
- 12.144 As noted in paragraph 12.64 above, even if it is technically possible to integrate CHE products from different suppliers, our provisional assessment is that some customers still believe that it is preferable to purchase CHE from the same supplier so that it has characteristics which they are familiar with. This gives an to incumbent suppliers or suppliers with a broad portfolio of CHE.
- 12.145 Therefore, we consider that current market players have strategic advantages from having their CHE already in use by customers. This makes it more difficult for potential competitors to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.

Provisional assessment on barriers to entry and / or expansion

- 12.146 We have found several barriers to entry and/or expansion. Based on the evidence we have received, we consider that:
- (a) Significant initial costs are needed to be able to supply CHE and provide parts and servicing. Economies of scale also constitute a significant barrier to entry or expansion and may prevent small-scale entry from imposing an effective constraint. The investment needed to be able to provide maintenance and repair services is likely to constitute a high barrier to entry and/or expansion in relation to the supply of Mobile Equipment, as a potential new entrant (directly or through a distributor) would need to serve a large number of customers in order to be commercially viable.
 - (b) Having a strong track record and reputation are very important in order to satisfy customers' purchasing criteria, and establishing that strong track record and reputation therefore presents a high barrier for new entrants. The evidence also shows that the importance of having established customer relationships (among other factors) makes it difficult for new entrants to win market share and gives the incumbent supplier an advantage over potential competitors entering the market and/or competitors wishing to expand.
 - (c) Some customers are averse to multi-sourcing CHE (including CHE which has little or no automation) and, in relation to Gantry Cranes, interoperability can be a barrier to expansion for suppliers with a narrow portfolio of CHE.
- 12.147 These barriers may be reduced if a new entrant has been able to establish a strong track record and reputation in adjacent markets.
- 12.148 Nevertheless, we have found that these barriers in aggregate are likely to materially reduce the extent, timing and likelihood of entry following the Merger. All potential entrants or existing suppliers attempting to expand would face at least some of these barriers and potentially all of them.
- 12.149 We also note that the only other firms which have achieved scale in the relevant markets in which we provisionally found an SLC are: i) ZPMC in the supply of Gantry Cranes (as described in Chapter 7); and ii) Sany in the supply of Mobile Equipment (as described in Chapter 9). Neither ZPMC nor Sany entered into the relevant markets within the last five years. This evidence indicates that there has not been material recent entry, and the frequency of entry is low, which is consistent with barriers to entry being high and entry being unlikely as a result of the Merger.

Entry and expansion as a result of the Merger

- 12.150 The Parties identified a number of OEMs as potential new entrants or as having the potential and/or plans to enter or expand into the markets in which we provisionally found SLCs.⁴⁷⁶
- 12.151 The Parties have not specified whether any of the third parties identified above would be more likely to enter or expand in response to the Merger.
- 12.152 In the course of our investigation, we have gathered evidence from all the Parties' major competitors,⁴⁷⁷ including about barriers to entry and expansion and their plans to enter and expand in the relevant markets. We also contacted a number of other competitors and potential entrants identified by the Parties but did not receive responses from all of them.
- 12.153 The evidence we received was consistent and demonstrates that barriers to entry and expansion in the relevant markets are, in aggregate, high which indicates that it is difficult for OEMs to enter or expand in any of the markets in which we provisionally found an SLC in a timely manner and with a sufficient scale to offset the potential loss of competition resulting from the Merger.
- 12.154 As discussed in relation to each relevant market in Chapters 7, 8, and 9, we did not find evidence that any of the existing alternative suppliers, or any other third parties, have the necessary capabilities or intention to materially enter or substantially expand in the relevant markets, in the near future (without the Merger). As set out in those Chapters, no specific and timely entry or expansion plans appear to exist that would be sufficient in scope and magnitude to sufficiently constrain the Merged Entity to offset the potential loss of competition from the Merger.
- 12.155 When considering entry and expansion as a countervailing factor, the evidence we obtained from third parties also does not demonstrate that any OEM would materially enter or substantially expand in the markets in which we found an SLC, in the near future, as a result of the Merger. Any such entry or expansion would need to be timely and of sufficient scope and

⁴⁷⁶ For example, in relation to the supply of Gantry Cranes: Baltkran, CSSC, Doosan, DSD Hilgers, HDHM, Kaliningrad, Kuenz, Liebherr, Mi-Jack, Mitsui, Mitsubishi, Paceco Espana, Sany, and ZPMC; in relation to the supply of SC and ShC: Liebherr, Mobicon, Sany, Suzhou Dafang, and ZPMC; in relation to the supply of Mobile Equipment excluding heavy duty forklift trucks: CES, CVS Ferrari, FTMH, Dalian, Hangcha, Heli, Hyster, Liebherr, Loadstar, Mitsui, Uplifting, Sany, Shaanxi, SOCMA, Svetruck, Taylor, XCMG, Zhongtie-Wuxin, and ZPMC; and in relation to the supply of heavy duty forklift trucks: BYD, CES, CVS Ferrari, FTMH, Dalian, Doosan, Hangcha, Heli, Hyundai, Hyster, Linde, Loadstar, Mitsui, Uplifting, Sany, SOCMA, Svetruck, Taylor, XCMG, Zhongtie-Wuxin, and ZPMC.

⁴⁷⁷ CVS Ferrari S.P.A., Hyster-Yale, Hyundai, Kuenz, Liebherr, Linde Material Handling, Sany, Terberg, TICO, ZPMC. In relation to spreader suppliers, we received responses from Elme, RAM and Stinis.

13. Mitsui Engineering & Shipbuilding, Heli, XCMG.

effectiveness to prevent an SLC from arising as a result of the Merger. Small-scale entry that is not comparable to the constraint eliminated by the Merger would not be likely to prevent the SLCs we have provisionally found.⁴⁷⁸

12.156 In this context, we did not identify any suppliers that expected to materially expand their turnover generated from the supply of in the UK, as a result of the Merger:

(a) [REDACTED].

(b) [REDACTED].

(c) [REDACTED].

(d) [REDACTED].

12.157 Therefore, we consider that there is no evidence that these or any other firms are likely to enter and/or expand to such a degree and in such a manner, including as a result of the Merger, that they would sufficiently constrain the Merged Entity in a timely manner. General plans by the Parties' existing competitors to continue to compete to win tenders is characteristic of the pre-Merger competitive landscape.

12.158 As discussed at paragraphs 12.148 and 12.149, we note that barriers to entry and/or expansion are high, the only other firms which have achieved scale in the relevant markets are ZPMC and Sany, and neither of them entered into the relevant markets within the last five years.

12.159 Therefore, our provisional conclusion is that timely entry or expansion of sufficient scale is not likely to occur, as a result of the Merger, in order to prevent an SLC from arising in any of the markets in which we provisionally found an SLC.

CMA's provisional assessment on entry and expansion as a countervailing factor

12.160 We consider that there is substantial evidence of a number of significant barriers to entry in the relevant markets, and these barriers in aggregate are likely to materially reduce the extent, timing and likelihood of entry following the Merger.

12.161 The evidence we gathered from third parties also does not support any firms would have the necessary capabilities or intention to materially enter or

⁴⁷⁸ CMA129, paragraph 8.39.

substantially expand in the markets in which we found an SLC, in the near future, as a result of the Merger.

12.162 Based on the above analysis, our provisional conclusion is that timely entry or expansion of sufficient scale is not likely to occur, as a result of the Merger, in order to prevent an SLC from arising in any of the market in which we provisionally found an SLC.

Countervailing factors: Merger efficiencies

12.163 We considered whether efficiencies arising from the Merger could constitute a countervailing factor.

12.164 In some instances, mergers can give rise to efficiencies.⁴⁷⁹ Rivalry-enhancing efficiencies change the incentives of the merger firms and induce them to act as stronger competitors to their rivals—for example, by reducing their marginal costs giving them the incentive to provide lower prices or a better quality, range or service.⁴⁸⁰ They may prevent an SLC by offsetting any anticompetitive effects.⁴⁸¹

12.165 Cost and revenue synergies often form part of the rationale for mergers, and it is not uncommon for firms to make efficiency claims in merger proceedings. Many efficiency claims by merger firms are not accepted by the CMA because the evidence supporting those claims is difficult to verify and substantiate.⁴⁸²

12.166 Most of the information relating to the synergies and cost reductions resulting from a merger is held by the merger firms.⁴⁸³ Therefore, it is for the Parties to demonstrate that the Merger will result in efficiencies.⁴⁸⁴

12.167 The Parties stated in their Merger Notice that they, ‘do not wish the CMA to consider efficiencies or relevant customer benefits at this stage. They reserve the right to raise these considerations in due course’.

12.168 In regard to possible synergies, the Parties subsequently told us that:

(a) ‘No precise work or analysis has been carried out at this stage. However, the Parties anticipate that an important part of the deal rationale is to ensure that the parties are better placed to address sustainability

⁴⁷⁹ CMA129, paragraph 8.2.

⁴⁸⁰ CMA129, paragraph 8.3 (a).

⁴⁸¹ CMA129, paragraph 8.4.

⁴⁸² CMA129, paragraph 8.6.

⁴⁸³ CMA129, paragraph 8.7.

⁴⁸⁴ CMA129, paragraph 8.15.

challenges in the industry, by providing a platform for innovation in automation, robotics, electrification and digitalization.

- (b) The Transaction will allow the Merged Entity to develop innovative products at an accelerated rate (as compared to each Party alone) [✂] to meet intense competition from [✂].

12.169 We do not consider this evidence to be sufficient to assess potential efficiencies in any detail.

Our provisional assessment

12.170 Taking all of the above into account, the CMA's provisional assessment is that any merger efficiencies would not be timely, likely, and sufficient to prevent an SLC from arising, in any of the market in which we provisionally found an SLC.

Provisional conclusion on countervailing factors

12.171 For the reasons set out above, the CMA's provisional conclusion is that there are no countervailing factors which would prevent an SLC from arising as a result of this Merger, in any of the markets in which we provisionally found an SLC.

13. Provisional finding

13.1 For the reasons set out in the preceding Chapters, the Inquiry Group appointed to consider this reference has made the following provisional findings on the statutory questions it has to decide pursuant to section 36(1) of the Act:

- (a) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and
- (b) the creation of that situation may be expected to result in a substantial lessening of competition as a result of horizontal unilateral effects in relation to UK customers, in the supply of each of the following categories of equipment in Europe, including the UK: (i) RTG, (ii) ASC, (iii) SC and ShC, (iv) RS, (v) HDFLT, (vi) ECH and (vii) ATT.

13.2 We invite any parties to make representations to us on these provisional findings by no later than 17.00hrs GMT, on 17 December 2021. Parties should refer to the notice of provisional findings for details of how to do this.