

Appendices and glossary

Appendices

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Glossary

Appendix A: Terms of reference and conduct of the inquiry

Terms of reference

- 1. In exercise of its duty under section 33(1) of the Enterprise Act 2002 (the Act) the Competition and Markets Authority (CMA) believes that it is or may be the case that:
 - (a) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation, in that:
 - (i) enterprises carried on by Cargotec Corporation will cease to be distinct from enterprises carried on by Konecranes Plc; and
 - (ii) the conditions specified in section 23(1)(b) of the Act are satisfied; and
 - (b) the creation of that situation may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom for goods or services, including in the supply of reach stackers, straddle carriers and rubber-tyred gantry cranes.
- 2. Therefore, in exercise of its duty under section 33(1) of the Act, the CMA hereby makes a reference to its chair for the constitution of a group under Schedule 4 to the Enterprise and Regulatory Reform Act 2013 in order that the group may investigate and report, within a period ending on December 27, 2021, on the following questions in accordance with section 36(1) of the Act:
 - (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 a substantial lessening of competition within any market or markets in the United Kingdom for goods or services.

Joel Bamford
Senior Director, Mergers
Competition and Markets Authority
13 July 2021

Conduct of the inquiry

- 3. We published the biographies of the members of the Inquiry Group conducting the inquiry and the administrative timetable for the investigation on the inquiry webpage on 14 July 2021.
- 4. On 6 August 2021, we published an issues statement on our webpage, 1 setting out the areas on which the inquiry would focus.
- 5. On 20 August 2021, members of the Inquiry Group and staff attended virtual 'site visits' with the Parties and their advisers held via MS Teams. These arrangements were made because of Coronavirus (COVID-19) and the Government's associated guidelines.
- 6. We invited a wide range of interested parties to comment on the Merger. We conducted 15 interviews with customers, competitors, manufacturers and distributors of the Parties via MS Teams. Evidence was also obtained from third parties using written requests. Our approach to third party evidence and description of the third-party evidence we considered is set out in Appendix D We also used evidence from the CMA's phase 1 investigation into the Merger.
- 7. We received written evidence from the Parties in the form of submissions and responses to information requests (non-confidential versions of their responses to the Phase 1 Decision and the issues statement are published on the inquiry webpage). We also received a large number of internal documents from the Parties, as set out in Chapter 6 of the final report.
- 8. The CMA received confidentiality waivers from the Parties to share information with the EC. We received the Parties submissions to the EC requests for information and considered these responses in our analysis. Throughout the inquiry the CMA has cooperated with the other authorities investigating this inquiry, in particular the EC.
- 9. Due to Cargotec's and Konecranes' failures to comply with the requirements of their respective section 109 notices requesting information, we paused the statutory timetable on 11 August 2021, pending receipt of the information sought. Separate notices of extension addressed to each Party were published on the inquiry webpage. Following receipt of the outstanding information, we restarted the statutory timetable on 20 September 2021 and notices of termination of extension were published on the inquiry webpage on 22 September 2021. The timetable was stopped for a total of 39 days, extending the statutory deadline to 4 February 2021. An updated

¹ Issues Statement.

- administrative timetable was published on the inquiry webpage on 22 September 2021 to reflect this extension.
- 10. In the course of our inquiry we sent the Parties a number of working papers for comment. We also provided Parties and third parties with extracts from our working papers for comments on accuracy and confidentiality. The Parties were also sent an annotated issues statement, which outlined our emerging thinking at the time prior to the main party hearings. The Parties provided comments on those papers on 22 October 2021.
- 11. We held main party hearings with the Parties on 20 October 2021. Both of these hearings were held via MS Teams.
- 12. On 26 November 2021, we published a summary of our provisional findings report, a notice of provisional findings and a notice of possible remedies on the inquiry webpage. On 29 November 2021, we published a non-confidential version of our provisional findings report on the inquiry webpage.
- 13. On the same date as we published a summary of our provisional findings report, we issued a notice of extension to allow the CMA sufficient time to reach a fully reasoned final decision, having regard to the scope and complexity of the inquiry. The deadline for the CMA's final decision following this extension changed to 1 April 2022. An updated administrative timetable was published on the inquiry webpage on 26 November 2021 to reflect this extension. A further update to the administrative timetable was published on the inquiry webpage on 4 March 2022.
- 14. On 10 January 2022, non-confidential versions of the Parties' response to the provisional findings and the Parties' response to our notice of possible remedies were published on the inquiry webpage.
- 15. We held response hearings with Cargotec and Konecranes on 17 December 2021. The response hearings were held via MS Teams. A Remedies Working Paper was sent to the Parties on 14 February 2022 for comment. After issuing the Provisional Findings Report, we had response hearings with 12 customers, five OEMs and 2 distributors. We also had response hearings with four third parties that submitted a non-binding offer the KAS Divestiture Business and one third party that expressed interest in the acquisition of the KAS Divestiture Business, but subsequently informed the CMA that it had decided not to pursue a non-binding offer for the KAS Divestiture Business.
- 16. A non-confidential version of the final report has been published on the inquiry webpage.
- 17. We would like to thank those who have assisted us in our inquiry.

Appendix B: Shares of Supply

Introduction

- 1. In this appendix, we explain our approach to shares of supply for Gantry Cranes, Mobile Equipment, and other products (SC, ShC, TT, Crane spreaders, Mobile spreaders, and MHC).
- 2. For all relevant products, the Parties submitted their own sales data as well as their estimates of their competitors' sales. For Mobile Equipment and Gantry Cranes, we also received sales data from some third-party competitors. For these products, as set out below, we constructed our shares of supply (on a volume and revenue basis) using the best available data for each product and geography.
- 3. Where we present shares of supply based on volumes, these are based on delivery volumes rather than order volumes.
- 4. Where we present shares of supply based on revenue, these are based on nominal revenue figures (ie, not adjusted for inflation) in Euros.² This is consistent with the data and estimates provided by the Parties.
- 5. We note that we typically assign more weight to shares of supply based on revenue rather than volume. However, in this case we assign slightly more weight to shares of supply based on volume, because we consider that the data that we have received on volumes is more accurate than the data that we have received on revenue.³ As shown in the competitive assessments, the differences in shares of supply based on volume and revenue are not material.

Gantry Cranes

6. Our shares of supply for Gantry Cranes use a combination of the data submitted by the Parties and the data submitted by competitors. Where these figures were available, we have used the sales data submitted by competitors in relation to their own sales. Where we have not received data from a

² The majority of suppliers provided data in Euros, but two suppliers provided data in GBP. We converted this data into Euros using the exchange rates provided by each supplier.

³ We consider that both the data that the Parties provided regarding their own sales and the data that we received from third parties are accurate in terms of both volume and revenue figures. However, we consider that the Parties' estimates of their competitors' sales (which we use when third-party sales data is not available) are more accurate for sales volumes than for revenues. This is because, as explained below, the Parties' estimates of their competitors' revenues are based on estimates of approximate price differences between the Parties and their competitors, whereas estimates of competitors' sales volumes are based on internal intelligence and information from industry bodies.

competitor, or where we have incomplete data from a competitor, we have used the Parties' estimates of the competitors' sales instead.

Parties' data

- 7. The Parties provided sales figures for themselves and their competitors covering the years 2009–20 on three different geographic bases: UK, Europe,⁴ and worldwide (excluding China).
- 8. For their own sales of Gantry Cranes, the Parties provided the actual number of deliveries that they made in each year and region. The Parties also provided the actual revenues associated with these deliveries for Konecranes' RTG sales, and both Parties' ASC sales. For Cargotec's RTG sales, Cargotec provided estimated revenues because actual revenues associated with each of its RTG deliveries were unavailable.⁵
- 9. The Parties estimated competitors' delivery volumes using data obtained from World Cargo News reports.
- 10. The Parties do not have visibility of competitors' actual revenues, so they estimated these based on relative price levels, as follows.
 - a) The Parties calculated their own average prices in the periods 2009–11, 2012–14, 2015–17 and 2018–20.6
 - b) For each competitor, the Parties estimated the approximate difference between their own prices and those of the competitor, in increments of 2.5% (for example, 2.5% higher, or 5% lower). This difference was applied to the Parties' average prices from above to obtain an average price for each competitor.
 - c) Competitors' revenues in each year were then estimated by multiplying the estimated delivery volumes by the relevant estimated average prices.

Third-party data

11. We sought sales data covering revenues (in Euros) and delivery volumes from the Parties' competitors in RTG and ASC for the period 2011–20 on

⁵ Cargotec calculated its estimated revenues by multiplying its actual number of deliveries of RTG in each year by its average price for RTG over a three-year period. Cargotec calculated four average prices for four three-year periods (2009–11, 2012–14, 2015–17, 2018–20) and used the relevant price according to the year in which the deliveries were made (eg, the average price from 2018–20 was used to estimate the three annual revenues associated with RTG deliveries in 2018, 2019 and 2020).

⁶ These are not adjusted for inflation.

- three geographic bases: UK, Europe,⁷ and worldwide (excl. China). We received data from ZPMC⁸ and Kuenz⁹ for both RTG and ASC, and from Liebherr for RTG.
- 12. The data from ZPMC, Liebherr and Kuenz cover a large proportion of third-party RTG and ASC sales, particularly on a European basis. According to the Parties' estimates of delivery volumes, the competitors for which we did not receive sales data accounted for:
 - a) [5–10%] [%]% of European RTG sales over 2011–20;
 - b) [0–5%] [≫]% of European ASC sales over 2011–20;
 - c) [20-30%] [%]% of worldwide (excl. China) RTG sales over 2011-20; and
 - d) [0-5%] [%]% of worldwide (excl. China) ASC sales over 2011–20.

Our approach

- 13. As noted above, where we did not receive data from competitors, or where we received incomplete data, we relied on the Parties' estimates of their competitors' sales. This applies in the following cases:
 - a) RTG sales for Mitsui, Paceco Espana, Sany, CSSC, Mitsubishi, Mi-Jack, Baltkran, Doosan, HDHM, Hyundai, Rainbow-Cargotec, and Trans Gulf Port Cranes;
 - b) ASC sales for CSSC and HDHM; and
 - c) RTG and ASC sales for ZPMC in 2011.
- 14. We summed the volumes (or revenue) for all suppliers to obtain our estimates of the total market sizes. We then calculated shares of supply as each supplier's volume (or revenue) divided by the total market size.
- 15. We have presented ten-year aggregated shares of supply (ie, the total share of supply over 2011–20 for each supplier) in our competitive assessments of horizontal unilateral effects in RTG and ASC. We have focused on ten-year aggregated shares in order to smooth out lumpiness, which limits the extent to which we can interpret annual shares of supply (or shares of supply aggregated over shorter time periods).

⁸ As noted below, ZPMC did not provide data for 2011.

⁹ Kuenz had converted the revenue data that it provided from Euros to GBP. We converted this data back into Euros using the exchange rate provided by Kuenz.

- 16. The Parties submitted that this long time period conceals more dynamic market trends in the Parties' and competitors' shares in Gantry Cranes, including the impact of recent entry and expansion. We note that we take account of any dynamic trends, including relevant entry and expansion, in the assessment of other evidence, such as from third parties and internal documents. In addition, we have presented shares of supply covering two five-year periods (2011–15 and 2016–20) in order to identify any broad trends in the shares.
- 17. As discussed in Chapter 6, we place weight on the ten-year aggregated shares of supply that we have calculated for RTG and ASC. However, even when aggregated over ten years, the shares of supply in the UK can still be affected by lumpiness, so require careful interpretation.

Mobile Equipment

- 18. Our shares of supply for Mobile Equipment use a combination of the data submitted by the Parties and the data submitted by competitors. Where available, we have used the sales data submitted by competitors in relation to their own sales. Where we have not received data from a competitor, or where we have incomplete data from a competitor, we have used the Parties' estimates of the competitors' sales instead.
- 19. Where we obtained data from both a manufacturer and that manufacturer's distributor, we gave preference to data from the manufacturer. This is because volume data supplied by distributors may count the same equipment multiple times, where it is leased out more than once during a year.

Parties' data

- 20. The Parties provided sales figures for themselves and their competitors covering the years 2016–20 on three different geographic bases: UK, Europe, and worldwide (excluding China).¹⁰
- 21. For their own sales of Mobile Equipment, the Parties provided their actual sales volumes in each year and region along with the associated nominal sales revenue (in Euros).
- 22. The Parties estimated competitors' sales volumes as follows:

¹⁰ The Parties defined Europe as the UK, the EEA, Switzerland, Ukraine, and Turkey.

- a) Sales volumes between 2017 and 2019 were estimated based on internal intelligence and information from third-party sources, in particular industry associations.¹¹
- b) Estimated sales volumes for 2016 and 2020 were extrapolated from the 2017–19 estimates using the market-wide growth trends in those years (sourced from industry bodies).
- 23. The Parties do not have visibility of competitors' revenues, so they estimated these based on relative price levels, as follows.
 - a) The Parties calculated their own average prices in the periods 2016–17 and 2018–20.¹²
 - b) For each competitor, the Parties estimated the approximate difference between their own prices and those of the competitor, in increments of 2.5% (for example, 2.5% higher, or 5% lower). This difference was applied to the Parties' average prices from above to obtain an average price for each competitor.
 - c) Competitors' revenues in each year were then estimated by multiplying the estimated sales volumes by the relevant estimated average prices.¹³

Third-party data

- 24. We requested sales data covering revenues and volumes from the Parties' competitors in Mobile Equipment for the period 2016–20 on three geographic bases: UK, Europe, and worldwide (excluding China). Where relevant, we sought this data from competitors' UK distributors as well.
- 25. We received sales data from Cooper (UK distributor for Sany in RS and ECH, and for Svetruck in HDFLT), CVS Ferrari, Hyster, 15 Hyundai, Liebherr, Linde, Sany, and ZPMC. This data covers a large proportion of third-party Mobile Equipment sales. According to the Parties' estimates of delivery volumes, the competitors for which we did not receive sales data accounted for:
 - a) [0–5%] [≫]% of UK RS sales and [5–10%] [≫]% of European RS sales over 2016–20;

¹¹ Each of the Parties produced independent estimates for a set of competitors; when these estimates overlapped and differed the average of the estimates was used.

¹² These are not adjusted for inflation.

¹³ For example, the sales volumes in 2016 and 2017 would both be multiplied by the average price for 2016–17.

¹⁴ We defined Europe as the whole continent, including both the EEA and UK.

¹⁵ Hyster had converted the revenue data that it provided from Euros to GBP. We converted this data back into Euros using the exchange rate provided by Hyster.

- b) [0–5%] [≫]% of UK ECH sales and [20–30%] [≫]% of European ECH sales over 2016–20; and
- c) [30–40%] [≫]% of UK HDFLT sales and [30–40%] [≫]% of European HDFLT sales over 2016–20.¹⁶

Our approach

26. Table 1 summarises the data that we used for each competitor in our shares of supply for Mobile Equipment. As noted above, we used manufacturers' own data on sales volumes and revenues where this was available. Where this data was not available, either because we did not receive any data or we received incomplete data, we used data from the manufacturer's UK distributor. If this was not available, we used the Parties' estimates.

Table 1: Sales data used in our shares of supply

Competitor	RS	HDFLT	ECH
CVS FTMH Hyster	Own data - Own data	Own data - Own data	Own data Parties' estimates Own data
Hyundai	-	Own data	-
Liebherr	Own data	-	-
Linde	-	Own data†	-
Sany	Distributor data for UK, own data for 2019–20 in Europe, Parties' estimates otherwise	Own data for 2019–20 in UK and Europe, Parties' estimates otherwise	Distributor data for UK, Parties' estimates otherwise‡
Svetruck	-	Distributor data for UK, Parties' estimates otherwise	Parties' estimates
Taylor ZPMC	Parties' estimates Own data	Parties' estimates	Parties' estimates Own data

Source: CMA analysis.

Notes:

- 27. The Parties' estimates for sales of Mobile Equipment include 'others' categories that include all remaining sales that have not been attributed to a specific competitor. We include these estimated sales in our shares of supply calculations.¹⁷
- 28. For RS and HDFLT we received data from some competitors for which the Parties had not provided estimates and thus whose sales had been implicitly captured in the 'others' categories in the Parties' estimates. To avoid double counting the sales of these competitors, we reduced the size of the 'others'

[†] We did not receive data on Linde's worldwide sales and the Parties did not provide an estimate for these sales; therefore, we have assumed that Linde's worldwide sales are the same as its European sales.

[‡] The Parties' estimate of the total volume of ECH sold by Sany in Europe was less than the volume of ECH sold in the UK, according to Sany's UK distributor, Cooper; therefore, we have assumed that Sany's sales of ECH in Europe are the same as its UK sales.

¹⁶ The proportions for HDFLT overstate the proportion of sales that are not accounted for because we received data from three competitors for which the Parties had not provided estimated sales volumes.

¹⁷ For HDFLT, the Parties split the 'others' category into multiple categories according to the industry body from which the data came (FEM for Europe, ITA for the USA, JIVA for Japan, and KOCEMA for South Korea). We combined these estimates into a single 'others' category.

categories by an amount equal to the sales of these competitors. ¹⁸ The relevant adjustments for each product are as follows.

- a) RS—we subtracted sales for Liebherr and ZPMC from the 'others' category.
- b) **HDFLT**—we subtracted sales for CVS, Hyundai, and Linde from the 'others' category.¹⁹
- 29. We summed the volumes (or revenue) for all suppliers (including 'others') to obtain our estimates of the total market sizes. ²⁰ We then calculated shares of supply as each supplier's volume (or revenue) divided by the total market size.
- 30. We have presented five-year aggregated shares of supply (ie, the total share of supply over 2016–20 for each supplier) in our competitive assessments of horizontal unilateral effects in RS, HDFLT and ECH. Sales of Mobile Equipment occur more frequently than sales in Gantry Cranes but are nonetheless lumpy. Therefore, we focus on five-year aggregated shares in Mobile Equipment in order to smooth out lumpiness.
- 31. The Parties submitted that the use of five-year aggregated shares obscures the growth and current market position of Chinese suppliers, and in particular that of Sany which only announced its relationship with Cooper in 2015.²¹ We note that we take account of any dynamic trends in the assessment of other evidence, such as from third parties and internal documents. In addition, we inspected annual sales figures in relevant Mobile Equipment markets in order to identify any broad trends in Sany's sales.
- 32. As discussed in Chapter 6, we place weight on the five-year aggregated shares of supply that we have calculated for Mobile Equipment. We also consider that the shares of supply for the UK are more relevant for Mobile Equipment than for other products because there are UK-specific elements to Mobile Equipment competition (see Chapter 5).

¹⁸ If this subtraction led to a negative sales figure for an 'others' category, we assumed that the sales for the 'others' category was 0.

¹⁹ As noted above, the Parties provided estimates for several different 'others' categories. We subtracted the total sales for CVS, Hyundai, and Linde from the 'others FEM' and 'others KOCEMA' categories as we understand that these are the industry bodies to which these competitors report (see Parties' response to CMA P1 RFI 3, question 6; Annex 171 to Draft Merger Notice, shares of supply methodology).

²⁰ As such, where the sales figure from a competitor differs from the Parties' estimate, the market size used in our shares of supply will also differ. We note that the Parties typically under-estimated the sales of their competitors (as compared with the data that we gathered from third parties), such that our market size estimates are typically larger than those submitted by the Parties.

²¹ Parties' response to Mobile Equipment working paper, pp 7–8.

Other products

- 33. The shares of supply that we present for other products (SC and ShC, TT, Crane spreaders, Mobile spreaders, and MHC) are based solely on data and estimates provided by the Parties.²²
 - a) For SC and ShC, the Parties provided sales volumes for themselves and their competitors covering the years 2017 to 2021 (up to 31 July) on four different geographic bases: UK, Europe, worldwide (excluding China), and worldwide.
 - b) For TT, Crane and Mobile spreaders, and MHC, the Parties provided aggregate sales volumes for themselves and their competitors covering the years 2017 to 2019 on four different geographic bases: UK, Europe, worldwide (excluding China), and worldwide.
- 34. For their own sales of the products listed above, the Parties provided their actual numbers of deliveries. The Parties estimated competitors' delivery volumes for the products listed above based on internal market intelligence and publicly available data, including a DS Research market report entitled 'Container Terminal Foresight 2024, Section 2: Container Handling Equipment'. The total market sizes are the sum of the Parties' volumes and the estimated volumes of their competitors.

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²² As with Cranes and Mobile Equipment, for these other products the Parties defined Europe as the UK, the EEA, Switzerland, Ukraine, and Turkey.

Appendix C: Bidding analysis

Introduction

- 1. In this appendix, we discuss the Parties' bidding data; explain our approach to analysing this data; and respond to the Parties' views on our analysis.
- 2. We set out, and interpret, the results of our bidding analysis in Chapter 7 (RTG and ASC) and Chapter 9 (Mobile Equipment).

Data

The Parties' bidding data

- 3. The Parties submitted data for Mobile Equipment, RTG and ASC covering the sales opportunities that they won and lost over the period 2016-21.²³ The data covers the UK, EEA and the rest of the World and includes the following information:
 - (a) Tender name.
 - (b) Segment (ie the type of CHE being tendered).
 - (c) Customer and delivery region.
 - (d) Date of opportunity.
 - (e) Order intake by volume (ie the number of units to be supplied).
 - (f) Order intake by value (ie the revenue associated with the opportunity).
 - (g) The winner of the bid.
 - (h) Product/solution offered to customer.
 - (i) Other variables, such as unique identifiers and columns identifying competitors other than the winning bidder (i.e. runner-up competitors) where known.²⁴

²³ Parties' submission [%].

²⁴ Merger Notice [%].

- 4. All of Cargotec's bidding data was sourced from its Salesforce CRM data.²⁵ The Parties submitted that this data has a number of limitations:²⁶
 - (a) Salesforce records sales opportunities in the context of tenders, but it is not always possible to identify whether a sale is the result of a tender or a bilateral negotiation with a customer. Furthermore, the Salesforce system does not have any fields for tender-specific information, such as whether the tender was open to other manufacturers, or the process for selecting the winner.
 - (b) Key fields such as the identity of competitors, delivery country or customer name, are often empty for many opportunities recorded in the system. The name of the winner of the sales opportunity is recorded fairly consistently for opportunities lost by Cargotec, but the names of other competitors are recorded in only a small number of cases.
 - (c) Information on expected margins is not reliable, as it is filled in automatically by the system or estimated by users and does not reflect the true expected economic margins associated with the opportunity.
 - (d) When equipment is sold via an independent dealer, the identity of the end customer is usually not recorded. Sales via independent dealers are very common for Mobile Equipment, such as empty container handlers, forklift trucks, and reach stackers.
 - (e) There was a lack of consistency over time in the way information was recorded in Salesforce which impacts the quality of the data, in particular historical data. This is because the guidelines provided to sales staff evolved over time and modified the way some information was reported.²⁷
 - (f) Salesforce records are subject to human errors and small mistakes in the entries. For example, the status of some old opportunities has not been updated and these are still recorded as ongoing sales opportunities.
- 5. Konecranes' bidding data was sourced from its Siebel CRM system, its Liftman dataset (which records sales opportunities involving independent distributors), RUSH reports, and a database listing all lift truck orders won by Konecranes.²⁸ Konecranes explained that Siebel is only occasionally used to

²⁵ Parties' submission [%].

²⁶ Merger Notice [≫].

²⁷ The Parties submitted that an example of this was that 'while the value "Cancelled" in the sales stage field may indicate opportunities cancelled by the customer, in earlier cases it may also indicate opportunities lost by Cargotec'. Source: Parties' response to the Provisional Findings Report, paragraph 2.8.

²⁸ Konecranes submission [%], Merger Notice [%].

- track Mobile Equipment sales opportunities; most lost sales opportunities involving Mobile Equipment were collected from RUSH reports.
- 6. The Parties submitted that Konecranes' bidding data has a number of limitations including the following:²⁹
 - (a) In Siebel, sales made via tenders are not systematically identified by sales staff. Siebel does not contain fields for tender-specific information, such as whether the tender was open or not to other manufacturers, and many 'key fields', such as the identity of competitors and their prices, are not recorded systematically. ³⁰ As information on competitors is rarely public, the competitor's name identified by Konecranes' sales staff represents their best estimate and might be inaccurate. ³¹ In some cases, Siebel provides the total value of sales for each given opportunity, but does not provide any split by product type. ³² Siebel CRM records are subject to human errors and small mistakes in the entries can exist. For example, some sales opportunities reported as cancelled may in fact be cases lost by Konecranes, but mislabelled as cancelled. ³³
 - (b) The Liftman database is not used systematically and does 'not cover all sales opportunities that distributors might have'. Data are not available for 2016.³⁴
 - (c) RUSH reports do not contain any unique identification number for many opportunities, such that it is not possible to ascertain whether two sales opportunities correspond to two distinct tenders, or if they correspond to two orders deriving from the same tender. RUSH reports and the lift truck database do not contain information about maintenance contracts.^{35,36}
 - (d) Siebel, the Liftman database and RUSH reports all record the total value of sales for each opportunity, but this value is not split by product type. This means that for opportunities covering multiple product types, the value associated with each product type is not recorded.^{37,38}

²⁹ Merger Notice [%].

³⁰ For MEQ, there is a single case relating to a lost MEQ opportunity in Seibel CRM. Sources: Parties' submission [%], Merger Notice [%].

³¹ This applies to the Seibel CRM, and Liftman databases. Sources: Merger Notice [≫], Parties' response to Provisional Findings [≫].

³² Konecranes submission [%].

³³ Merger Notice [≫].

³⁴ Konecranes submission [%].

³⁵ Konecranes submission [%].

³⁶ In addition, RUSH reports are only available for Europe, not for the rest of the world.

³⁷Konecranes submission [≫].

³⁸ The Parties' response to the Provisional Findings Report, paragraphs 2.4 to 2.14.

- (e) General limitations include that sales opportunities contained in the submitted data were limited to only those either won or lost by the Parties, excluding cancelled opportunities and those that are still ongoing.³⁹ In cases where information on key variables were not populated in the original data, attempts were made to infer the data from other populated variables.⁴⁰
- 7. The Parties provided tables showing the total number of lost opportunities in their data and the percentage of those opportunities for which information on competitors faced was available. These are summarised in Table 2 below. This shows that information on competitors faced is available in relation to most of these lost opportunities, but the bidding data contains less information on competitors faced in relation to Konecranes' lost opportunities for Mobile Equipment.

Table 2 Lost sales opportunities recorded in the Parties' data, from 2016 to May 2021

Party	Equipment type	Number of opportunities lost	Percentage of opportunities lost that contain information regarding competitors
Cargotec	RS	[%]	[%]
	ECH	[%]	[%]
	FLT >10t	[%]	[%]
	ASC	[%]	[%]
	RTG	[%]	[%]
Konecranes	RS	[%]	[%]
	ECH	[%]	[%]
	FLT >10t	[%]	[%]
	ASC	[%]	[%]
	RTG	[%]	[%]

Source: CMA analysis of Parties' data.

Data checks and adjustments by the CMA

8. In order to provide an additional check on the extensiveness of the Parties' bidding data, we compared total wins and losses (as captured by the bidding data) to total units supplied in the market as a whole (as captured in the shares of supply data).⁴⁴ We also calculated the ratio of total wins and losses in the bidding data to total units supplied in the shares of supply data.

³⁹ Konecranes submission [≫].

⁴⁰ Konecranes submission [%].

⁴¹ Parties' submission [%].

⁴² Parties submission [].

⁴³ The Parties also provided tables showing the total number of won opportunities that were in their data and the percentage of those for which information on competitors faced was available. These percentages were much lower than those in table 2 below, and as such the Parties submitted that 'the Parties' data do not record information on competitors in a vast majority of cases'. We do not reproduce these statistics here, because our analysis does not make use of competitors faced data in relation to won opportunities.

⁴⁴ As set out in appendix B, our shares of supply data comprises the Parties' own estimates of their total sales and third-party sales and, where available, data from third-parties on their own sales. We made this comparison for the period 2016-2020 as both datasets contain data for this period.

9. Table 3 shows that, [%]. [%].

Table 3 Comparison of bidding data and shares of supply data, UK, 2016 to 2020

	Total units supplied in market, based on shares of supply data	Cargotec		Konecranes	
		Total units won/lost in bidding data	Ratio of total units supplied in market to total units won/lost in bidding data	Total units won/lost in bidding data	Ratio of total units supplied in market to total units won/lost in bidding data
RTG	[%]	[%]	[%]	[%]	[%]
ASC	[%]	[%]	[%]	[%]	[%]
Reach Stacker	[%]	[%]	[※]	[%]	[%]
ECH	[%]	[%]	[%]	[%]	[%]
HDFLT	[%]	[%]	[%]	[%]	[%]

Source: CMA analysis of Parties' data, and third parties' data.

10. Table 4 shows that for Europe [%]. [%].

Table 4 Comparison of bidding data and shares of supply data, UK + EEA, 2016 to 2020

	Ca		argotec Volume		Konecranes Volume	
	Total Market Supply	Bid total	Market supply to bid total ratio	Bid total	Market supply to bid total ratio	
RTG	[%]	[%]	[%]	[%]	[%]	
ASC	[%]	[%]	[%]	[×i	[%]	
RS	[%]	[%]	[%]	[%]	[%]	
ECH	[%]	[%]	[%]	[%]	[%]	
HDFLT	[%]	[%]	[%]	[%]	[%]	

Source: CMA analysis of Parties' data, and third parties' data.

- 11. Overall, we consider that Table 3 and Table 4 show that the Parties' bidding data covers a significant proportion of the total sales in the market. However, consistent with the Parties' analysis at Table 2 above, the proportion of the market covered in the bidding data is somewhat lower in relation to Konecranes' Mobile Equipment.
- 12. We made a number of adjustments to the raw bidding data submitted by the Parties, in order to improve its suitability for analysis.
- 13. First, we deduplicated the data, where we found that the same opportunity was included more than once in the same dataset.
- 14. Second, we made a small number of adjustments where we found an identifiable inaccuracy in the bidding data:
 - (a) In relation to Cargotec's data:

- (ii) [※].
- (iii) We removed a Mobile Equipment opportunity that was lost by Cargotec to [≫]. We consider this opportunity had been misclassified [≫].
- (b) In relation to Konecranes' data:
 - (i) We removed an RTG opportunity relating to a customer based in [≫].
 This is because Cargotec informed us that this bid was cancelled.⁴⁶
 - (ii) The Parties highlighted three significant opportunities containing multiple products in a single entry that were won by third party competitors.⁴⁷ In order to be conservative, we included these tenders in our analysis. Where the Parties' bidding data did not provide a breakdown of the value/volume of these opportunities, we made assumptions about how to allocate value/volume between the relevant products.⁴⁸
- 15. Third, we identified opportunities where the implied unit price⁴⁹ was particularly high relative to other observations and subjected these data points to additional checks and adjustments. Our rationale was that the value recorded against these opportunities may have been subject to manual errors or other issues.
 - (a) For Mobile Equipment, we identified a number of outlier observations where the implied unit price was more than three standard deviations away from the average price for that product.⁵⁰ For these observations, we then sought to identify the same opportunity in the other Party's data. Where there was an inconsistency between the two (for example, in relation to the value of an opportunity), we made an adjustment so that the value that we judged to be more reliable was used in both data sets.⁵¹

⁴⁵ Response to P2 questionnaire [≫].

⁴⁶ Cargotec submission [%].

⁴⁷ These were: [≫]. Source: The Parties' response to the Provisional Findings Report, paragraph 5.1.

 $^{^{48}}$ In particular, this applies to an [\gg] and related to RS and ECH. One of these had a total value of [\gg] and the other had a total value of [\gg]. For the purposes of our analysis, we apportioned these values equally between the RS and ECH components of the opportunities.

⁴⁹ Calculated as revenue divided by number of units.

⁵⁰ This rule identified 16 outliers making up less than 1% of all mobile equipment bids in the UK and EEA combined.

⁵¹ In particular, if the value ascribed to an opportunity was an outlier in one data set but not the other, we used the non-outlier value in both data sets.

For outlier observations where it was not possible to find a match, we replaced the opportunity value that we had doubts over with the average unit price for losses to that competitor, as calculated based on other observations in that dataset.

(b) For RTG and ASC, the number of opportunities in the data was much lower than for Mobile Equipment, so we manually checked opportunities where the implied unit price was high.⁵² In these cases, we sought to match the opportunity in the datasets of the Parties. Where the opportunity value was inconsistent, we made an adjustment based on the winning bidder's data (which we judged to be the more reliable of the two data points). In addition, two of the outliers in both Parties' data were opportunities lost to Kuenz; we corrected these outliers using data submitted by Kuenz. The only outlier that was not adjusted was Cargotec's [≫]. Although the implied unit value was high for this opportunity, we judged that overall it was plausible and that, as the winner of the opportunity, Cargotec was well positioned to hold accurate data.⁵³

Analysis

16. In this section, we discuss our approach to analysing the bidding data, as well as several submissions from the Parties in relation to our analysis.

Our approach to analysing the bidding data

- 17. Having made a number of adjustments to the Parties' data, we produced:
 - (a) loss ratio analysis for RTG, ASC and Mobile Equipment, and
 - (b) overlap analysis for RTG only.
- 18. Loss ratios are an important measure of closeness of competition between the merging parties, and between the merging parties and third party competitors. They are calculated as the number of opportunities that a Party lost to a competitor, as a percentage of all opportunities that the Party

⁵² As unit values for RTG and ASC vary more between tenders than for other types of equipment, we identified potential outliers by examining the top 10% when ranked on implied price. In practice, for Konecranes' RTG data, this check covered the top three observations (which were €0.6m or more above the average unit price), and for Cargotec's RTG data this check covered the top four observations (which were €1.2m or more above the average unit price). For Konecranes' ASC data, this check covered one observation (which was €0.5m or more above the average unit price), and for Cargotec's ASC data this check covered one observation (which was €6.7m above the average unit price).

⁵³ The implied unit price for [≫] higher than the mean implied unit price of all Cargotec RTG opportunities.

- participated in and lost. We calculated loss ratios on three different measures: number of tenders lost, number of units lost, and value (revenue) lost.
- 19. The Parties' bidding data contained information on competitors faced in relation to most lost opportunities. As a result, the identity of the competitor that an opportunity was lost to was available in most cases and we were able to undertake a loss ratio analysis covering RTG, ASC and Mobile Equipment. We note that the bidding data is less complete in containing information on competitors faced in relation to Konecranes' lost opportunities for Mobile Equipment. However, the number and proportion of Konecranes' lost opportunities for Mobile Equipment where the identity of the winner was recorded is still significant (see also paragraph 26 below). Further, we have no reason to believe that any missing data would lead to a bias in our results.
- 20. Overlap analysis considers the extent to which two or more competitors face each other in tenders and as such is an additional measure of closeness of competition. Our overlap analysis considered the total number of opportunities participated in (and won) by each Party, and the subset of those opportunities in which the other Party was also a competing bidder.
- 21. As the Parties' submissions make clear, their bidding data did not contain comprehensive information on all bidders faced in tenders. However, by manually matching opportunities across their databases, we were able to analyse the extent of overlap between the Parties' tender participations in RTG. In principle, this analysis could have been undertaken for ASC as well, however the sample of ASC tenders was too small to allow meaningful analysis. In relation to Mobile Equipment, the sample size was too large to allow manual matching and we found that it was not possible to mechanically match tenders (for example through unique tender identifiers).
- 22. Overall, we consider that our quantitative bidding analysis (which includes loss ratios for RTG, ASC and mobile equipment and overlap analysis for RTGs) provides useful evidence regarding closeness of competition between the Parties and the third-party constraints that they face.

Reliability of loss ratios

Parties' views

23. The Parties stated that any loss ratio analysis based on their bidding data is 'likely to be flawed because the Parties do not record all of their lost opportunities'. They said this 'is particularly the case for Konecranes' Mobile Equipment data, as sales are made [≫] via a distributor in the UK as [are a]

large proportion of sales in the rest of Europe. As a result, Konecranes has very limited visibility as to its wins and especially its losses'.⁵⁴

24. The Parties further submitted that our analysis of the completeness of the bidding data in our Provisional Findings Report (see Table 3 and Table 4 above) was misleading.⁵⁵ They submitted Figure 1 and Figure 2 below, and said that these statistics show that the data actually used in the CMA's loss ratio analysis covers only a 'very small portion' of the relevant markets.⁵⁶ For example, they said that the loss ratio analysis covers less than 25% of the Mobile Equipment markets for both Parties; that none of the Mobile Equipment analyses cover even one third of sales by competitors; and that in some cases these analyses cover as little as one seventh of the market.

Figure 1: [**※**]

[%]

Source: Parties' response to the Provisional Findings, [%].

Figure 2: [**※**]

[%]

Source: Parties' response to the Provisional Findings, [%].

Our assessment

- 25. We do not agree that our loss ratios are likely to be flawed. First, as demonstrated by the Parties' own data at Table 2, in most of the markets that we considered, the Parties' data contained relevant information on a significant number of losses, both in absolute terms and relative to the size of the market in question. 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.
- 26. In relation to Konecranes' bidding data for Mobile Equipment, we recognise that this contains significantly fewer opportunities where the winner was identified, as compared to the Cargotec data. 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.⁵⁷ However, Konecranes' Mobile

⁵⁴ Parties' response to the AIS, paragraph 6.2.

⁵⁵ Parties' response to the Provisional Findings, [%].

⁵⁶ Parties' response to the Provisional Findings, [※].

⁵⁷ 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 received 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.

Equipment bidding data nonetheless covers a substantial number of opportunities in most cases, and we have not seen evidence to suggest that any omissions would bias the results of our analysis.⁵⁸ As discussed in relevant chapters (Chapter 7 and 9), where the lost opportunity sample size is small (for example, Konecranes' data contains [\gg] in the UK over 2016 to 2021), we do not place significant weight on the precise level of losses to particular competitors.

- 27. We also do not agree that the checks that we undertook in relation to data completeness (see Table 3 and Table 4) are misleading. In light of the Parties' submissions that their bidding data do not always capture opportunities systematically, we consider that these tables provide a useful broad check on the completeness of these data.
- 28. In relation to the Parties' claims that Figure 1 and Figure 2 show that our loss ratios cover a 'very small portion' of the market, we make the following observations:
 - (a) First, by construction, any loss ratio only considers those opportunities that a supplier has lost and not those that it has won. Therefore, the fact that the Parties' wins (as shown in the dark grey regions in Figure 1 and Figure 2) are not in scope of our loss ratios is to be expected and does not represent a weakness in our analysis.
 - (b) Second, where competitor sales are present in the share of supply data but not in the tender data (as shown by the light grey regions in Figure 1 and Figure 2), this could be due to the Parties not bidding on a tender. It could also be due to timing mismatches between the bidding data and the share of supply data.⁵⁹ Therefore, where certain competitor wins are not present in the bidding data, this may be due to a number of reasons and does not necessarily reflect a weakness in the bidding data.
 - (c) Third, we note that our loss ratios are only one part of our evidence base. We consider these in the round with other evidence, including our shares of supply analysis which provides a broader picture of all the sales that take place in relevant markets.

⁵⁸ In Chapter 9, we present loss ratios for Konecranes based on the following number of lost opportunities: [\gg] for RS in Europe, [\gg] for RS in the UK; [\gg] for HDFLT in Europe, [\gg] for HDFLT in the UK, [\gg] for ECH in Europe, [\gg] for ECH in the UK.

⁵⁹ Share of supply data captures units supplied based on when the equipment was delivered, whilst bidding data captures wins and losses based on when the opportunity or tender took place. This means that, for example, if a tender took place in 2015 and the equipment was delivered in 2016, the units would show up in the 2016-20 shares data but not in the 2016-20 tender data.

The scope of our analysis

Parties' views

- 29. The Parties submitted that, to quantitatively assess the extent to which the Parties constrain one another, the CMA should have conducted an analysis of the opportunities won and lost by each of the Parties, taking into consideration both the runner-up and the difference between the second and third best competitors in each case.⁶⁰
- 30. The Parties noted that their bidding data contained limited information on the identity of competing suppliers (other than the winners) and how they were ranked. They said that the CMA did not seek to complete the Parties' data by collecting critical information on missing competitors and on the relative strength of bidders, except in very few cases such as the qualitative case studies. They said that the CMA should have gathered data that would have allowed it to undertake 'win-loss analysis, taking into consideration ranking and relative strength of competitors in tenders, and the frequency with which one Party is the second-best alternative (ie the runner up) when the other Party wins' and the frequency with which the Parties compete against each other relative to third parties'.⁶¹
- 31. The Parties said that 'by analysing mainly the winners of the Parties' lost opportunities and only performing a partial participation analysis for RTGs, the PFs' analyses fail to capture a wider picture of the competitive dynamics of the MEQ and crane markets'.⁶²

Our assessment

- 32. We agree that the Parties' data did not support a quantitative analysis of the additional measures set out at paragraphs 29 and 30. While additional bidding analysis of the sort outlined by the Parties may have provided additional insights, we disagree that it was necessary for the CMA to collect additional data and undertake such additional analysis in order to assess competitive dynamics. The CMA has undertaken the most meaningful analysis that is practicable based on the data available.
- 33. First, we note that the quantitative bidding analysis that we did undertake, primarily loss ratios, provides an important indication of the competitive constraints faced by the Parties. Loss ratios are particularly useful because,

⁶⁰ Parties' response to the Provisional Findings, [≫].

⁶¹ Parties' response to the Provisional Findings, [×].

⁶² Parties' response to the Provisional Findings, [%].

- where a Party frequently loses to another player, that player is likely to have an important influence on the Party's competitive decisions.
- 34. Second, we considered the results of our analysis of the Parties' bidding data in the round with other evidence in order to assess closeness of competition between the Parties and competitive constraints faced. This wider evidence complements, and goes beyond, our quantitative analysis of who the Parties lose to most frequently. For example, in addition to our tender case studies (which discuss the full set of competitors faced by the Parties in certain tenders), our customer questionnaires asked about the full set of alternatives that customers considered. We consider that this evidence is probative and that it was not necessary for us to gather additional data to inform additional quantitative bidding analysis.

Reliability of participation analysis

Parties' views

- 35. The Parties noted that the CMA's participation analysis (we refer to this as an overlap analysis) presented in the Provisional Findings for RTG does not extend to competitors other than the Parties.⁶³ The Parties said that:
 - (a) the RTG market is characterized by infrequent tenders of high value, with both Parties participating in around [≫] opportunities in the EEA and UK from 2016-20; and
 - (b) at least some RTG customers always seek offers from multiple suppliers. For example, HPH told the CMA that they have to have a minimum of three bids in this final stage and would often compare three to five bids; and
 - (c) the CMA's market share data indicate that [≫] suppliers delivered [90-100] [≫]% of RTGs in Europe in 2016-20; one would expect all of these to be present in a high share of tenders.⁶⁴
- 36. The Parties argue that, by only analysing how often Konecranes participates in Cargotec's RTG tenders (and vice-versa), the CMA's participation analysis lacks probative value, and cannot support inferences on the Parties' closeness of competition relative to other competitors.⁶⁵

⁶³ Parties' response to the Provisional Findings, [%].

⁶⁴ Parties' response to the Provisional Findings, [%].

⁶⁵ Parties' response to the Provisional Findings, [%].

Our assessment

37. We recognise that our overlap analysis only relates to competition between the Parties. While additional overlap analysis capturing a wider set of competitors may have been useful, we disagree that the analysis that we undertook lacks probative value. Rather, we consider that our overlap analysis in respect of RTG complements our loss ratio analysis (and the wider quantitative and qualitative evidence that we present in Chapter 7 in respect of RTG), providing an additional measure of closeness of competition between the Parties.

Appendix D: Third-party evidence

Introduction

- 1. In this appendix we outline our approach to gathering evidence from third parties in relation to Gantry Cranes, SC and ShC, MEQ, ATT, and the vertical theories of harm. As part of this, we discuss the number of responses that we received for different types of equipment.
- 2. We have gathered evidence and views on the nature of competition and the competitive conditions faced by the Parties from their customers and competitors. We primarily did so through written questionnaires. ⁶⁶ We have included the specific questions asked in our questionnaires as footnotes when referring to third-party evidence in relevant chapters. We supplemented this information with virtual meetings with a number of third parties. ⁶⁷ Some third parties also provided additional evidence that was relevant to our inquiry.
- 3. Before the Provisional Findings Report, in total, we gathered evidence from 20 customers, 68 16 competitors, 69 three distributors 70 and an industry association. 71 Following publication of our Provisional Findings Report, we contacted, in total, 31 third parties, 72 mainly to obtain views on what may constitute an effective remedy to address our provisional competition concerns. The third parties contacted at this stage included customers (both UK customers and customers with operations in mainland Europe), original equipment manufacturers (OEMs) and distributors. In total, we had response hearings with 12 customers, five OEMs and two distributors. Of these, we had not engaged with five of the 12 customers (all mainland Europe customers) and with two of the five OEMs prior to the Provisional Findings Report.
- 4. We also had response hearings with four third parties that submitted a non-binding offer the KAS Divestiture Business (see more details in paragraphs 57 to 60),⁷³ and one company present in the CHE industry that submitted a non-binding offer to MEQ Divestiture Business and expressed interest in the acquisition of the KAS Divestiture Business. This third party subsequently

⁶⁶ We have primarily relied on the evidence provided in response to the questionnaires sent during phase 2 of the inquiry but have relied on evidence provided in response to the questionnaires sent during phase 1 where appropriate.

⁶⁷ We rely on evidence from virtual meetings conducted during both phase 1 and phase 2 of our inquiry.

⁶⁸ List of third parties. [≫].

⁶⁹ List of third parties. [%].

⁷⁰ List of third parties. [%].

⁷¹ [%].

⁷² This does not include the five third parties that submitted a non-binding or expressed interest in the acquisition of the KAS Divestiture Business (see paragraph 4).

⁷³ We note that subsequently we learned that one of these companies (private equity) had also submitted a non-binding offer for the MEQ Divestiture Business.

- informed the CMA that it had decided not to pursue a non-binding offer for the KAS Divestiture Business.
- 5. In general, we have interpreted the evidence from third parties qualitatively and have assessed it alongside other evidence.
- 6. We recognise that some third parties have an interest in the outcome of our inquiry. Therefore, as in any inquiry, when using third-party views as evidence, we have given due regard to a range of factors including: the incentives of the party giving that view; the extent to which the party had knowledge that was relevant to the subject areas being explored as part of our assessment, and the extent to which the view was corroborated by other evidence available to us.

Third party engagement before the Provisional Findings Report

7. We provide below details about our engagement with third parties in relation to each of the relevant markets we considered in our competition assessment.

Gantry Cranes

Customers

- 8. We asked the Parties to provide contact details for their customers of Gantry Cranes in the UK.⁷⁴ We sent questionnaires to all of the UK customers for which we received contact details, covering all relevant products that the customer had purchased from the Parties.⁷⁵
- 9. For each of RTG and ASC, we asked customers, among other things, a series of questions in relation to their most recent purchase of that equipment type from the relevant Party. For those customers that had purchased products from both Parties, we only asked the customer about their recent purchase from one Party. We also asked all relevant customers a forward-looking question about which suppliers they would expect to consider, supposing that they were planning to purchase that equipment in the UK within the next year.
- 10. Through our discussions with the Parties' customers for other CHE, we discovered that some of these had purchased Gantry Cranes within the past ten years, but not from either of the Parties. Given the small number of

⁷⁴ CMA P1 RFI 3, question 30: *Please provide all contact details provided to-date, and in response to this RFI, in the format required by the CMA.*

⁷⁵ [%].

- customers for Gantry Cranes in the UK, we also sent questionnaires to these customers in order to widen the response base for Gantry Cranes.
- 11. In total, we received substantive responses from seven customers of Gantry Cranes. 76 We also had virtual meetings with five of these respondents. The response rates for each type of Gantry Crane are as follows.
 - (a) **RTG**—five responses from five questionnaires (ie, 100% response rate);⁷⁷ and
 - (b) **ASC**—two responses from two questionnaires.
- 12. Respondents included the operators of the five major container ports in the UK, as identified by the Parties⁷⁸—HPH (Felixstowe), DP World (London Gateway and Southampton), ABP (Immingham) and Peel Ports (Liverpool)—as well as BHC. According to data provided by the Parties, these respondents accounted for 100% of Cargotec's RTG sales in the UK over 2017–20.⁷⁹ We further note that these respondents include the customer for Konecranes' only sale of RTG in the UK during 2011–20, a customer that had recently purchased RTG but not from the Parties, and all known purchasers of ASC in the UK over the past ten years.
- 13. The Parties submitted that, even if the CMA was to conclude that the market is Europe-wide, the small number of responses (four) from UK customers of Gantry Cranes does not present a consistent picture of competition between the Parties and is not representative of the wider European market.⁸⁰
- 14. As noted above, we have gathered evidence from all purchasers of Cargotec RTG in the UK since 2017 (according to data from the Parties) and all recent purchasers of ASC in the UK. Therefore, while this is a small number of customers, it is a large proportion of the relevant customers in the UK. Given that the CMA is concerned with the effects of mergers in the UK, it is reasonable for us to focus our customer outreach on UK customers.

Competitors

15. We asked the Parties to provide contact details for their main competitors in Gantry Cranes. We sent questionnaires covering the relevant products to the

⁷⁶ [%].

⁷⁷ One of the five respondents [≫] noted that it did not have anything to add to the responses that it had already provided during phase 1 of the inquiry. For this customer, we relied on its response to the phase 1 questionnaire. ⁷⁸ Merger Notice, [≫].

⁷⁹ Parties' submission [%].

⁸⁰ Parties' submission [%].

- four largest third-party Gantry Crane OEMs in Europe (ZPMC, Liebherr, Kuenz, and Mitsui), as well as to Sany and an RTG distributor (Cooper).
- 16. Liebherr and Kuenz provided responses, and we had a detailed virtual meeting with ZPMC in lieu of its response to the questionnaire. Sany and the RTG distributor (Cooper) each responded to a more limited set of questions. Sany Mitsui (which has a share of supply of [0–5%] in RTG in Europe over 2011–20 and has not sold ASC in Europe over this period) did not respond to our questionnaire.
- 17. We issued mandatory requests for information to ZPMC and Sany regarding their respective expansion plans.

SC and ShC

- 18. For customers using SC and ShC, we relied on the responses to our written questionnaire from phase 1 of the investigation. We also gathered further evidence from virtual meetings with both customers and competitors of the Parties that took place in both phase 1 and phase 2 of our inquiry.
- 19. At phase 1, we sent questionnaires to the four customers identified by the Parties as using SC in the UK (DP World, Forth Ports, Maritime Transport, Peel Ports), one of which (DP World) also uses ShC.⁸² We received responses from all of these customers and also had virtual meetings with three of them.
- 20. We had virtual meetings with two competitors of the Parties: Liebherr and ZPMC. We did not speak to Mobicon or Combilift; we note that these suppliers have made very few deliveries to European customers.
- 21. The Parties submitted that engagement with only four customers does not give a sufficient view of the whole market, even if the CMA was to conclude that the market is Europe-wide, nor provide a sufficiently detailed view of market dynamics.⁸³ As noted above, we have gathered evidence from all known purchasers of SC and ShC in the UK, and two of the main competitors to the Parties. Therefore, while this is a small number of third parties, it is a large proportion of the relevant third parties in the UK.

⁸¹ [%].

⁸² We are not aware of any other customers in the UK that use ShC.

⁸³ Parties' submission [%].

Mobile Equipment

Customers

- 22. We asked the Parties to provide contact details for their customers of Mobile Equipment in the UK.⁸⁴ We sent questionnaires to all 33 customers for which we received contact details, covering all relevant products that the customer had purchased from the Parties.⁸⁵
- 23. For each of type of Mobile Equipment we asked customers, among other things, a series of questions in relation to their most recent purchase of that equipment type from the relevant Party. For those customers that had purchased products from both Parties, we only asked the customer about their recent purchase from one Party. The Parties identified eight industrial customers as being customers of Mobile Equipment for both Parties. We asked four of these customers about their purchases from Cargotec, and four about their purchases from Konecranes.⁸⁶
- 24. We also asked all relevant customers a forward-looking question about which suppliers they would expect to consider, supposing that they were planning to purchase that equipment in the UK within the next year.
- 25. In total, we received responses from 16 customers of Mobile Equipment, of which 9 were port and intermodal terminal operators and 7 were industrial customers. The response rates for each type of Mobile Equipment are as follows:⁸⁷
 - (a) **RS**—eight responses from 22 questionnaires;
 - (b) **HDFLT**—13 responses from 25 questionnaires; and
 - (c) **ECH**—eight responses from 17 questionnaires.⁸⁸
- 26. The respondents included the operators of the five major container ports in the UK, as identified by the Parties (see paragraph 12).

⁸⁴ CMA P1 RFI 3, question 30: *Please provide all contact details provided to-date, and in response to this RFI, in the format required by the CMA.*

⁸⁵ Parties' submission [%].

⁸⁶ In order to assign each customer a Party, we first split the eight customers into two groups of four: steel manufacturers and other manufacturers. We arranged each group in alphabetical order (based on the customer name) and then assigned each customer a Party on an alternating basis, starting with Cargotec (ie, the first steel manufacturer alphabetically was assigned Cargotec, and the second steel manufacturer was assigned Konecranes, and so on).

⁸⁷ Not all respondents answered the questionnaire in full.

⁸⁸ One customer provided details about a recent purchase it had made in lieu of filling in the questionnaire.

- 27. According to data provided by the Parties, the respondents accounted for at least 62% of Cargotec's RS sales in the UK over 2017–20, at least 32% of Cargotec's HDFLT sales in the UK over 2017–20, and at least 89% of Cargotec's ECH sales in the UK over 2017–20.89
- 28. We do not have the requisite data in order to determine the coverage of Konecranes' customers because it uses Impact as a distributor in the UK. We note, however, that that tender data collected from Impact suggests that we contacted all its recent port customers for Konecranes' Mobile Equipment. 90 We also note that the Parties have end users in common, which means that some of the customers that the CMA contacted were customers of both Parties.
- 29. In summary, we have gathered evidence from a significant proportion of the Parties' customers for Mobile Equipment in the UK. We have lower coverage of the Parties' HDFLT customers because the customer base is more fragmented and we did not receive many responses from industrial customers, which are common purchasers of HDFLT. For each Mobile Equipment market (and for all other markets covered by our questionnaires), we consider the responses received in the round with other evidence.

Competitors

- 30. We asked the Parties to provide contact details for their main competitors in Mobile Equipment. We sent questionnaires to 11 of the 13 OEMs listed, covering the relevant products that they produced.⁹¹ We also sent questionnaires to an additional HDFLT OEM (Hyundai)
- 31. In addition, we contacted 6 UK distributors: these were Impact (distributor for Konecranes), Hyster (distributor for Briggs), Cooper (distributor for Sany and Svetruck), Grant Handling (distributor for Heli), Shad Group (an all-brand service provider and a distributor for CES) and Premier Lift Trucks (an all-brand service provider and distributor for Goodsense forklifts).
- 32. We received responses from most major suppliers of Mobile Equipment in Europe and their distributors in the UK.⁹² In particular, we received responses from CVS, Hyster (and its distributor, Briggs), Hyundai, Impact, Liebherr, and Sany (and its distributor, Cooper). We had virtual meetings with Linde and

⁸⁹ Parties' submission [%].

⁹⁰ tender data from [%].

⁹¹ We sent questionnaires to the OEMs that we considered most relevant to our assessment of the competitive effects of the Merger. were These were: CVS, Dalian, FTMH, Heli, Hyster, Liebherr, Linde, Maximal Forklift, Sany, Svetruck, and ZPMC. We note that Sany responded to a more limited set of questions. The two other OEMs listed were not present in the UK or in Europe.

⁹² Not all respondents answered the questionnaire in full.

ZPMC in lieu of responses to the questionnaire. Aside from Briggs, Cooper, and Impact, the other three distributors that we contacted either did not respond or responded that the questionnaire was not applicable to their business. In addition to their responses, we had virtual meetings with Briggs, Cooper, and Impact.

- 33. We also issued a mandatory request for information to Sany regarding its expansion plans.
- 34. In summary, we have gathered evidence from all of the Parties' major competitors in Mobile Equipment. We consider these responses with other evidence in the round.

ATT

- 35. As the ATT market has not yet been established, we included some questions related to ATT in the questionnaires sent to customers that buy other CHE from the Parties in the UK.
- 36. Of 27 questionnaires sent, 13 customers responded to at least one of our questions regarding ATT. Given the nascent nature of ATT, in our assessment of customers' views of ATT suppliers, we only relied on responses from the four customers that considered themselves to be well-informed on this topic (see Chapter 10).⁹³
- 37. The Parties submitted that the number of customers responding to the questionnaire that felt well-informed was very small (four). They further noted that the weight given to these four responses should reflect that these customers indicated that they either have not considered buying ATT or do not plan to do so in the next five years (or both), which means that it is unclear to what extent these customers would have reviewed or even considered potential options.⁹⁴
- 38. As above, we have focussed on the views of customers that indicated that they felt well-informed about the ATT market as these are most likely to accurately reflect the nature of competition. Even if a customer does not intend to purchase ATT in the near future, we consider that it can still provide relevant views on the suppliers that it would consider. We also note that we considered these responses with other evidence in the round in reaching our preliminary findings.

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⁹³ However, we relied on all responses in our assessment of the importance of various purchasing criteria.

⁹⁴ Parties' response to ATT working paper, paragraph 4.4.

39. We also sent questionnaires to two current competitors of the Parties in manual TT (Terberg and Tico) and 13 other companies that the Parties had indicated were involved in the development of ATT. We received a response from one of the current competitors (Tico) and had a virtual meeting with the other in lieu of a response (Terberg). We received full responses from four of the 13 companies that the Parties indicated were involved in the development of ATT (Hyster-Yale, Westwell Labs, Waymo, and Microsoft). 95 We also had a virtual meeting with Westwell Labs.

Vertical theories of harm

- 40. We gathered evidence from a range of third parties that were relevant to our assessment of the input foreclosure and customer foreclosure theories of harm.
- 41. We sent requests for information to the three main competitors to Cargotec (Bromma) in the supply of spreaders (both Crane spreaders and Mobile spreaders): Elme, RAM and Stinis. We also requested information from Liebherr, which is the only large manufacturer of MHC other than Konecranes. We received some information from all of these third parties and had virtual meetings with Elme and Liebherr.
- 42. We also included questions related to Crane spreaders and/or Mobile spreaders in some of the questionnaires sent to third parties during both phase 1 and phase 2 of our inquiry. We gathered further evidence in some of the virtual meetings that we had with third parties.

Third party consultation after the Provisional Findings Report

- 43. We provide below details about our engagement with third parties after the Provisional Findings in the form of response hearings.
- 44. The response hearings focused on the effectiveness of possible remedies to address the provisional competition concerns identified in our Provisional Findings Report. For example, we asked third parties about: i) the importance of branding; ii) the importance of interoperability and interconnectivity across different types of CHE; iii) the competitive significance of suppliers being able to offer a range of CHE including MEQ and Port Cranes; iv) the necessary attributes of a suitable purchaser; and, v) where the third party was an OEM, whether it would be interested in acquiring the Divestiture Businesses.

 $^{^{95}}$ We also received responses from [\gg] and [\gg] indicating that they were not in a position to be able to respond to the questionnaire.

- 45. We also asked third parties for any comments on the CMA's provisional findings about the effects of the Merger on competition. Where we had not engaged with third parties prior to the Provisional Findings Report, we asked them some questions relevant to our competition assessment (for example, we asked some OEMs about their tendering activity and expansion plans in relation to the UK). Where third-parties had responded to our questionnaire ahead of Provisional Findings, in some cases we asked some follow up clarification questions on their responses.
- 46. In total, we contacted 19 third parties to obtain views on what may constitute an effective remedy to address our provisional competition concerns. The third parties contacted included customers, OEMs and distributors (see paragraph 3).

Customers

- 47. We contacted five of the Parties' UK customers and one terminal operator that operates a port terminal in the UK under concession from one of these UK customers.
- 48. The customers were selected on the basis that they operate port terminals of a range of different sizes and levels of automation. All except one of the customers had previously been contacted as part of the competitive assessment and had expressed varying views regarding the impact of the Merger. ⁹⁶
- 49. Of the six third parties contacted under this heading, we held response hearings with five. Of these five, two have procured different types of CHE equipment from the same Party in the last three years and one has a maintenance contract covering more than one type of CHE equipment with one of the Parties. The sixth third party that we contacted (a customer) refused to have a response hearing with the CMA.

Competitors

- 50. We contacted eleven OEMs in total: seven OEMs of MEQ and four OEMs of Port Cranes.
- 51. These OEMs were selected on the basis that they comprised both established OEMs with a material presence in Europe as well as OEMs with a small

⁹⁶ One of these customers that we contacted prior to the Provisional Findings Report had expressed concerns with the effect of the Merger on competition. The others had expressed a neutral view or were supportive of the Merger.

- presence in Europe. Eight of the eleven OEMs that we contacted had previously provided views relevant to the CMA's competitive assessment ahead of our Provisional Findings, and at that stage had expressed varying views regarding the impact of the Merger.⁹⁷
- 52. The eleven OEMs contacted included six OEMs that Cargotec initially identified as 'suitable and interested purchasers' for the KAS Divestiture Business and five OEMs that Konecranes identified as having an interest in the acquisition of the MEQ Divestment Business (including three that were also identified as potentially purchasers for the KAS Divestiture Business). 98
- 53. We had response hearings with five OEMs (two OEMs that supply Port Cranes and three OEMs that supply MEQ), including two OEMs with a material presence in Europe and three OEMs with a small presence in Europe. Four of these OEMs were in the list of companies that the Parties identified as potential purchasers for the KAS Divestiture Business or the MEQ Divestiture Business. Six OEMs (four OEMs of MEQ and two OEM of Port Cranes) refused to have a response hearing with the CMA.

Distributors

54. The CMA contacted two distributors (which, as noted in the Chapter 13, typically have a close relationship with customers and a good understanding of customer needs). Both of these distributors are UK distributors of OEMs with an established presence in relevant UK markets, and both had been contacted previously ahead of our Provisional Findings as part of the CMA's information gathering in relation to the competitive assessment. 99 We held response hearings with both of these distributors.

Additional outreach after issuing the Remedies Working Paper

Customers

55. In light of the outcome of the European Commission's market testing, after issuing our Remedies Working Paper, we gathered some additional evidence from third parties. This included contacting customers active in mainland Europe, in order to assess whether the views of these non-UK customers regarding remedies in this case differed materially from those of the

⁹⁷ Five of the OEMs we contacted had expressed concerns with the effect of the Merger on competition. The others expressed a neutral view or were supportive of the Merger.

⁹⁸ Parties' submissions [≫].

⁹⁹ Both distributors had previously expressed concerns with the effect of the Merger on competition.

- customers active in the UK that we engaged with prior to issuing the Remedies Working Paper. ¹⁰⁰
- 56. In undertaking this additional engagement, we followed broadly the same approach as we did when gathering third-party evidence ahead of the Remedies Working Paper. As part of this exercise we:
 - (a) Contacted 13 non-UK customers operating container handling terminals of different sizes in mainland Europe. These customers were selected on the basis:
 - (i) that they represented a variety of port sizes;
 - (ii) that they were active in different parts of mainland Europe; and
 - (iii) that they had a variety of purchasing patterns, with some customers having purchased both MEQ and Port Cranes and/or Straddle Carriers from one or both Parties, and others only having purchased either MEQ or Port Cranes and/or Straddle Carriers from one or both Parties.
 - (b) Held response hearings with five of these customers. The remaining eight non-UK customers did not respond to the CMA request, or did not agree to attend a response hearing.
 - (c) Contacted and held response hearings with two GTOs with UK operations. 101

Potential purchasers

- 57. After issuing the Remedies Working Paper, we also held response hearings with four potential purchasers that submitted a non-binding offer for the KAS Divestiture Business. 102 The Parties had asked interested parties to submit non-binding offers for that business by 4 March 2022 and provided the CMA with the details of [≫] potential purchasers on 7 March 2022.
- 58. On 16 March 2022, the Parties confirmed the identity of [≫] bidders that submitted non-indicative offers in relation to the MEQ Divestiture Business.

¹⁰⁰ We did not consider that a similar widening the scope to non-UK customers was required for our engagement with third parties in relation to the competitive assessment. This is because both competition authorities reached broadly the same conclusions in their respective substantive assessment of the Merger. See Chapter 6, paragraphs 6.27.

¹⁰¹ One of these GTO has been previously invited for a response hearing before the Remedies Working Paper was issued, but had refused the invitation.

¹⁰² We note that subsequently we learned that one of these bidders (a private equity firm) had also submitted an non-binding offer for the MEQ Divestiture Business.

The CMA held conference calls with two of these bidders (one prior to issuing the Remedies Working Paper and the other in the context of its offer for the KAS Divestiture Business). 103

- 59. In addition, on 20 March 2022, the Parties informed us that a third party, a company active in the CHE industry, that had already submitted a non-binding offer for the MEQ Divestiture Business had also expressed an 'interest in purchasing' the KAS Divestiture Business and that it would 'be important for the CMA to discuss [this third party] views on the competitive possibilities of running a business that combines the KAS Divestiture Business with the MEQ Divestment Business, as well as the [third party'] views on the composition of the KAS Divestment Business'. 104 The CMA held a response hearing with this third party, on 22 March 2022. On 24 March 2022 this third party informed the CMA that it had decided not to pursue a non-binding offer for the KAS Divestiture Business.
- 60. These response hearings with the potential purchasers that submitted non-binding offers or expressed an interest on the Divestiture Businesses were focused on their views on the KAS Divestiture Business (replicating the topics covered in the hearings with other third parties) but were not intended to assess the suitability of these potential purchasers (or form part of any purchaser suitability assessment process).¹⁰⁵

¹⁰³ Given the late stage at which the CMA was provided with the identity of these bidders, it was not feasible to hold response hearings with all of them but we did not consider that this was necessary to inform our assessment of the effectiveness of the Parties' Remedy Proposal.

¹⁰⁴ Email of Cargotec's legal representative [≫] to the CMA team of 20 March 2022.

¹⁰⁵ The assessment of the suitability of potential purchasers takes place after the CMA accepts Final Undertakings or makes a Final Order.

Glossary

ABP Associated British Ports

AGV Automated guided vehicles.

APD Automation and project delivery.

ARMG Automated rail-mounted gantry cranes.

A-RTG Automated **RTG**.

ASC Automated stacking cranes.

ATT Automated terminal tractors. Sometimes referred to as **A-TT**.

BHC Belfast Harbour Commissioners, statutory corporation established to

operate, maintain and improve Belfast Harbour.

CAGR Compound annual growth rate.

Cargotec Cargotec Corporation and all its' subsidiaries.

CAT Competition Appeal Tribunal.

CCH Cargotec's Counterbalanced Container Handlers business line

(including **RS** and **ECH**)

CEO Chief Executive Officer.

CHE Container handling equipment.

CMA Competition and Markets Authority.

CMA129 Merger Assessment Guidelines (2021 – revised guidance)

CMA2 revised Mergers: Guidance on the CMA's jurisdiction and procedure (2020 –

revised guidance).

CMA rules of procedure for merger, market and special reference

groups.

CMA120 Merger Assessment during the Coronavirus (COVID-19) pandemic.

CMA87 Merger remedies guidance.

Consultation

Paper

The CMA's consultation paper summarising the additional third-party

evidence of 15 March 2022.

CRM

Customer relationship management system.

CRMG

Cantilevered RMG

CTF Market

Report

Container Terminal Foresight Market Report

DISH

The **Cargotec** Digital Solutions Hub.

Divestiture

Assets

The carve-outs of assets, operations, employees and customer and

supplier contracts that comprise the **Divestiture Businesses**.

Divestiture

Businesses

Both the KAS and the MEQ Divestiture Businesses.

EBIT Earnings before interest and tax.

ECH Empty container handlers.

ECS Equipment Control Systems.

EEA European Economic Area

EMEA Europe, Middle East and Africa

eRTG Electronic **RTG**.

Europe The whole continent, including both the EEA and UK.

FLT Forklift trucks.

FTE Full time Employees.

Gantry Cranes (or yard cranes)

RTG, RMG and ASC are collectively referred to as Gantry Cranes.

GTO

Global terminal operator, GTOs are defined as in the Drewry annual report 2020/21: "A stevedore, carrier or hybrid that operates significant container terminal facilities in at least two different world regions." Furthermore, we also considered as port to be a GTO if a GTO owns at least 50% of that port or if a port has the same parent

company as a GTO.

HDFLT Heavy duty **FLT**. That is **FLT** with a lifting capacity of at least 10

tonnes.

Hold Separate

Manager

An independent interim manager with executive powers during the

divestiture process.

HPH Hutchison Port Holdings Limited

HPH UK Hutchison Ports (UK) Limited

HTE Horizontal Transport Equipment, refers to both **SC** and **ShC**.

Hyster Hyster-Yale Group.

ICS Intelligent Crane Solution

Inquiry Group The Group of CMA panel members constituted to investigate and

report on whether the Merger will lead to an SLC.

IPR Intellectual Property Rights.

Kamos Kalmar Mobile Solutions.

KAS Kalmar Automation Solutions.

Konecranes Konecranes Plc and all its subsidiaries.

McKinsey Report A report in which McKinsey, at the Parties' request, assessed the

cost synergies of the Merger.

MEQ Mobile Equipment, refers to RS, ECH and HDFLT.

Merged Entity Refers to the a post-Merger entity of the merged **Cargotec** and

Konecranes collectively.

Merger The proposed merger between Cargotec and Konecranes.

MHC Mobile harbour cranes.

Monitoring An independent trustee who will monitor the preservation of the

Trustee divestiture business during the divestiture process.

MoU Memorandum of Understanding.

NDA Non-disclosure Agreement.

OEM Original Equipment Manufacturer.

Parties Cargotec and Konecranes collectively, for statements referring to the

future, the Merged Entity.

Parties' Remedy

Proposal

The remedies proposed by the Parties, as submitted to the **CMA** on 6 January 2022, together with the addendum submitted to the European

Commission on 20 January 2022.

Parties' Response to the Remedies Notice, 10 January 2022.

Response to the Remedies Notice

Parties' response Parties' response to the CMA Phase 1 Decision, 23 July 2021.

to the CMA

Phase 1 Decision

Parties' Parties' Response to Consultation Paper, 17 March 2022

Response to Consultation

Paper

Parties' response Parties' response to Issues Statement, 19 August 2021.

to Issues Statement

Parties' response Parties' response to the Provisional Findings Report, 10 January 2022.

to the Provisional Findings Report

Phase 1 Decision The CMA's phase 1 Reference Decision.

[X]

[%]

Provisional The CMA's Provisional Findings Report published on 29 November

Findings Report 2021.

Port Cranes Port Cranes includes STS, RTGs, RMGs, and ASCs.

Quay Cranes Refers to STS and MHC.

R&D Research and Development.

RCB Relevant Customer Benefit.

Remedies Notice The CMA's Notice of possible remedies under Rule 12 of the CMA's

rules of procedure for merger, market and special reference groups,

published on 26 November 2021.

RMG Rail-mounted gantry cranes.

RMS Relevant merger situation.

RS Reach stackers.

RTG Rubber-tired gantry cranes.

the UK).

SC Straddle carriers.

Share of supply

test

That 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

ShC Shuttle carriers.

SLC Substantial lessening of competition.

SMV SMV Lifttrucks AB

Spreaders Spreaders are the piece of CHE used to grip containers

Straddle Carriers SC and ShC.

STS Ship-to-shore cranes.

Terex MHPS Terex Material Handling & Port Solutions.

TEU Twenty-foot equivalent unit: The standardised measure for containers

in the industry where one 40ft container equals two TEU.

The Act The Enterprise Act 2002.

The KAS The 'entirety' of **Cargotec's** KAS business (see paragraphs 13.35 to

Divestiture 13.37).

Business

The KAS The Parties proposal to divest Cargotec's KAS Divestiture Business

Divestiture under the Parties Remedy Proposal.

Proposal

The MEQ
Divestiture
Business

Konecranes' global Lift Trucks business (see paragraphs 13.42 to

13.44).

The MEQ Divestiture Proposal The Parties proposal to divest Konecranes' MEQ Divestiture

Business under the Parties Remedy Proposal.

The Termination Commitment Proposal

The non-divestiture element of the Parties' Remedy Proposal.

TOS Terminal Operating System.

TSA Transitional service arrangement

TT Terminal tractors.

Turnover test The value of the turnover in the UK of the enterprise being taken over

exceeds GBP 70 million.

UK United Kingdom.

Upfront Buyer Condition

A commitment from **the Parties** not to implement **the Merger** before entering into a final binding sale and purchase agreement for the sale

of the divestiture business.