

Anticipated acquisition by Tadano Limited of the Demag Brand Crane Business and 8 subsidiaries of Terex Corporation

Decision on relevant merger situation and substantial lessening of competition

ME/6819/19

The CMA's decision on reference under section 22(1) of the Enterprise Act 2002 given on 18 June 2019. Full text of the decision published on 26 June 2019.

Please note that [X] indicates figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

SUMMARY

1. Tadano Limited¹ (**Tadano**) has agreed to acquire the **Demag Brand Crane Business**² and control over **8 subsidiaries of Terex Corporation (Demag/Terex)** (the **Merger**). Tadano and Demag/Terex are together referred to as the **Parties** and, after the Merger, as the **Merged Entity**.
2. The Competition and Markets Authority (**CMA**) believes that it is or may be the case that each of Tadano and Demag/Terex is an enterprise; that these enterprises will cease to be distinct as a result of the Merger; and that the share of supply test is met. Accordingly, arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

¹ A company incorporated in Japan with shares listed on Tokyo Stock Exchange.

² As defined in the Asset and Stock Purchase Agreement dated 22 February 2019. See paragraph 14 below for a description of the acquired assets.

3. The Parties overlap in the production and supply of all-terrain cranes,³ and sell their products under the Tadano and Demag brands. While the evidence received on the geographic frame of reference was mixed, on a cautious basis, the CMA has assessed the impact of the Merger on the supply of all-terrain cranes in the United Kingdom (**UK**).
4. The CMA considered a range of evidence in its competitive assessment, including in relation to: shares of supply, closeness of competition and competitive constraints.
5. The Parties both supply all-terrain cranes in the UK (and the rest of the European Economic Area (EEA)). The Parties and competitors Liebherr and Manitowoc are the main suppliers in the market and Liebherr is the market leader in the supply of all-terrain cranes in the UK.
6. The Parties have a combined share of supply of all-terrain cranes of [20-30%] in the UK, and [20-30%] in the EEA ([~~20-30%~~] of the share of Liebherr).
7. The CMA believes that, while this is a concentrated market where all producers compete to some extent with each other, the Parties are not each other's closest competitor. The CMA found that the closest competitor to each of the Parties is Liebherr, rather than each other. This is supported by the Parties' lost orders data, which showed that less than [10-20%] of all-terrain orders lost by each Party is won by the other Party.
8. The CMA has found that there are some key differences between the Parties' offerings. The Parties do not have complete product ranges of all-terrain cranes in the UK⁴ and thus only compete in relation to certain categories of all-terrain cranes. Moreover, the Parties are also differentiated in terms of quality to at least some extent.
9. The Parties will continue to face significant competitive constraint from Liebherr and Manitowoc after the Merger. The CMA found that Liebherr, the leading global full-range all-terrain crane producer and Manitowoc, which is also a strong global all-terrain crane producer with a more complete product range than the range of the Parties, will continue to exert significant competitive constraints on the Merged Entity post-Merger. Both Liebherr and Manitowoc, unlike the Parties, are full-line suppliers of cranes, and both provide all of the different types of crane (for example, mobile cranes and

³ Hereafter term 'supply' in the context of product supply means 'production and supply' of all-terrain cranes.

⁴ A full range supplier refers to a supplier who manufactures the full range of cranes within all-terrain cranes, whereas a full-line supplier offers at least one product in each of the different categories of crane, eg mobile cranes, crawler cranes etc.

crawler cranes). Moreover, no third parties raised significant concerns in relation to the Merger.

10. The CMA believes that these factors, taken together, are sufficient to ensure that the Merger does not give rise to a realistic prospect of a substantial lessening of competition (**SLC**) as a result of horizontal unilateral effects.
11. The Merger will therefore **not be referred** under section 33(1) of the Enterprise Act 2002 (the **Act**).

ASSESSMENT

Parties

12. Tadano, is a Tokyo Stock Exchange listed company incorporated in Japan, which produces mobile cranes (ie all-terrain, rough-terrain and truck-mounted cranes) and telescopic boom crawler cranes. Tadano's mobile crane production sites are situated in Japan, Germany and the United States (US). The turnover of Tadano in the 2018 financial year was approximately £1.2 billion worldwide, of which approximately [X] was allocated to the UK.⁵
13. Terex produces all-terrain mobile cranes and lattice boom crawler cranes in Germany through the Demag Brand Crane Business. The turnover of Demag/Terex (the **Target**), in the 2018 financial year was approximately [X] worldwide, of which approximately [X] was allocated to the UK.⁶

Transaction

14. Under an Asset and Share Purchase Agreement (ASPA) dated 22 February 2019, Tadano will acquire control over the shares of eight subsidiaries as well as assets of the Demag/Terex business of designing, manufacturing and selling of all-terrain cranes and lattice boom crawler cranes and their related components, replacement parts, and other construction related equipment and products.
15. The Parties informed the CMA that the Merger is also the subject of review by competition authorities in Germany and Poland. The Merger has been cleared by both of these authorities. Completion of the Merger is conditional on UK merger control approval.

⁵ Conversion from JPY into EUR based on an exchange rate of €1 = JPY 126.71 (average ECB euro reference exchange rate). Conversion from EUR to GBP based on an exchange rate of €1 = GBP 0.8826.

⁶ [X] converted at a rate of €1 = \$1.1810 (average ECB euro reference exchange rate 2018).

Rationale for the Transaction

16. The Parties told the CMA that the primary rationale for the Merger was the addition of the Target's lattice boom crawler cranes to Tadano's existing business. [✂]

Jurisdiction

17. Each of Tadano and Demag/Terex is an enterprise. As a result of the Merger, these enterprises will cease to be distinct.
18. The Parties overlap in the supply of all-terrain cranes in the UK, with a combined share of supply based on value of [20-30%] and an increment resulting from the Merger of [10-20%].⁸ The CMA therefore believes that the share of supply test in section 23 of the Act is met.
19. The CMA believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
20. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 24 April 2019 and the statutory 40 working day deadline for a decision is therefore 20 June 2019.

Counterfactual

21. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual). For anticipated mergers the CMA generally adopts the prevailing conditions of competition as the counterfactual against which to assess the impact of the merger. However, the CMA will assess the merger against an alternative counterfactual where, based on the evidence available to it, it believes that, in the absence of the merger, the prospect of these conditions continuing is not realistic, or there is a realistic prospect of a counterfactual that is more competitive than these conditions.⁹
22. In this case, there is no evidence supporting a different counterfactual. The Parties have argued that the current competitive situation serves as an

⁷ See for example, Tadano Board Presentation dated 23 February 2019, paragraph 9.

⁸ See details on shares of supply at paragraph 55 onwards.

⁹ [Merger Assessment Guidelines](#) (OFT1254/CC2), September 2010, from paragraph 4.3.5. The [Merger Assessment Guidelines](#) have been adopted by the CMA (see [Mergers: Guidance on the CMA's jurisdiction and procedure](#) (CMA2), January 2014, Annex D).

appropriate counterfactual because the Parties do not anticipate any material change in the competitive conditions on the relevant market(s) in the foreseeable future.¹⁰ Similarly, third parties have not argued for a different counterfactual or indicated likely change in the competitive conditions in this respect. Therefore, the CMA believes the prevailing conditions of competition to be the relevant counterfactual.

Background

23. The Parties design, manufacture and sell mobile and crawler cranes, and related components, replacement parts and after-sales services.

Mobile cranes

24. Mobile cranes can be categorised in three sub-categories of cranes, namely:
- (a) All-terrain cranes. These are used for various functions including on and off-road construction and infrastructure projects. All-terrain cranes can travel efficiently on public roads as well as on rough terrain usually found at places of use – such as construction sites. All-terrain cranes are capable of operating on rough-terrain by way of all-wheel drive and crab steering and typically have between two and nine axles.

Within the all-terrain cranes category there are potential subdivisions between weight lifting capacities. All-terrain cranes will typically have a lifting capacity in the range of 50 tonnes to 1200 tonnes. There are broadly eight weight categories of all-terrain cranes: (i) up to 65 tonnes; (ii) 66 to 80 tonnes; (iii) 81 to 110 tonnes; (iv) 111 to 150 tonnes; (v) 151 to 199 tonnes; (vi) 200 to 299 tonnes; (vii) 300 to 399 tonnes; and (viii) over 400 tonnes.



¹⁰ Merger Notice, response to question 11.

Source: Parties' Final Merger Notice.

- (b) Rough-terrain cranes. These are used principally in the construction industry for the building of elevated roadways, bridges and other infrastructure projects, and in the energy industry in relation to oil and gas, petrochemical, wind and other power plant projects. Rough-terrain cranes will typically have a maximum lifting capacity of 145 tonnes.



Source: Parties' Final Merger Notice.

- (c) Truck mounted cranes. These are versatile self-propelled loading-unloading machines mounted on a truck, with a working section comprising a rotating cantilevered boom and are primarily used for the loading and unloading of motor vehicle rolling stock, for cargoes primarily consisting of a heavy and single-item nature, and also for construction and repair work. Truck-mounted cranes will typically have a maximum lifting capacity of 250 tonnes.



Source: Parties' Final Merger Notice.

Crawler cranes

25. Crawler cranes can be split into two categories:

- (a) Lattice boom crawler cranes, a combination of the lattice boom crane as a superstructure mounted on a carrier vehicle with crawler tracks, with a high lifting capacity of up to 3,200 tonnes (lattice boom crawler cranes can be further sub-divided between cranes with lifting capacity below and above 300 tonnes).



Source: Parties' Final Merger Notice.

- (b) Telescopic boom crawler cranes, a combination of a telescopic boom crane as a superstructure mounted on a carrier with crawler tracks. Telescopic boom crawler cranes typically have a lifting capacity in the range of 20 tonnes to 230 tonnes.



Source: Parties' Final Merger Notice.

The Parties' product ranges and overlaps

Table 1: Overview of horizontal overlaps between the Parties

		Tadano	Target
Mobile cranes		•	•
	All-terrain cranes	•	•
	Rough-terrain cranes	•	
	Truck-mounted cranes	•	
Crawler cranes		•	•
	Lattice boom crawler cranes		•
	With lifting capacity <300t		
	With lifting capacity >300t		•
	Telescopic boom crawler cranes	•	

Source: CMA analysis of Parties' data.

26. As shown in Table 1 above, the Parties supply mobile (all-terrain, rough-terrain and truck-mounted) and crawler cranes, though they only overlap on some types:

(a) Mobile cranes: All-terrain (Overlap)

Tadano and the Target both supply all-terrain cranes. However, the Parties' ranges do not overlap for all lifting capacity classes. [✂]

(b) Mobile cranes: Rough-terrain cranes and truck-mounted cranes (No overlap)

Tadano supplies rough-terrain cranes and truck-mounted cranes. However, the Target does not supply such cranes.¹¹

(c) Crawler cranes: lattice boom crawler cranes (No overlap)

The Target supplies lattice boom crawler cranes with lifting capacity over 300 tonnes. Tadano does not supply lattice boom crawler cranes.

(d) Crawler cranes: telescopic boom crawler cranes (No overlap)

Tadano supplies telescopic boom crawler cranes.¹² However, the Target does not supply telescopic boom crawler cranes.

¹¹ Terex supplies rough-terrain cranes, but such cranes are not part of the Target business.

¹² For completeness, Tadano's telescopic boom crawler cranes have lifting capacity below 300 tonnes.

Sales channels and after-sales

27. The Parties predominantly sell their cranes to crane rental or project lifting companies. These customers generally buy cranes based on an informal request for a proposal. Typically, a customer approaches one or more supplier with its order specification requesting an initial offer. This initial offer is followed by negotiations conducted over the phone, in meetings and/or via e-mail. Most UK customers of the Parties follow a dual- or multi-sourcing strategy.¹³ The Parties and their two main competitors, Liebherr and Manitowoc, told the CMA that they all sell their cranes in the UK through their UK subsidiaries.
28. After-sales services comprise the sale of spare parts, crane repair and the provision of general service and maintenance. A crane manufacturer commonly provides after-sales services only for its own products. However, according to the Parties, there are also several independent crane service and maintenance providers in the UK.¹⁴

Frame of reference

29. Market definition provides a framework for assessing the competitive effects of a merger and involves an element of judgement. The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the 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. The CMA will take these factors into account in its competitive assessment.¹⁵

Product scope

30. Given the Parties' activities described above, the CMA has considered in turn:
- (a) Whether mobile and crawler cranes should be considered under the same product frame of reference;
 - (b) Whether lattice boom crawler cranes and telescopic boom crawler cranes should be considered under the same product frame of reference;

¹³ The Parties provided a description of their sales processes, which was supported by the evidence received from the third parties and customers. See Merger Notice, page 49.

¹⁴ Merger Notice, page 48.

¹⁵ [Merger Assessment Guidelines](#), paragraph 5.2.2.

- (c) Whether all-terrain cranes and other types of mobile cranes should be considered under the same frame of reference; and
- (d) Whether all-terrain cranes should be further segmented into narrower lifting capacity classes.

Mobile cranes and crawler cranes

- 31. The Parties referred to the European Commission's (EC) decisional practice,¹⁶ which identified distinct product markets for: (i) mobile cranes; (ii) lattice boom crawler cranes, with lifting capacity below 300 tonnes ("low-end"); and (iii) lattice boom crawler cranes, with lifting capacity above 300 tonnes ("high-end").
- 32. The CMA notes that there are a number of differences in characteristics between mobile cranes and crawler cranes. In particular, mobile cranes, in contrast to crawler cranes, can easily travel on roads and do not need to be assembled on site. The CMA also did not find any evidence during its merger investigation to suggest that it should depart from the EC's precedent and consider mobile and crawler cranes under the same product frame of reference.
- 33. Therefore, the CMA believes that mobile and crawler cranes should not be considered under the same product frame of reference.

Lattice boom crawler cranes and telescopic boom crawler cranes

- 34. The CMA notes that there are a number of differences in characteristics and uses between lattice boom crawler cranes and telescopic boom crawler cranes. Lattice boom crawler cranes usually require substantial time and space to assemble in preparation for a job. Telescopic boom crawler cranes do not require substantial set-up time and space but offer a more limited level of lifting capacity than lattice boom crawler cranes. Telescopic boom crawler cranes are often used for construction jobs with lower load requirements or where there is limited space. Lattice boom crawler cranes are often used for job sites that require the lifting of heavy loads to significant heights and are more expensive to assemble and disassemble due to their lattice boom design.
- 35. Therefore, the CMA believes that lattice boom crawler cranes and telescopic boom crawler cranes should not be considered under the same product frame of reference. As the Parties do not compete with each other in the supply of

¹⁶ [COMP/M.2882 - TEREX / DEMAG](#) (2002), paragraphs 9-14.

lattice boom crawler cranes or telescopic boom crawler cranes, crawler cranes are not considered further in this Decision.

All-terrain cranes and other types of mobile cranes

36. As noted in paragraph 24 above, rough-terrain and truck-mounted cranes are generally used in specific industries and have maximum lifting capacity of 145 and 250 tonnes respectively. All-terrain cranes, instead, are more versatile and their lifting capacity can range from less than 100 tonnes to more than 1,000 tonnes.
37. The Parties estimated that [X] of the mobile cranes sold in the UK in 2018 were all-terrain cranes.
38. The CMA also notes that, as the Target does not supply rough-terrain and truck-mounted cranes, the Parties' combined shares of supply are larger when all-terrain cranes are considered separately from other types of mobile cranes.
39. Hence, on a cautious basis, the CMA has considered the impact of the merger in the supply of all-terrain cranes without including other types of mobile cranes in the analysis.

Possible further segmentation of all-terrain cranes by lifting capacity classes

40. In its previous decisional practice, the EC considered whether the mobile cranes market could be subdivided into a "low-end" and "high-end" market by capacity. However, the EC's inquiry did not find support for such segmentation.¹⁷
41. The CMA received some evidence during its merger investigation from third parties supporting the segmentation of all-terrain cranes into lifting capacity classes. [X] (two customers of the Parties) told the CMA that, although cranes with a given lifting capacity can usually do the job of cranes with lower lifting capacity, the higher the lifting capacity of a crane, the larger it is in size, implying more difficult access to construction sites.¹⁸ This suggests that substitutability between all-terrain cranes with different lifting capacities may be limited in certain circumstances.
42. However, the CMA also notes that all-terrain cranes of different lifting capacity are generally produced in the same production sites; that the same four

¹⁷ [COMP/M.2882 - TEREX / DEMAG](#) (2002), paragraph 14.

¹⁸ Notes of the calls and customer responses to our questionnaire.

competitors (the Parties, Liebherr and Manitowoc) compete for several lifting capacity classes in the UK and across the EEA; and the CMA did not find evidence of different conditions of competition in the different classes. The CMA found that customers often adopt similar purchasing behaviour when buying different types of all-terrain cranes and negotiate for different capacity classes in a similar way.

43. Therefore, the CMA considered that the appropriate frame of reference is the supply of all-terrain cranes, without further sub-segmenting on the basis of lifting capacity. However, the CMA has considered any differences between lifting capacity classes in the competitive assessment where relevant.

Conclusion on product scope

44. For the reasons set out above, the CMA has considered the impact of the Merger in the supply of all-terrain cranes.

Geographic scope

45. The Parties submitted that an EEA-wide market definition would be more appropriate than a UK-wide market definition.
46. In *Terex/Demag* (2002), the EC left the geographic market definition open, although indicated that there was some support for an EEA-wide frame of reference.¹⁹
47. The CMA received some evidence, from the Parties and third parties, supporting an EEA-wide frame of reference. In particular:
- (a) No mobile cranes are produced in the UK and most, if not all, mobile cranes sold in the UK are imported from and produced in Germany;
 - (b) There are no significant regulatory barriers within the EEA between different national jurisdictions; and
 - (c) The Parties estimated that transportation costs account for only around [X] % of the unit sale price of a crane.
48. The Parties also submitted that:
- (a) There are no significant differences in national or local customer preferences;

¹⁹ [COMP/M.2882 - TEREX / DEMAG](#) (2002), paragraph 15.

- (b) The Parties apply the same price lists uniformly across the EEA; and
- (c) The Parties have experienced no material difference in profitability per unit when comparing sales to the UK to sales to other areas within the EEA.

49. However, the CMA noted that:

- (a) Each of the Parties, Liebherr and Manitowoc, supplies customers in the UK through UK-based subsidiaries, suggesting that a national presence is important to supply UK customers;
- (b) Customers told the CMA that after-sales services are a key factor in their choice of all-terrain crane supplier – after-sales networks operate at a national level in the UK;
- (c) [REDACTED] told the CMA that in the UK, mobile cranes have additional tonnage capacities for transporting on road - 16 tonnes per axle is permitted while in the EU only 12 tonnes per-axle is permitted; and
- (d) [REDACTED], actual prices are determined by individual negotiation and vary between customers, and therefore, in principle, may differ on average across the EEA Member States.

Conclusion on geographic scope

50. For the reasons set out above, and on a cautious basis, the CMA has considered the impact of the Merger in the UK.

Conclusion on frame of reference

51. For the reasons set out above, the CMA has considered the impact of the Merger in the supply of all-terrain cranes in the UK.

Competitive assessment

Horizontal unilateral effects

52. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or to degrade quality on its own and

without needing to coordinate with its rivals.²⁰ Horizontal unilateral effects are more likely when the merging parties are close competitors.

53. The CMA assessed whether it is or may be the case that the Merger has resulted, or may be expected to result, in an SLC in relation to horizontal unilateral effects in the supply of all-terrain cranes in the UK.
54. In order to assess whether the Merger gives rise to competition concerns, the CMA considered a range of evidence in relation to the following areas:
 - Shares of supply;
 - Closeness of competition between the Parties; and
 - Competitive constraints.

Shares of supply

55. The Parties estimated that the Merged Entity will have a share of supply in the market for the production and distribution of mobile cranes in the UK of [20-30%], based on their own data and estimates of competitors' sales of mobile cranes by volume in 2018.
56. The CMA has considered that analysing shares of supply by value is more appropriate than by volume given that all-terrain cranes can be differentiated on the basis of price, quality and, as explained above, in terms of size and lifting capacity.²¹
57. The CMA found evidence that the market for the sale of mobile cranes is cyclical.²² Volumes of sales vary annually, due to factors such as the performance of the construction industry and crane hire companies' fleet renewal policies. Moreover, all-terrain cranes are high value items and the number of all-terrain cranes sold in the UK is fairly low,²³ with sales by individual manufacturers fluctuating considerably from year to year. To reduce the impact of annual fluctuations, the CMA calculated the Parties' shares of supply as a three-year average. Moreover, the CMA has considered both UK and EEA market shares. The latter are less subject to fluctuation and hence

²⁰ [Merger Assessment Guidelines](#), from paragraph 5.4.1.

²¹ The CMA note that in this case the estimated shares by value were very similar to the estimated shares by volume, so the CMA's conclusions would not change in any case.

²² Parties' and competitors' sales data and submissions. This is also in line with the findings of the European Commission in [COMP/M.2882 - TEREX / DEMAG](#) (2002).

²³ The Parties' data shows [§] units sold in 2018, [§] units sold in 2017 and [§] units sold in 2016.

may be a useful cross-check of the competitive strength of the different suppliers.²⁴

58. The CMA estimated shares of supply based on value as an annual average for 2016-2018 using the Parties' and third-party data. This is set out in Table 2 below.

Table 2: Values and shares of supply of all-terrain cranes in the UK and in the EEA (2016-2018 annual average)

Producer	All-terrain cranes sold in the UK (2016-2018 annual average)		All-terrain cranes sold in the EEA (2016-2018 annual average)	
	Value	Share	Value	Share
Tadano	[X]	[10-20%]	[X]	[10-20%]
Target	[X]	[10-20%]	[X]	[10-20%]
Combined	[X]	[20-30%]	[X]	[20-30%]
Liebherr	[X]	[50-60%]	[X]	[60-70%]
Manitowoc	[X]	[10-20%]	[X]	[10-20%]
Total	[X]	100%	[X]	100%

Source: CMA analysis of Parties' and competitors' data.

59. Table 2 shows that the combined share of supply of the Parties in the period 2016-2018 was around [20-30%] in the UK and [20-30%] in the EEA, with a [10-20%] and a [10-20%] increment respectively. Liebherr has a share of supply around [50-60%] in the UK and [60-70%] in the EEA, while Manitowoc has shares of supply around [10-20%] and [10-20%] respectively. The CMA did not find evidence of any other supplier selling all-terrain cranes in the UK and the rest of the EEA. For completeness, it is noted that the CMA received evidence of other producers of mobile cranes (eg rough terrain and truck mounted cranes) active in the EEA but these producers are not active in all-terrain cranes.
60. The Merged Entity's share of supply in the UK and EEA will make it the second largest player in the market. However, the merged entity's share of supply is still [X] of the market leader, Liebherr. Manitowoc is also an important player in the market with [X] of the UK market and will remain so post-Merger.
61. In addition, the CMA considers that the combined share of supply of the Parties may exaggerate the degree of overlap and competitive interaction between them. This is based on the evidence from lost orders analysis, sales data and quality of products as set out below in paragraphs 66 onwards.

²⁴ Given the larger sample size of the whole EEA, EEA market shares are less subject to sales variations due to customers' renewal policies or country-wide fluctuations, and hence less variable.

Closeness of competition

62. The Parties submitted that they compete only to a limited extent with each other for all-terrain crane customer orders and that each Party competes more closely with Liebherr and Manitowoc. In particular, the Parties argued that their all-terrain products are complementary. The Parties submitted that they have only limited overlaps between their product portfolios.
63. The CMA has examined the closeness of competition between the Parties and has considered evidence from (i) the Parties' internal documents, (ii) the Parties' lost order analysis, (iii) sales data, and (iv) third party evidence.

Internal documents

64. Internal documents provided by the Parties to the CMA generally related to all cranes rather than specifically to all-terrain cranes. The internal documents provided by the Parties show that the Parties see all crane producers active globally (including each other) as rivals.²⁵ Demag/Terex, in particular, notes [redacted]²⁶ Internal documents, show that the Parties consider Liebherr and Manitowoc as the most significant full-line rivals across different types of crane active on a global basis.²⁷
65. Moreover, an internal document provided by Tadano shows that the Parties have complementary product lines.²⁸

Lost order analysis

66. The Parties provided the CMA with their records of lost orders for their all-terrain cranes in the UK for the three calendar years, 2016-2018. This showed the number of cranes lost in each order, as well as the producer which ultimately won the order.²⁹ The CMA considers that this data provides an indication of the closest competitor of the Parties, and the CMA would expect that the closer a competitor, the more often orders are lost to such competitor.

²⁵ See for example, Tadano 2017 Consolidated Financial Results, slide 14; and Terex Corporation 2017 Cranes Strategy, slide 126.

²⁶ See for example, Terex Board of Directors Meeting – Cranes Segment Strategy 2018-2023, page 115.

²⁷ See for example, Terex Corporation 2017 Cranes Strategy, slide 126; and Structure of the World Crane Industry, prepared by Tadano based on materials from the Japan Construction Equipment Manufacturers Association, included in Tadano Consolidated Financial Results (Comprehensive) For FY 2017 (Y/E 31 March 2018), slide 14. See also Terex Board of Directors Meeting - Terex Oklahoma City, OK Facility - Strategy Review, 2018, pages 111-113.

²⁸ See for example, Tadano Board Presentation dated 23 February 2019, paragraph 9.

²⁹ [redacted].

The data shown in Table 3 shows that a large majority of the orders lost by the Parties were lost to Liebherr rather than to each other.

Table 3: Lost orders analysis

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis of the Parties' data.

67. As shown in Table 3, Tadano [REDACTED]. The Target only lost [REDACTED] units to Tadano (out of [REDACTED] where a competitor winning the deal was identified), while losing [REDACTED] to Liebherr and [REDACTED] to Manitowoc.
68. This data showed that Tadano and the Target are not each other's closest competitors. The data indicates that the Parties are only the third closest competitors to each other (after Liebherr and Manitowoc) with [REDACTED] [REDACTED]. On the basis of this data, Liebherr is the strongest and closest competitor of both Parties by a very significant margin, [REDACTED]. Manitowoc appears as the second closest competitor of both Parties, [REDACTED] Tadano's lost orders and [REDACTED] of the Target's lost orders.

Sales data

69. In addition to the lost orders analysis, the CMA analysed each Party's UK and EEA sales data for the last three years, 2016 to 2018.
70. This analysis showed that in the last three years the Parties competed in the supply of only certain categories of all-terrain cranes. In particular:
- (a) [REDACTED];
 - (b) Terex did not sell any all-terrain crane with lifting capacity between 65 tonnes and 80 tonnes;
 - (c) [REDACTED].

Third party views

71. The CMA also received evidence to suggest that the Parties differ in terms of build quality of their cranes.
72. In particular, the CMA received some concerns from third parties about quality issues with Demag/Terex cranes which has made the Target a less viable alternative to Tadano. A number of customers, [REDACTED], told the CMA that Tadano produces better quality cranes and suggested that, as a result of the Merger, the Target may benefit from Tadano's superior build quality.
73. One customer, [REDACTED], told the CMA that, *"the build quality of our Terex mobile cranes is poor. I hope that the introduction of Tadano R&D and existing product know-how can be incorporated in some of the product line not currently manufactured by Tadano."* Similarly, another [REDACTED] told the CMA that, *'This is the best thing for Demag. Tadano produces a better quality and more reliable crane. Tadano will do the right thing for the industry producing and developing cranes.'* This evidence suggests a degree of differentiation in quality of product between Tadano and Terex.
74. Customers consistently told the CMA that the Parties mostly compete with Liebherr for sales in all-terrain cranes. No customer identified the Parties as each other's closest competitor. In particular [REDACTED] stated that *"[a]s Liebherr is the largest supplier by far, [we believe] it would be good for the crane industry to have Tadano united with Terex"*. This view was also supported by [REDACTED], who stated that *"[the merger] will build a stronger leaner competitor for Liebherr"*.
75. Overall, the CMA did not receive significant concerns from customers in relation to this transaction. From the customers who responded to the CMA's merger investigation, the vast majority of respondents did not think the Merger will negatively impact the market. Only a very limited number of customers, [REDACTED], raised concerns regarding the Merger but these customers did not indicate an expectation of adverse effects as a result of the Merger and one of these customers commented that the Merger will create a more efficient competitor for the market. Three customers, [REDACTED], specifically noted that the Merger will be beneficial, referring to improved quality and improved ability of the Parties to compete in the production of cranes more generally with the leading global producers, Liebherr and Manitowoc.
76. The views of competitors were aligned with the views of customers. [REDACTED] competitors, [REDACTED], told the CMA that the parties compete only in certain product lines of all-terrain cranes. [REDACTED], that is not a competitor, told the CMA

that the ranges of all-terrain cranes supplied by the Parties are “nearly complementary”.³⁰

77. One competitor told the CMA that the Merger will lead to the creation of a full-range crane manufacturer, ie a manufacturer that offers all-terrain cranes at each weight category, indicating that the Parties are not currently each other’s closest competitors.

CMA conclusion on the closeness of competition

78. The CMA believes that the evidence shows that the Parties are not each other’s closest competitor and that the Parties compete more closely with Liebherr than with each other. The CMA notes that there are some key differences between the Parties offerings: the Parties do not have complete product ranges of all-terrain cranes in the UK and thus only compete in relation to certain categories of all-terrain cranes. Moreover, the Parties are also differentiated in terms of quality to at least some extent. This is supported by third party views, sales data and the lost orders data, which showed that [X] of all-terrain cranes lost by each Party is won by the other Party as explained above.

Competitive constraints

79. The CMA examined the competitive constraint on the Parties from the market leader Liebherr, Manitowoc and other producers active globally. The CMA also considered the degree to which the second-hand market can be considered as a competitive constraint on the Parties.
80. The Parties submitted that both Tadano and Terex consider Liebherr to be their main competitor, with Manitowoc also providing a competitive constraint.
81. The Parties also submitted that they face additional competitive constraints from other producers active globally – namely China (XCMG, Zoomlion and Sany), Japan (Kato) and the US (Link-Belt). The CMA did not find any evidence of current sales of all-terrain cranes in the UK or the EEA by these other global producers,³¹ This is consistent with the information provided by the Parties which states that to the best of their knowledge, only four producers are currently active in the UK and EEA – Liebherr, Manitowoc, Tadano and Terex (except for one all-terrain crane delivered to Germany by a

³⁰ [X]

³¹ See Merger Notice, footnote 43. This is also supported by the evidence provided by customers and competitors.

Chinese producer in the relevant period). The CMA considers these producers as a potential competitive constraint in paragraph 89 onwards.

Liebherr

82. The CMA considers that Liebherr exerts a very strong competitive constraint on both Parties, that this is much greater than the constraint that each Party exerts on each other and that this constraint will continue to be the case post-Merger. Liebherr is by far the biggest competitor in the market and will continue to be post-Merger. In particular, the CMA notes that:
- (a) Liebherr is a global full-line producer of different types of cranes with an all-terrain share of supply of approximately [50-60%] in the UK and [60-70%] in the EEA (see Table 2 above);
 - (b) [redacted] of the orders lost by each Party are won by Liebherr (see paragraphs 66-68);
 - (c) The Parties' internal documents show that they compete mainly with Liebherr and with Manitowoc (see paragraphs 62 to 63) in relation to the supply of cranes in general; and
 - (d) Third-party views confirmed that Liebherr is the strongest competitor in the market. All customers consistently named Liebherr as the closest competitor to each of the Parties.
83. The evidence received by the CMA shows that Liebherr has a strong product offering in terms of all factors considered relevant by customers (based on customer responses to the CMA's merger investigation, these are after-sales services, quality, price, brand/reputation, range of cranes supplied and innovation). The CMA believes that Liebherr [redacted] to continue to act as a very strong competitive constraint on the Parties post-Merger and to adapt and cater for any increase in market demand.³² This suggests that post-Merger, Liebherr would be able to supply customers willing to switch.

Manitowoc

84. The Parties are also constrained by Manitowoc, a global full-line producer of different types of crane with a share of supply of approximately [10-20%] in the UK and [10-20%] in the EEA. Customers who responded to the CMA's merger investigation considered Manitowoc to be a competitor of Liebherr and the Parties. The Parties' records of lost orders show that [redacted] lost by Tadano

³² Liebherr's response to questionnaire.

and [X] of the orders lost by Terex in the UK are awarded to Manitowoc, more than the percentage lost by the Parties to each other.

85. The evidence received from Manitowoc shows that it continues to maintain its market position. Noting the cyclical nature of its business, Manitowoc [X].³³ The CMA believes that Manitowoc will continue to provide an important competitive constraint on the Parties.

Used cranes

86. The CMA also asked customers whether they currently buy used all-terrain cranes (in addition to buying new cranes) and whether they would switch to buying used all-terrain cranes in case of a 5%, non-negotiable price increase or decrease in quality of new all-terrain cranes.
87. The CMA received mixed evidence in response to its merger investigation, with only some customers indicating that they buy or have bought used cranes. Some customers that bought used cranes noted that they only did so when they needed to obtain cranes quickly. Other customers pointed to a small number of used cranes which they had purchased but noted that these purchasers were limited to cranes of up to two years old (consistent with the warranty period granted by the producers).
88. Overall the CMA found that the used cranes market would provide only a limited competitive constraint to the Parties post-Merger.

Other global producers

89. The Parties told the CMA that globally several other manufacturers are active in the production of all-terrain cranes and could enter the EEA market, including from China (XCMG, Zoomlion and Sany), Japan (Kato) and the US (Link-Belt). In particular, the Parties consider that Chinese producers are expected to enter the EEA in the next three to five years.³⁴
90. The CMA did not receive any evidence from the Parties or third parties that these global producers would enter the UK market in a sufficiently timely

³³ Manitowoc RFI response, 8 May 2019.

³⁴ See Merger Notice, pages 47-48. The Parties also noted that Chinese competitors have already started offering truck-mounted cranes and crawler cranes in the EEA.

manner to provide a constraint on the Parties post-Merger.³⁵ [REDACTED].³⁶ This is consistent with the views provided [REDACTED] and some customers.

91. The CMA approached Kato which is a Japanese crane manufacturer and supplier [REDACTED] but had previously supplied cranes within these markets. [REDACTED]. However, Kato was unable to provide any evidence to support a sufficiently timely entry into the UK market.³⁷ The CMA also did not receive any evidence indicating that [REDACTED] made any steps to enter the UK market.
92. Overall the CMA did not receive evidence that any of these global producers act as a competitive constraint on the Parties.

CMA conclusion on competitive constraints

93. On the basis of this evidence, the CMA believes that the Parties will continue to face competition from other suppliers of all-terrain cranes post-Merger, in particular from Liebherr and Manitowoc. Liebherr is by far the market leader and the closest competitor of both Parties. Manitowoc, a full-line producer of different types of crane is an important competitor to both Parties and will continue to pose a competitive constraint on the Parties post-Merger.

Conclusion on horizontal unilateral effects

94. The Parties account for [20-30%] of the sales of all-terrain cranes in the UK and [20-30%] across the EEA by value, which is [REDACTED] of the sales of the market leader Liebherr.
95. The CMA believes that, while this is a concentrated market where all producers compete to some extent with each other, the Parties are not each other's closest competitor. The CMA found that the closest competitor to each of the Parties is Liebherr, rather than each other. This is evidenced by internal documents, lost orders data and third party information.
96. The CMA notes that there are some key differences between the Parties offerings. The Parties are differentiated in terms of quality to at least some extent. The Parties also do not have complete product ranges of all-terrain cranes in the UK and thus only compete in relation to certain categories of all-terrain cranes. This is supported by the Parties' internal documents, third

³⁵ [Merger Assessment Guidelines](#), from paragraphs 5.8.3 and 5.8.11.

³⁶ See Terex Board of Directors Meeting – Cranes Segment Strategy 2018-2023, page 116.

³⁷ [REDACTED]

party views, sales data and the lost orders data, which showed that [X] of all-terrain orders lost by each Party is won by the other Party.

97. The CMA believes that the Parties will continue to face significant competitive constraint from Liebherr, the market leader and Manitowoc after the Merger. The CMA found that Liebherr, which is the leading global full-range all-terrain crane producer, and Manitowoc, which is also an important global all-terrain crane producer with a more complete product range than the range of the Parties, will continue to exert significant competitive constraints on the Merged Entity post-Merger.
98. Very few third parties responding to the CMA's merger investigation expressed competition concerns. According to some third parties the Parties' product ranges are largely complementary in all-terrain cranes.
99. Accordingly, for all the reasons set out above, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in relation to the supply of all-terrain cranes in the UK.

Barriers to entry and expansion

100. Entry, or expansion of existing firms, can mitigate the initial effect of a merger on competition, and in some cases may mean that there is no SLC. In assessing whether entry or expansion might prevent an SLC, the CMA considers whether such entry or expansion would be timely, likely and sufficient.³⁸
101. However, the CMA has not had to conclude on barriers to entry or expansion as the Merger does not give rise to competition concerns on any basis.

Third party views

102. The CMA contacted customers and competitors of the Parties. Only a very limited number of customers raised concerns in relation to this Merger and some indicated benefits. For example, some customers indicated that the Merger may allow the Merged Entity to compete more effectively with the leading player in the market, Liebherr and others noted potential quality improvements for one of the Parties (Demag/Terex). Other producers, including the Parties' competitors, did not raise any concerns in relation to the Merger. Only one third party raised a concern over the increased market

³⁸ [Merger Assessment Guidelines](#), from paragraph 5.8.1.

share the Merged Entity will have post-Merger. No other third party raised concerns about the Merger.

Decision

103. Consequently, the CMA does not believe that it is or may be the case that the Merger may be expected to result in an SLC within a market or markets in the United Kingdom.

104. The Merger will therefore **not be referred** under section 33(1) of the Act.

Eleni Gouliou

Director

Competition and Markets Authority

18 June 2019