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Case No COMP/M.6857 - CRANE CO / MEI GROUP

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**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(1)(b) in conjunction with Art 6(2)
Date: 19/07/2013

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EUROPEAN COMMISSION

Brussels, 19.7.2013
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PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party

Dear Sir/Madam,

**Subject: Case No COMP/M.6857 – CRANE CO / MEI GROUP
Commission decision pursuant to Article 6(1)(b) in conjunction with
Article 6(2) of Council Regulation No 139/2004**

1. On 31 May 2013, the European Commission received a notification of a proposed concentration pursuant to Article 4 and following a referral pursuant to Article 4(5) of Council Regulation (EC) No 139/2004¹ by which Crane Co. ("Crane", US) acquires sole control of MEI Conlux Holdings (US), Inc. and MEI Conlux Holdings (Japan), Inc. (together "MEI") by way of purchase of shares. Crane is hereinafter referred to as "the Notifying Party", whereas Crane and MEI are collectively referred to as "the Parties".

I. THE PARTIES

2. **Crane** is a diversified manufacturer of highly engineered industrial products. Its Payment Solutions group ("CPS") provides unattended payment systems supplying customers, primarily original equipment manufacturers ("OEMs"), active in vending, retail, transportation and gaming. Its Vending Solutions group ("CVS") provides vending machines for the automated sale of products.

¹ OJ L 24, 29.1.2004, p. 1 (the "Merger Regulation"). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this decision.

3. **MEI** is a manufacturer and supplier of unattended payment systems supplying primarily OEM customers active in vending, retail, transportation and gaming, and as such a competitor to Crane Payment Solutions.

II. THE OPERATION

4. On 20 December 2012, Crane and MEI signed a Sale and Purchase Agreement ("SPA") according to which Crane intends to acquire 100% of the shares of MEI for USD 820 (around EUR 638 million).

III. CONCENTRATION

5. As a result of the proposed transaction, Crane will acquire sole control of the whole of MEI. The notified operation therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

IV. EU DIMENSION

6. The operation does not have an EU dimension within the meaning of Article 1 of the Merger Regulation as it does not meet the thresholds of Article 1(2) or Article 1(3).²
7. However, on 1 February 2013, the Notifying Party informed the Commission by means of a reasoned submission that the concentration was capable of being reviewed under the national competition laws of four Member States³ and requested the Commission to examine it. None of the competent Member States indicated its disagreement with the request for referral within the period laid down by the Merger Regulation.
8. The notified operation is therefore deemed to have an EU dimension according to Article 4(5) of the Merger Regulation.

V. ACTIVITIES OF THE PARTIES

9. Both Parties to the proposed concentration manufacture and supply unattended payment systems. Unattended payment systems enable transactions around the clock (24/7) by handling currency and/or accepting cashless payment via machines where an attendant is generally not present. Examples of machines into which unattended payment systems are incorporated include vending machines for drinks and snacks, retail self-checkout machines in supermarkets, gaming or slot machines and public transport ticket vending machines.
10. The Parties produce the payment systems by assembling parts, such as electronic circuit boards and plastic parts, supplied mainly by Chinese contract manufacturers.
11. Crane has manufacturing facilities in Germany ("National Rejectors Inc." or "NRI", Buxtehude), the UK ("Money Controls", Manchester), and Canada ("CashCode", Toronto). NRI produces coin handling and cashless solutions, CashCode mainly bill

² The thresholds are not met since MEI's aggregate Union-wide turnover in 2011 (the 2012 revenues have not yet been audited) was below EUR 100 million.

³ Germany, Portugal, Spain and the United Kingdom.

handling solutions and Money Controls mainly coin handling solutions. In 2012, Crane closed its production facility in the United States ("Telequip", New Hampshire). Crane acquired NRI in 1984, CashCode and Telequip in 2006 and Money Controls in 2010. Crane's manufacturing facilities each have their separate R&D departments and Crane operates an additional R&D department in Kiev, Ukraine.

12. MEI has one manufacturing facility in Mexico and a design centre in Switzerland. The design centre in Geneva was acquired by MEI (which at that time formed a part of Mars, Incorporated) in 1993 together with other assets of Sodexo Cash Management Systems. The Japanese subsidiary of MEI Group, Conlux, focuses its activities in Japan and South Korea. It manufactures products in Japan and increasingly in China through outsourcing or contract manufacturing.
13. Crane is also active in the manufacture and supply of vending machines into which certain types of unattended payment are incorporated. The manufacture and supply of vending machines thus constitutes a downstream market to the market of unattended payment systems and Crane is vertically integrated downstream.
14. The Parties are also active in vending management solutions ('VMS') and telemetry. VMS is a piece of software that allows a vending operator to manage its operations by analysing data such as vending machine performance and sales amounts. Telemetry is a form of wireless communication that, among other things, transfers data from the vending machine to the operator of the machine. MEI has only limited sales in VMS and telemetry in the EEA while Crane currently only sells those products outside the EEA.

VI. MARKET DEFINITIONS

VI.1. Unattended payment systems

VI.1.1. Product descriptions and end uses

15. According to the type of payment handled, unattended payment systems can be divided into coin payment systems, bill payment systems and cashless⁴ payment systems. The Parties' sales in cashless payment systems are currently limited⁵ and thus cashless payment systems will not be further discussed in detail in this decision.
16. There are three basic types of coin payment systems:
 - (i) *Coin acceptors*, which accept and validate coins. The coin drops into a slot at the top and rolls through an electromagnetic field generated by two coils. Sensors measure the disturbances and thus the thickness and diameter of the coin allowing it to validate the coin and determine the coin's authenticity.

⁴ For instance, card readers and other cashless.

⁵ Crane does not produce card readers and MEI manufactures card readers only in combination with bill handling products. With regard to other cashless, there is no overlap either, and Crane's EEA market share is [0-5]%.

- (ii) *Coin dispensers*, also called “hoppers”, which dispense pre-stored coins. Of the Parties, only Crane manufactures coin dispensers. Therefore, coin dispensers will not be further discussed in detail in this decision.
- (iii) *Coin recyclers*, which accept coins, sort and store them and return coins as change to customers by re-using the coins inserted by another customer. There are two types of coin recyclers: Coin recyclers based on tubes (also called "coin changers") store the coins of different denominations in separate tubes and dispense them out of the tubes. Coin recyclers based on hoppers store the coins of different denominations in separate hoppers and dispense them out of the hoppers. Coin recyclers based on hoppers have a higher capacity than coin recyclers based on tubes, as they can dispense more than one coin at a time and are used for high frequency and high capacity applications, such as self-check-out machines in supermarkets.

Figure 1: Examples of a coin acceptor, a coin dispenser, a coin recycler based on tubes and a coin recycler based on hoppers



Source: Form CO, paragraph 171

17. There are also three basic types of bill payment systems:
- (i) *Bill acceptors* provide for the automated acceptance and validation of bills utilising a light source as optic recognition technology. The light shines through the banknote and determines the value and whether it is genuine. Once validated, the note is transported through the system mechanically and stored loosely in a bag or another form of container or stacked in a box.
 - (ii) *Bill dispensers* dispense pre-stored bills. They may contain recognition technology to verify the value of the banknote before dispensing. As neither of the Parties manufactures bill dispensers, they will not be further discussed in detail in this decision.
 - (iii) *Bill recyclers* accept bills, sort and store them and return bills as change to customers by re-using the bills inserted by another customer. In addition to optical recognition technology, bill recyclers contain mechanical technology allowing for the transportation of the bills in and out of the recycler.

Figure 2: Examples of a bill acceptor, a bill dispenser and a bill recycler



Source: Form CO, paragraph 171

18. The Parties sell their unattended payment systems to four main groups of end users, these sub-segments are called “verticals” in the industry. According to the Notifying Party, the verticals comprise the following:

- Vending
 - Bottling that is the selling of soft drinks;
 - Full line that is the selling a range of goods, including hot and cold drinks, snacks and food as well as can and bottles.
- Gaming
 - Casinos;
 - Amusement with prize (“AWP”), which are gambling machines where there is no exercise of skill on the part of the user and the size of prize is commonly low.
- Retail
 - Retail self-check-out (“Retail SCO”), mainly used by large retail outlets;
 - Retail safes (no overlap between the Parties’ activities in the EEA);
 - Stand-alone coin dispensers (no overlap in the EEA);
 - Retail kiosks, which is the residual category for all sales not falling into any of the other categories of the four groups of end users; machines in this segment are diverse and include for instance photo kiosks, petrol garage kiosks or museum ticket kiosks.
- Transportation
 - Ticket vending in mass transit;
 - Off-street parking;
 - On-street parking (no overlap in the EEA).

VI.1.2. Product market definitions

19. The Commission has not previously examined the markets for unattended payment systems. However, it analysed the supply of cash handling products mainly to

customers in the financial sector in the case *M.6535 – Glory/Talaris*⁶ in 2012. In that case, the Commission left open (i) if cash handling products for customers in the financial and the retail sector should be included in the same product market and (ii) if the markets should be sub-segmented by type of cash handling product.

VI.1.2.1. Cash and cashless payment systems

20. The Notifying Party argues that cashless payment systems constitute an alternative to cash handling systems. It submits that cashless payment is growing and is viewed by many as the preferred method of payment so that in some locations almost all transactions are generally paid for without the use of cash. However, the Notifying Party acknowledges that all gaming machines and most vending machines, retail SCO machines and retail kiosks require cash payment systems, and that also in transportation cashless payment systems are not a one-to-one substitute to cash payment systems.⁷ Overall, the Notifying Party submits that it can be left open whether cashless systems should be included in the relevant product market since the proposed concentration is not likely to result in a significant impediment to effective competition under any alternative product market definition.
21. The results of the market investigation show that cash and cashless payment systems are complementary and do not fall into the same product market due to limited demand-side and lack of supply-side substitutability.
22. The majority of customers considered that cash payment systems cannot be substituted by cashless payment systems for their needs.⁸ In particular, customers pointed to differences in price, size and reliability of the systems. While some customers explained that there can be a degree of substitutability because cashless solutions can be easier for the end user and reduce the probability of fraud, the majority of customers explained that end customers still demand to pay cash and, accordingly, that cash payment cannot be substituted with cashless payment. This applies in particular to payments in public places and in the provision of public services. Customers acknowledged that there is a trend in the industry to move to cashless transactions⁹. However, this trend is described as being independent of short-term switches in reaction to relative price changes. Customers also pointed to high costs for cashless payment systems.
23. The customers explained that cash payment systems and cashless payment systems are complementary products and that they would consider buying cash payment systems in addition to cashless payment systems or vice versa.¹⁰

⁶ Commission decision COMP/M.6535 of 2 July 2012 – *Glory/Talaris Topco*.

⁷ Form CO, paragraphs 22, 160–168, 707 and 719.

⁸ Responses to question 23 of the Questionnaires to customers in vending, in gaming, in transport, in retail SCO and in retail kiosks; Minutes of the conference call of 14 March 2013 with a competitor.

⁹ Minutes of the conference call of 3 July 2013 with a customer.

¹⁰ Responses to question 24 of the Questionnaires to customers in vending, in gaming, in transport, in retail SCO and in retail kiosks.

24. The majority of competitors considered that the producers of unattended cash payment systems are not technically able to switch to the production of cashless payment systems and vice versa on short notice and without incurring a significant investment.¹¹ They explained that the products and industry standards are very different and require entirely different technical and design expertise. As a result switching production requires significant investments in terms of time and money. Furthermore, only a minority of competitors responding in the market investigation had any activities in cashless payment systems at all.¹²
25. The Commission thus concludes on the basis of the information submitted by the Notifying Party and the results of the market investigation that there is limited demand-side and supply-side substitutability between cash and cashless payment systems. Therefore, cash and cashless payment systems do not fall in the same product market. As a result, the Notifying Party's argument with regard to competitive pressure from cashless payment systems is not confirmed.

VI.1.2.2. Coin and bill payment systems

26. The Notifying Party recognises that the product characteristics, functionality and underlying technologies of coin and bill payment systems are different. According to the Notifying Party, the customers' choice between coin and bill payment systems will depend on what transaction takes place: some customers require only coin handling products or only bill handling products or both.¹³ The Notifying Party also acknowledges that supply-side substitutability is at best limited and that a manufacturer developing only coin handling products is not in a position to supply bill handling products immediately.¹⁴
27. The results of the market investigation go in the same direction. The Commission found no indications of demand-side substitutability. Competitors explained that the producers of coin payment systems are not technically able to switch to the production of banknote payment systems and vice versa on short notice and without incurring a significant investment.¹⁵ They explained that the technology used for the recognition of coins and bills is entirely different because coin payment systems recognise, distinguish and sort metal discs by using inductive sensing while banknote payment systems recognise, distinguish and sort paper by using optical sensors. Some competitors also explained that the development of a coin or banknote payment system requires expertise and substantial investments in terms of time and money.
28. The Commission also notes that there are a number of competitors in the markets who focus their activities either on coin or on bill payment systems. This becomes

11 Responses to question 22 of the Questionnaire to competitors in coins and to question 26 of the Questionnaire to competitors in bills.

12 Responses to question 5 of the Questionnaire to competitors in coins and to question 4 of the Questionnaire to competitors in bills.

13 Form CO, paragraph 172.

14 Form CO, paragraph 132.

15 Responses to question 10 of the Questionnaire to competitors in coins and to question 11 of the Questionnaire to competitors in bills; only two competitors in bill payment systems replied "I do not know" to that question.

apparent from the global and EEA market share data submitted by the Notifying Party.¹⁶ Alberici, Asahi Seiko, Sanden, SuzoHapp and wh'Münzprüfer are examples of competitors only selling coin products; Fujitsu, CI Tech, JCM and TNSi¹⁷ are examples of competitors only selling bill products.

29. The Commission thus concludes that there is no supply-side or demand-side substitutability between the production of coin and bill payment systems. Therefore, coin and bill payment systems do not fall in the same product market.
30. According to the Notifying Party, the overall markets for coin and for bill payment systems could each be subdivided further on the basis of the following three criteria:
 - (i) By functionality: this division is based on the payment functions of the system: accepting, dispensing, and recycling as described in paragraphs 16 and 17;
 - (ii) By end-use: this division is based on the applications in which the machines with an unattended payment system are used, that is vending, gaming, retail and transport, as described in paragraph 18;
 - (iii) By a combination of functionality and end-use: this further subdivision is based on a combination of the functionality with the end-use of the machine. It can lead to distinguishing, for instance, a market of coin acceptors used in vending machines.
31. However, the Notifying Party submits that the exact definition of the relevant product markets can ultimately be left open since the transaction does not give rise to a significant impediment to effective competition under any market definition.

VI.1.2.3. Sub-segmentation within coin payment systems

VI.1.2.3.1. Coin acceptors and coin recyclers

32. Coin acceptors come in two different sizes: smaller and cheaper with 3.5 inch and larger with 5 inch. The Notifying Party submits that there is one technology used in coin acceptors across all segments and thus, regardless of their size, coin acceptors are commodity products.
33. As to the supply-side substitutability, one of the respondents in the market investigation noted that technically there is no problem to switch between the two sizes of coin acceptors and that most of the manufacturers developed first the bigger 5 inch one and then miniaturised the components to create the 3.5 inch coin acceptor.¹⁸ Also the main competitors of the Parties in coin acceptors, such as Azkoyen, Comestero, wh'Münzprüfer all offer both the 3.5 inch and the 5 inch coin acceptors.¹⁹ Other than the size, the features of coin acceptors seem to be the same

¹⁶ Annexes 7.3(a) and 7.3(b) to the Form CO.

¹⁷ Toyo Network Systems & integration, also by respondents to the market investigation frequently referred to as "Toyocom" or "Toyo".

¹⁸ Response to question 14.1 of the Questionnaire to competitors in coins.

¹⁹ See Annex 6.3(b) to the Form CO.

and some customers clearly stated that they purchase both sizes.²⁰ The differences in prices between the two sizes of acceptors are small.²¹ Also the competitors noted that the same coin acceptors are sold in all the segments.²² It results from the above that there is no need to divide the overall market for coin acceptors further into 3.5 inch and 5 inch coin acceptors or to distinguish between coin acceptors for different end-uses.

34. According to the Notifying Party, a combination of a coin acceptor with one or more coin dispensers has the same functionality as the coin recycler and that these two can be used interchangeably, with the potential constraint resulting from the size of the machine in which the payment system is placed, since a compact coin recycler can fit into a smaller machine than the combination of an acceptor and dispenser(s). The Notifying Party admits that due to the size constraint in retail and in vending there is a clear preference towards coin recyclers over a combination of coin acceptor with a coin dispenser. In any case the Notifying Party claims that the product market definition can be left open in this case.
35. Based on the market investigation the Commission found that supply-side substitutability between the coin acceptors and coin recyclers does not exist, since the clear majority of the competitors said they are not technically able to switch between the production of coin acceptors and coin recyclers on short notice and without incurring a significant investment.²³
36. In the course of the market investigation customers explained that their needs determine which option is chosen, i.e. for higher capacity applications a combination of a coin acceptor with several coin dispensers is better than a coin recycler.²⁴ Customers active in vending pointed out that the size of a standard vending machine does not allow for the incorporation of a coin acceptor and coin dispenser combination.²⁵
37. The Commission thus concludes that the supply-side and demand-side substitutability between coin acceptors and coin recyclers are limited. Therefore coin acceptors and coin recyclers do not fall in the same product market.

VI.1.2.3.2. Different types of coin recyclers

38. According to the Notifying Party, the characteristics of a tube-based coin recycler are: a relatively small size, low throughput and low cost. Due to its limited capacity it is not suitable for applications such as retail, where a hopper-based coin recycler is used instead.

20 Response to question 14.1 of the Questionnaires to customers in transport, in gaming and in retail kiosks.

21 Response to question 13.3 of the Questionnaire to customers in retail kiosks.

22 Response to question 18 of the Questionnaire to competitors in coins.

23 Responses to question 12 of the Questionnaire to competitors in coins.

24 Responses to question 11.1 of the Questionnaire to customers in vending.

25 Responses to question 11.1 of the Questionnaire to customers in vending.

39. Those differences between high-capacity coin recyclers based on hoppers and low capacity coin recyclers based on tubes were also pointed out in the market investigation by all competitors²⁶ and by the majority of the customers²⁷.
40. As to supply-side substitutability between tube-based and hopper-based coin recyclers, all competitors indicated that switching between these two types of coin recyclers is not possible on short notice and without incurring a significant investment.²⁸ One competitor stated that the two types of coin recyclers are entirely different and switching from one to another means starting a production of a completely different product.²⁹ Another competitor noticed that since these two types of coin recyclers are required for different applications, a small increase in price would not induce them to alter their product offering.³⁰ Limited supply-side substitutability is also confirmed by the fact that Crane's competitors in coin recyclers are different for coin recyclers based on tubes (MEI, Azkoyen, Sanden, Coinco, Jofemar) and for coin recyclers based on hoppers (Asahi Seiko).
41. As to demand-side substitutability, the majority of customers in vending³¹, who are the most important customer group for tubes-based coin recyclers, stated that coin recyclers based on hoppers are not substitutable with those based on tubes because of differences in size (with hopper-based recyclers being larger³²), price (with hopper-based recyclers being more expensive³³) and capacity between the two types of recyclers.³⁴ The lack of demand-side substitutability has also been pointed out as regards the other verticals.³⁵
42. The Commission thus concludes that, due to the lack of supply-side and demand-side substitutability, coin recyclers based on tubes belong to a separate product market than those based on hoppers.
43. MEI does not offer a coin recycler based on hoppers. Since there is thus no overlap in this segment, the following section VI.1.2.3.3 will focus on coin recyclers based on tubes.

26 Responses to question 4 of the Questionnaire to competitors in coins.

27 Responses to question 15 of the Questionnaire to customers in vending, gaming, retail SCO, retail kiosk and transport. Many of those customers who said that such a distinction does not exist also stated that they do not use coin recyclers at all (in particular in gaming).

28 Responses to question 15 of the Questionnaire to competitors in coins.

29 Response to question 15 of the Questionnaire to competitors in coins.

30 Response to question 16 of the Questionnaire to competitors in coins.

31 The Commission also notes that half of the respondents confirming such substitutability do not buy either of these coin recyclers.

32 Response to question 16.1 of the Questionnaire to customers in vending.

33 Response to question 16.1 of the Questionnaire to customers in vending.

34 Responses to question 16 of the Questionnaire to customers in vending.

35 This was confirmed by all of the customers in gaming, and in retail SCO, as well as the majority of customers in retail kiosks and in transport. See responses to question 16 of the Questionnaire to customers in vending, gaming, retail self-checkout, retail kiosk and transport.

VI.1.2.3.3. Coin recyclers based on tubes for different end uses

44. According to the Notifying Party, coin recyclers based on tubes are predominantly used in the vending and retail kiosk segments. In transport applications tube-based coin recyclers are used usually only in low-throughput applications or for small machines.
45. Indeed [...] of Crane's tube-based coin recyclers are sold in vending, while [...] are sold in transport, [...] in retail and the remaining part [...] in gaming.³⁶ For all these verticals, Crane sells the same coin recycler based on tubes, i.e. the Currenza C² model.³⁷ MEI sells [...] out of its six models of tube-based coin recyclers solely in vending, while for the remaining [...] almost [...] and [...] are sold in vending and the rest in transport [...] and retail kiosks.³⁸
46. The fact that coin recyclers based on tubes are particularly relevant for vending was pointed out in the market investigation.³⁹ Many of the customers in the transport segment stated that they are using coin recyclers based on hoppers.⁴⁰ Similarly, many customers in the gaming segment stated that they are not using coin recyclers at all.⁴¹ A customer in the retail SCO segment noted that "*[i]n the retail segment the tube changers do not offer the required input capacity, performance, storage capacity and security.*"⁴²
47. Since tube-based coin recyclers are not designed for a particular vertical, but can be used across various verticals, although they are in practice used only to a small extent in other verticals than vending, it is not necessary to distinguish between coin recyclers based on tubes for different segments and instead an overall market for tube-based coin recyclers will be assessed.

VI.1.2.4. Conclusion on the product market definitions in coin payment systems

48. The Commission concludes that there are separate product markets for coin recyclers and coin acceptors. With respect to coin recyclers, a separate market for coin recyclers based on tubes can be distinguished, as opposed to coin recyclers based on hoppers. While it is noted that coin recyclers based on tubes are used predominantly in the vending segment, it is not necessary to subdivide the market for tube-based coin recyclers according to their end-use. For the purposes of this decision, the

36 Annex 6.3(e)(ii) to the Form CO.

37 See Tables 68 and 75 in the Form CO, in which the Notifying Party admits that for the transport and retail kiosk segment Crane sells the same model of the coin recycler based on tubes as the one sold in vending.

38 Annex 6.3(e) (i) to the Form CO.

39 For instance the response of a competitor to question 18 of the Questionnaire to competitors in coins and the response of a customer to question 2.4 of the Questionnaire to customers in vending.

40 Responses to questions 2.4 and 16 of the Questionnaire to customers in transport. Minutes of the conference call of 20 June 2013 with a customer in transport.

41 Responses to question 2.4 of the Questionnaire to customers in gaming.

42 Response to question 16 of the Questionnaire to customers in retail SCO, also similar responses to question 16 of the Questionnaire to customers in retail kiosks.

Commission will assess the competition effects of the proposed transaction with respect to the product markets for (i) coin acceptors and (ii) coin recyclers based on tubes. As the Parties' activities do not overlap with respect to coin recyclers based on hoppers, they are not assessed further in this decision.

VI.1.2.5. Sub-segmentation within bill payment systems

VI.1.2.5.1. Bill acceptors and bill recyclers

49. According to the Notifying Party, a bill acceptor and a bill dispenser can be combined to provide similar functions as a bill recycler. Bill recyclers could thus be substituted by a combination of a bill acceptor and a bill dispenser in most applications, including retail SCO, mass transport and off-street parking. Those combinations are generally cheaper than recyclers. The difference between the two options is that a combination of an acceptor and a dispenser needs to be emptied and refilled with cash whereas the recycler simply re-uses the introduced cash, thus reducing the running costs for the operators.⁴³ However, according to the Notifying Party, the product market definition can be left open in this case.
50. The Commission notes that there are substantial differences in product characteristics since bill recyclers are compact units offering the accepting and dispensing function all in one. Bill recyclers thus include technology to transport bills in and out of the system, to stack bills and to subsequently remove single bills from the cash box, increasing the risk of paper jams and requiring higher levels of technological know-how.
51. The Commission takes into account the fact that there is a degree of specialization of bill payment manufacturers in the industry. While, according to EEA market share data submitted by the Notifying Party⁴⁴, Crane, MEI, JCM, Innovative and TNSi sold both acceptors and recyclers in 2012, competitors ICT, Azkoyen and Giesecke & Devrient ("G&D") only sold bill acceptors and competitors Merkur and Fujitsu currently only sold bill recyclers.
52. The Commission notes that bill recyclers were introduced in the market fairly recently. Crane introduced its first bill recycler product in 2005 while MEI launched its bill recycler in 2009. Sales of bill recyclers have been growing in importance over the past years, in particular in Europe. This trend is also apparent from [...].⁴⁵
53. The industry trend towards recycling in bill payment systems, as acknowledged by the Parties, was also pointed out by the respondents in the market investigation.⁴⁶ Competitors explained that “[b]ill payment systems will move more towards having recyclers as standard, this will happen in all sectors with different specifications of

43 Form CO, paragraph 178.

44 Annex 7.3(b) to the Form CO.

45 Annex 5.5(a) to the Form CO, Document 964: "Crane Payment Solutions Strategic Plan 2001-2014", p. 125: Crane stated with regard to fare collection: [...] and also Annex 5.5(a) to the Form CO, Document 810 "Crane Payment Solutions Presentation", p. 42: [...].

46 Responses to question 80 of the Questionnaire to competitors in bills.

product.”⁴⁷ “In vending [...] [r]ecycling is not very well accepted. In gaming – AWP markets definitely ask for bill recyclers and the demand is growing in many countries. [...] In retail – the market is still growing and the bill recycler is more and more demanded. In transport – the market is definitely going towards bill recycling.”⁴⁸ Customers also shared these views.⁴⁹

54. The results of the market investigation on substitution between bill recyclers and acceptors, while not entirely conclusive, do not appear to show that there is a sufficient degree of substitutability to include the different systems in one relevant product market.
55. As regards demand-side considerations, the overall majority of customers did not consider that recyclers are substitutable with combinations of acceptors and dispensers.⁵⁰ However, the Commission notes there was no majority view among the responding customers in the retail and transport verticals on that question. Explaining their answers, customers pointed to the design of the cabinets which may not be sufficient in size to incorporate an acceptor/dispenser combination, the advantages of using bill recyclers in high volume accounts, the differences in purchasing price and running costs, the differences in operations and the differences in risk because high amounts of cash have to be stored in acceptor/dispenser combinations⁵¹.
56. The customers’ responses to the Commission’s questions on their reactions to hypothetical relative price changes also indicated that bill recyclers and bill acceptors form distinct markets. Only around half of the customers stated that they would switch to the purchasing of acceptors and/or dispensers if the price for recyclers increased by 5-10%.⁵² Moreover, the majority of customers in all segments stated that they would not switch to purchasing recyclers if the price for acceptors and/or dispensers increased by 5-10%.⁵³
57. As regards competitors, these found that recyclers are generally substitutable with combinations of acceptors and dispensers from a customer’s point of view with regard to functionality.⁵⁴ At the same time however, competitors explained that recyclers can be too expensive to constitute a viable alternative for some applications, that running costs and operations differ and that each machine requires

47 Response to question 80 of the Questionnaire to competitors in bills.

48 Response to question 80 of the Questionnaire to competitors in bills.

49 Responses to question 67 of the Questionnaires to customers in vending, in gaming, in transport, in retail SCO and in retail kiosks.

50 Responses to question 17 of the Questionnaires to customers in vending, in gaming, in transport, in retail SCO and in retail kiosks.

51 Responses to question 17 of the Questionnaires to customers in retail kiosks and in transport.

52 Responses to questions 18 of the Questionnaires to customers in vending, in gaming, in transport, in retail SCO and in retail kiosks.

53 Responses to questions 19 of the Questionnaires to customers in vending, in gaming, in transport, in retail SCO and in retail kiosks.

54 Responses to question 12 of the Questionnaire to competitors in bills.

a tailor-made solution,⁵⁵ all of these aspects making short-term substitution in response to relative price increases unlikely. Moreover, competitors explained that combination solutions will be replaced by recycling solutions as recycling solutions are becoming economically more and more attractive.⁵⁶ This suggests again that the choice of using bill recyclers instead of acceptor/dispenser combinations follows a long-term trend resulting from technological innovations in the industry, rather than the kind of short-term price-induced substitution that is relevant for market definition purposes.

58. As regards supply-side considerations, the competitors did not agree whether producers of bill acceptors are technically able to switch to the production of bill recyclers and vice versa on short notice and without incurring significant investments.⁵⁷ However, several competitors explained that developing and producing a reliable bill recycler requires several years of mechanical and electronic engineering due to challenges in the technology.⁵⁸
59. Taking into account the differences in product characteristics and technologies, a certain degree of specialization of bill payment producers, as well as the market investigation results, the Commission finds that bill acceptors and bill recyclers most likely do not fall into the same product market. In any event, as discussed further below, since the transaction raises serious doubts with respect to both bill recyclers and bill acceptors used in transport applications and since the Notifying Party has submitted remedies for both these markets, the market definition can ultimately be left open in this respect.

VI.1.2.5.2. Bill acceptors and bill recyclers for different end-uses

60. According to the Notifying Party, examining the supply of unattended payment systems on the basis of end-use is useful for analysing the competitive dynamics, the closeness of competition between the Parties and to reflect the importance of customer relationships. However, the Notifying Party also submits that there is a high degree of supply-side substitutability across the end-uses for bill acceptors and bill recyclers.⁵⁹ The Notifying Party submits that customising the products for the different end-uses is easy and that due to economies of scale there are large incentives to develop products which can be quickly and cheaply adapted to reach as many customer groups as possible. However, according to the Notifying Party, the product market definition can be left open in this case.
61. As will be shown below, the Commission finds that there are separate product markets for bill payment products used in transport applications due to differences in product characteristics, due to a lack of sufficient supply-side substitution because of technological requirements and due to differences in competitive dynamics.

55 Response to question 12 of the Questionnaire to competitors in bills.

56 Response to question 12 of the Questionnaire to competitors in bills.

57 Responses to question 13 of the Questionnaire to competitors in bills.

58 Responses to question 13.1 of the Questionnaire to competitors in bills.

59 Form CO, paragraph 181ff.

62. Regarding other verticals, such as retail SCO, gaming, vending and retail kiosks, the Commission sees indications that bill acceptors and bill recyclers for each of these verticals might constitute separate product markets for similar reasons as outlined in paragraph 61. However, for the purposes of this decision, this question can be left open. No competition concerns arise in those potential markets even under the narrowest product market definition distinguishing between bill acceptors and bill recyclers and distinguishing by vertical.

Differences in product characteristics

63. The Commission finds that bill acceptors and recyclers used for different end-uses, generally have different product characteristics and there is no or very limited demand-side substitution in the sense that a transport customer could use a product that was developed for, for instance, a gaming application.
64. This becomes already obvious from the following tables which set out the characteristics of bill recyclers and bill acceptors for different applications.
65. Bill acceptors have the following specific characteristics for different applications.

Table 1 Characteristics and prices of bill acceptors by vertical

Bill Acceptors	PRODUCT CHARACTERISTICS							
	Vending		Gaming		Retail		Transportation	
	Full Line	Bottling	AWP	Casino	SCO	Kiosks	Off-Street Parking	Mass Transport
Metal Bill Inlets to reduce vandalism	No	No	No	No	No	A diverse range of products is sold to retail kiosk customers	Yes	Yes
Multi-Note Escrow	No	No	No	No	No		Yes	Yes
Note Storage Capacity	Low	Low	Low	Low	Medium		Medium	High
Lockable note storage	No	No	No	Yes	No		Yes	Yes
Cash-box Memory	No	No	No	Some	No		No	Yes
Price Ranges	[...]	[...]	[...]	[...]	[...]		[...]	[...]

Source: Form CO paragraph 184, reformatted by the European Commission

66. Bill recyclers share many of the characteristics of bill acceptors, for instance regarding the metal bill inlets and multi-note escrow functionality. In addition, bill recyclers have the following specific characteristics for different applications.

Table 2 Additional characteristics and prices of bill recyclers by vertical

Bill Recyclers	PRODUCT CHARACTERISTICS							
	Vending		Gaming		Retail		Transport	
	Full Line	Bottling	AWP	Casino	SCO	Kiosks	Off-Street Parking	Mass Transport
Number of denominations recycled	Bill recyclers are not used in vending		1-3	Bill recyclers are not used in casinos	3-4	A diverse range of products is sold to retail kiosk customers	2-4	3-4
Cash-box recycling capacity			Medium		Medium		High	High
Price Ranges			[...]		[...]		[...]	[...]

Source: Form CO paragraph 184, reformatted and adapted by the European Commission

67. In particular, the bill payment systems used in transport applications differ in characteristics and price from the bill payment systems offered for other applications. Bill payment systems for transport applications have to be specifically

designed to be able to be placed outside or in remote locations where they might have to be battery powered and where they can be exposed to harsh weather conditions and subject to vandalism. The Notifying Party explained that it is therefore necessary to have a more vandal-resistant bezel and certain protective coatings, in particular to protect the circuitry within the acceptor from harsh weather conditions.

68. Bill payment systems sold to transport customers have to operate at high speed and with high capacity. They might also include a full note escrow function, especially when sold to mass transport and certain off-street parking customers.⁶⁰ The escrow function allows the exact same bills to be returned to the customer if the transaction is cancelled. To this end the inserted bills are held in escrow and not stacked in the cashbox until all bills have been inserted and validated. In addition, bill recyclers sold to transport customers have to be able to recycle more than two denominations.
69. Equally, competitors in the market investigation identified these features as key features of bill payment systems for transport applications.⁶¹
70. In addition to these technical features, the tables above show the big differences in sales prices. The low-end bill acceptors, which are exclusively models mounted on the door of the machines ("backload bill acceptors"), are sold to vending customers at sales prices around EUR [...]. The high-end bill acceptors, exclusively models which are mounted on the chassis of the machines ("frontload bill acceptors"), are sold to transportation customers, in particular to mass transport customers, at sales prices around EUR [...]. Similar price differences exist between bill recyclers sold to transport customers and bill recyclers sold to gaming customers.
71. As regards bill payment systems sold to retail SCO customers, these have to have a large note storage capacity and high reliability. In contrast, bill payment systems for retail kiosks, which is the residual category for all sales not falling into any of the other verticals, do not share specific characteristics since a diverse range of products is sold to these customers. As regards bill acceptors sold to gaming customers, these also have more limited specific features with the potential exception of casino customers with increased security requirements.
72. Due to the differing requirements of the end-uses, products are designed for a particular application. According to one competitor, if a supplier were to try to sell a product into a vertical that was originally developed for another vertical, the supplier will not be successful.⁶²

⁶⁰ Form CO, paragraphs 208 and 209.

⁶¹ Responses to question 24 of the Questionnaire to competitors in bills; Minutes of the conference call of 14 March 2013 with a competitor; Minutes of the conference call of 21 March 2013 with a competitor. Competitors explained that "*[i]n transport market, the reliability and durability are by far the most important and not all companies are able to develop the products to the quality required in the market.*" Response to question 19.1 of the Questionnaire to competitors in bills. "*Bill handling products in [ticket vending machines] for mass transit have to be very reliable and resistant, 'heavy duty', because they are often far from service centres, while the products for gaming are located indoors and thus less resistant.*" Minutes of the conference call of 16 April 2013 with a competitor.

⁶² Response to question 20.1 of the Questionnaire to competitors in bills.

Supply side substitution

73. Due to the technical features, which require special know-how and technology, suppliers cannot easily switch production from bill payment systems for different verticals to bill recyclers and bill acceptors used in transport applications. According to competitors, not all companies are able to develop the products to the quality required in the market⁶³ and large investments are needed for the high end technology.⁶⁴

Differences in competitive dynamics

74. The view that different verticals may constitute different markets is also supported by the fact the competitive landscape differs from one vertical to the other. For example, the Parties' customers are generally specialised in one vertical and are not active across several verticals. By the same vein, suppliers of bill payment systems differ between the different verticals. Although competitors may try to sell to several verticals,⁶⁵ actual sales and market shares differ considerably across the different verticals. For instance, while the Parties reach a combined market share of [70-80]% in bill acceptors for transport customers, they reach combined market shares of [20-30]% and [40-50]% in bill acceptors for gaming and retail customers respectively. Similarly, while the Parties reach a combined market share of [90-100]% for bill recyclers for transport customers, they only have a combined market share of [20-30]% in bill recyclers for retail customers. With regard to gaming, MEI is not even active in bill recyclers for gaming applications and Crane's share is [10-20]%.
75. Other producers of bill payment systems are also focused on one or two verticals only. For instance, based on EEA market share data submitted by the Notifying Party, TNSi only supplies bill payments systems to [...]; Innovative and JCM focus their sales of bill recyclers on [...] while Glory sells its bill recyclers exclusively to [...]. As regards bill acceptors, the specialization of competitors is less pronounced. However, also in bill acceptors TNSi and G&D⁶⁶ sell only to [...], while Innovative focuses its sales on [...]. At the same time, Azkoyen and Coinco sell mainly to [...]. Only JCM has a stronger presence in bill acceptors across several verticals.⁶⁷
76. The Commission therefore finds that due to a specialization of customers and competitors, the competitive dynamics differ for the marketing of bill payment products in the different verticals which also indicates that the products for different verticals constitute distinct markets.

63 Response to question 20 of the Questionnaire to competitors in bills.

64 Response to question 21 of the Questionnaire to competitors in bills.

65 Responses to questions 19 and 20 of the Questionnaire to competitors in bills.

66 G&D has in the meantime contributed its activities in unattended payment systems into the company CI Tech, a joint venture with Wincor Nixdorf.

67 Annex 7.3(b) to the Form CO.

Conclusion on bill acceptors and bill recyclers for different end-uses

77. The Commission concludes that based on the differences in product characteristics, lack of sufficient supply-side substitution and differences in competitive dynamics, there are at least separate product markets for bill recyclers and bill acceptors used in transport applications. Regarding other verticals, the Commission sees indications that bill acceptors and bill recyclers for each of these verticals might constitute separate product markets. However, for the purposes of this decision, this question can be left open as no competition concerns arise in those potential markets even under the narrowest product market definition.

VI.1.2.6. Conclusion on product market definitions in bill payment systems

78. The Commission concludes that there are most likely separate product markets for bill recyclers and bill acceptors although the market definition can be left open in this respect.
79. In addition, there are at least separate product markets for bill recyclers and acceptors used in transport applications. However, for the purposes of this decision, it can be left open whether there are also separate markets for bill payment systems sold in each of the retail SCO, vending, gaming and retail kiosks verticals. No competition concerns arise in those potential markets even under the narrowest product market definitions distinguishing between bill acceptors and bill recyclers and distinguishing by vertical.

VI.1.3. *Geographic market definitions*

80. The Notifying Party puts forward that the geographic scope is at least EEA-wide and most likely global for vending and retail kiosk; at least EEA-wide if not global for gaming, (although AWP could, theoretically, be considered national in scope because of national legislation applicable to AWP⁶⁸); and global for retail SCO and transport.
81. The Notifying Party argues that unattended payment systems are designed to be capable of handling most currencies with very minor modifications and most suppliers cover all currencies with their products. In addition, products used are essentially the same across geographies and transport costs are low relative to the value of the product. Furthermore, manufacturing and sales and marketing are performed on a global or at least EEA-wide basis. The Notifying Party further submits that support services are easily established and that there are no other barriers to selling across different geographies.
82. The Notifying Party's arguments regarding the geographic scope of the relevant markets are not corroborated by the differences in competitive conditions that exist between the different regions of the world. Despite the fact that the suppliers are based outside the EEA or have manufacturing sites outside the EEA and serve from

⁶⁸ With regard this segment, the Notifying Party argues that there is a certain degree of adaptation of the unattended payment system to meet local demands. In particular, there are national rules on the volume of cash that can be gambled at AWP machines (i.e. regulations on maximum stakes and prizes). This in turn influences the choice of payment system, particularly in bill handling products.

there the EEA, the competitive dynamics seem to vary considerably between North America, Europe and Asia respectively. Different competitors are present or have different market shares in the EEA compared to, for example, the US, and also the customers are different.

83. For instance, Coinco has a stronger position in coin recyclers in North America than in the EEA ([0-5]% in the EEA compared to [10-20]% in North America and around [20-30]% in the U.S.).⁶⁹ Wh'Münzprüfer has a stronger position in coin acceptors in North America than in the EEA ([20-30]% compared to [10-20]%). The EEA market is also characterised by a number of regional players. For example, competitors Azkoyen and Jofemar are active in coin recyclers and Alberici and Comestero in coin acceptors in the EEA only, but not in North America. Microcoin, on the other hand has virtually no sales of coin acceptors to the EEA but has an [5-10]% market share in North America.
84. As to the bill products, ICT sells bill acceptors in the EEA but has very limited sales in North America ([5-10]% compared to [0-5]%). Innovative Technology is a relevant player in both bill acceptors ([10-20]%) and bill recyclers ([5-10]%) in the EEA, but hardly present in North America ([0-5]% and [0-5]%).⁷⁰
85. The Notifying Party's arguments are also not confirmed by the Parties' own internal documents. These documents also indicate that the EEA is a separate market. In particular, in the transport segment, MEI assesses the competitive landscape at the following three levels: America, Europe and Asia-Pacific plus China. In each geographic segment different competitors are identified.⁷¹ With regard to vending, the competitive situation in the internal documents is also assessed according to the geographic areas North America, Europe and Rest of the World, with specific European competitors (Azkoyen, Comestero) and customers (Selecta, Autobar) identified.⁷² It is also clear from the financial accounts that Crane reports vending figures for Europe and North America separately.⁷³
86. Although there were indications that some competitors and customers for both coin and bill products look at the markets globally,⁷⁴ the market investigation equally indicated that a national or at least regional presence for service and technical support is important in order to be considered as a potential supplier.⁷⁵

⁶⁹ Annexes 7.3(a) and 7.3(b) to the Form CO.

⁷⁰ Annexes 7.3(a) and 7.3(b) to the Form CO.

⁷¹ See MEI internal document "MEI Transport Channel Review", slides 42-44, Annex 5.5(b) to the Form CO.

⁷² Annex 5.5(a) to the Form CO, Document: CVS 6 CPS Global Vending – Final.

⁷³ Annex 5.5(a) to the Form CO, Document 964: "Crane Payment Solutions Strategic Plan 2012 – 2015", August 2012, page 27.

⁷⁴ Responses to question 23 of the Questionnaire to competitors in coins, to question 27 of the Questionnaire to competitors in bills, to question 32 of the Questionnaires to customers in vending, gaming, retail SCO, retail kiosk and transport and to question 16 of the Questionnaire to customers in ticket vending.

⁷⁵ Minutes of the conference call of 15 April 2013 with a customer in transport: "*New competitor should have maintenance services located next to [...]s business*". Minutes of the conference call of 18 June 2013 with another customer in transport: "*[...] would prefer European / European focused suppliers because it is more practical to source products from its HQ in Austria. In addition, European suppliers care more than the*

87. With regard to price differences across regions, there were indications in the market investigation that price levels can differ appreciably between regions.⁷⁶ Competitors said: *"In less competitive markets price can be higher as much as 20%", "some countries need a slightly lower price than other countries depending on the local economy conditions or volume of products needed."* *"[T]he amusement and gaming customers in Spain and UK ask for very low prices, and the producers of bill payment systems offer aggressive prices to these markets, perhaps 10 – 20% less compared to the other market."*⁷⁷ Customers explained that prices in the US are cheaper than in the EU, and that there can be 10-20% difference across the regions. Customers also mentioned that within the EEA Southern Europe is traditionally cheaper than Northern or the rest of Europe.⁷⁸
88. With regard to quality differences of suppliers of different regions, the comments suggest that North American, European and Japanese products, including products of Crane and MEI, are regarded as having a higher quality. In contrast, other Asian suppliers, i.e. excluding Japanese manufacturers, are perceived as having lower quality products and competing rather on volume than on quality.⁷⁹
89. The Commission also notes that the national gaming regulations do not influence the features of the payment system but instead set the requirements for the gaming machine (Video Lottery Terminal or the AWP machine). These requirements concern, inter alia, the amount of money that can be gambled, won and lost. For this reason gaming machines are equipped with a technical device which controls the score and allows the player to win the money.⁸⁰ Therefore it is not that the payment system has to be tailored to specific national requirements in a given jurisdiction, but rather that the regulation influences the choice of the payment system among the existing ones. For instance, where low amounts of money can be gambled a low-end payment system will be chosen. In addition, the Commission notes that the scope of

American focused suppliers about solving problems or changes in the European market. Asian based companies are quite slow at adapting to changes in Europe and many Asian companies have not yet established a reputation synonymous with high quality".

- 76 Responses to question 26 of the Questionnaire to competitors in coins and to question 30 of the Questionnaire to competitors in bills.
- 77 Response to question 26 of the Questionnaire to competitors in coins and to question 30 of the Questionnaire to competitors in bills.
- 78 Responses to question 28 of the Questionnaires to customers in vending, gaming, retail SCO, retail kiosk and transport.
- 79 Responses to question 24 of the Questionnaire to competitors in coins and responses to question 28 of the Questionnaire to competitors in bills: *"[there are] many producers [...] in the world, but in general the quality of Asian producers is not very high, except Japan. Japanese producers offer in general high-quality bill payment systems to different industries, from low-cost amusement market to the high-end banking and transport markets. US and European producers normally offer high-quality products with some exceptions. Some American and European produces have excellent reputation of quality but a few have relatively poor reputation due to the high failure rate in the field."* See also the responses to question 26 of the Questionnaire to customers in vending and in gaming.
- 80 "Study of gambling services in the Internal Market of the European Union", prepared by the Swiss Institute of Comparative Law, of 14 June 2006.

activities of the gaming customers is at least EEA-wide⁸¹ and in most cases they procure payment systems also from the suppliers across the borders.⁸²

90. Taking into account the body of evidence, the Commission concludes that the geographic scope of the market for bill and coin payment systems and its sub-markets is EEA-wide.

VI.2. Vending machines

VI.2.1. Product market definition

91. The Commission has previously distinguished, while leaving the exact market definition open, three types of food and drink distribution machines: (i) vending machines, (ii) beverage machines used in hotels, restaurants and catering ('HoReCa') and (iii) office coffee machines.⁸³
92. While Crane is active in all of the above-mentioned types of machines, only vending machines are relevant for the purposes of this decision as only they include payment mechanisms and, therefore, a vertical link only exists between them and the unattended payment systems manufactured by the Parties. The Commission will thus assess the vertical link between the Parties' activities on the basis of the narrower product market for only vending machines without taking a final view on the product market definitions in food and distribution machines.
93. The Commission has previously also considered that the product market for vending machines could potentially be subdivided according to the products they dispense into: (i) hot and cold beverages ('H&C'); (ii) snacks and food ('S&F'); (iii) cans and bottles ('C&B') vending machines. However, the relevant market definition was ultimately left open.⁸⁴
94. The Notifying Party submits that the exact market definition concerning vending machines can be left open for the purposes of assessing the transaction as no competition concerns would be identified even under the narrowest possible market definition.
95. While the market investigation appears to support the view that H&C, S&F and C&B vending machines might not be interchangeable with each other,⁸⁵ the exact market definition of vending machines can be left open as the competitive assessment is not affected by whether vending machines are further divided into categories according to the types of products they dispense.

81 Responses to question 1.1 of the Questionnaire to customers in gaming.

82 Responses to question 25 of the Questionnaire to customers in gaming.

83 Commission decision COMP/M.5338 of 31 October 2010 – *Barclays / Investcorp / N & W Global Vending*, paragraphs 10-12.

84 Commission decision COMP/M.5338 of 31 October 2010 – *Barclays / Investcorp / N & W Global Vending*, paragraph 12.

85 Responses to questions 8 and 9 of the Questionnaire to competitors in vending machines.

VI.2.2. *Geographic market definition*

96. The Commission has previously left open the question of whether the relevant geographic market for food and drinks distribution machines, including vending machines, was EEA-wide or national.⁸⁶
97. The Notifying Party submits that the relevant geographic market for vending machines is likely to be EEA-wide. The Notifying Party supports its view by referring to the same machines being used across Europe, the European demand for vending machines being satisfied by manufacturing in a limited number of countries and the largest customers operating at least Europe-wide. The Notifying Party further notes that while some vending machines are imported into the EEA, the relatively high transport costs limit the possibility of supplying vending machines globally.
98. The responses in the market investigation concurred with the Notifying Party's claim that the market for vending machines is not global. Some respondents indicated technical differences between machines sold within the EEA and in the rest of the world and the majority of respondents also noted that there are barriers to trade, such as customs duties, between the EEA and at least some countries in the rest of the world.⁸⁷ The Commission finds that those factors are arguments against defining the relevant geographic market as global.
99. While some responses could be seen to point to national markets, a majority of respondents nonetheless replied that a vending machine manufacturer is able to sell its products to all parts of the EEA from a manufacturing plant anywhere in the EEA.⁸⁸
100. In summary, the Commission considers that the relevant geographic market for vending machines is likely to be EEA-wide. However, it can be left open for the purposes of this decision whether the market is national or EEA-wide as the exact market definition does not affect the competitive assessment.

VI.3. Vending Management Solutions and Telemetry

VI.3.1. *Product market definition*

101. *Telemetry* is a form of wireless communication between a vending machine and its operator using a piece of hardware installed on the vending machine, a so-called telemeter. A telemeter functions much like a mobile phone, for example using GPRS⁸⁹ and a SIM-card⁹⁰, and allows the transmission of data for the purposes of,

⁸⁶ Commission decision COMP/M.5338 of 31 October 2010 – *Barclays / Investcorp / N & W Global Vending*, paragraph 22.

⁸⁷ Responses to questions 11 and 16 of the Questionnaire to competitors in vending machines.

⁸⁸ Responses to questions 11, 14 and 15 of the Questionnaire to competitors in vending machines.

⁸⁹ General Packet Radio Service.

⁹⁰ Subscriber Identity Module.

for instance, cashless payments and vending management solutions, and can also send alerts from the vending machine to the operator.

102. VMS is a piece of software that allows a vending operator to manage its operations by analysing data such as vending machine performance and sales amounts. VMS software can be used in combination with telemetry to provide wireless and automatic updates of data from the vending machine to the VMS software.⁹¹
103. Telemetry and VMS are described by the Notifying Party as 'add-ons' to vending operations and vending machines.⁹² The Notifying Party further submits that the equipment and software used is the same regardless of the type of vending in question, for example bottles or full-line.
104. The Commission considers that the exact product market definition can be left open for the purposes of this decision as no competition concerns have been identified in relation to telemetry or VMS.

VI.3.2. Geographic market definition

105. While the Notifying Party does not put forward an exact geographic market definition, it discusses telemetry and VMS separately for the EEA in its submissions.
106. Respondents to the market investigation explained that the EEA would constitute a separate market for these products on the basis of, e.g. different competitors being present within the EEA than in the rest of the world.⁹³ The Commission notes in this context that while both of the Parties are present in these products in the US, only MEI sells them in Europe. Since telemetry and VMS are products that are sold as add-ons to vending machines, the Commission considers that the geographic market is likely to be of the same scope as the market for vending machines, either national or EEA-wide. However, the exact geographic market definition can be left open for the purposes of this decision as no competition concerns have been identified in relation to telemetry or VMS under the alternative market definitions.

VII. COMPETITIVE ASSESSMENT

VII.1. Introduction

107. The proposed transaction gives rise to a number of affected markets in the EEA. The following will present the horizontal assessment, the vertical assessment as well as conglomerate issues of the proposed transaction.

⁹¹ An alternative method is collecting the same data manually or using a hand-held device to read the data from the vending machine when a representative of the vending operator visits the machine. This does not however, in contrast with telemetry, allow for automatic and constant updates to the VMS. As the Parties are not active in the production of hand-held devices, they are not discussed further in this decision.

⁹² While the presence of both telemetry and VMS may be limited in the EEA at present, the Notifying Party expects them becoming more popular in the medium term. See Form CO, paragraphs 246 and 256.

⁹³ Minutes of the conference call of 26 June 2013 with a competitor and of 26 June 2013 with a customer in vending.

108. The horizontal overlaps between the Parties' activities give rise to the following narrowest affected markets:
- coin recyclers based on tubes in the EEA;
 - coin acceptors in the EEA;
 - bill recyclers for transport applications in the EEA;
 - bill acceptors for transport applications in the EEA;
 - bill recyclers for retail SCO applications in the EEA;
 - bill acceptors for retail SCO applications in the EEA;
 - bill acceptors for retail kiosk applications in the EEA;
 - bill acceptors for gaming applications in the EEA;
 - bill acceptors for vending applications in the EEA.
109. MEI currently does not supply a bill recycler for gaming applications thus no overlap results from the transaction and this potential market will not be analysed further. In addition, there is at present no market for bill recyclers for vending applications in the EEA. Finally, as the market for bill recyclers for retail kiosk applications is not affected due to a combined market share of the Parties of [5-10]%, this potential market will not be analysed further.
110. The vertical links between the Parties' activities give rise to affected markets for coin recyclers in the EEA and vending machines at the EEA and national level and between Crane's activities in the supply of vending machines and MEI's activities in the supply of VMS and telemetry should a national market for a particular type of vending machines be considered.

VII.2. Horizontal Assessment

VII.2.1. Coin payment systems

VII.2.1.1. Coin recyclers based on tubes

Arguments of the Notifying Party

111. The Notifying Party states that the competition dynamics for the coin recyclers based on tubes is identical to the supply of coin recyclers in vending as the vast majority of tube-based coin recyclers is used in vending only. According to the Notifying Party the transaction does not raise competitive concerns in the market for coin recyclers based on tubes because these products are commodity items, the prices of which have been falling, no significant barriers to entry arise, and because the remaining suppliers (such as Azkoyen, Sanden, Coinco and Jofemar) offer, and post-transaction will continue to offer, similarly designed products. The Notifying Party further submits that the information on tenders indicates that the customers in the full line vending segment, are aware of the presence of other suppliers of tube based coin recyclers since they often ask them to quote. While the Notifying Party admits that MEI and Crane may have been competing head-to-head for contracts in the full line vending segment, it argues that in general Crane and MEI are not each other's closest competitors because the former focuses on coin handling systems, while the latter on bill handling systems.

112. The high combined market share of the Parties, according to the Notifying Party, does not reflect their market power but rather the fact that their customers are satisfied and have no reason to switch. In its opinion cost and barriers to switching are low due to the “plug-and-play” nature of the vending segment. Comestero, Paytec and ICT are cited as the recent entrants. A supplier already present in another vertical could, according to the Notifying Party, enter the market for coin recyclers based on tubes with the investment of under EUR [below 1] million and in less than a year. Exclusive distribution plays no real importance in the market, since suppliers of payment systems generate the majority of their revenues by selling directly to OEMs or operators and in any case there is a sufficient number of experienced distributors available in each country in the EEA. The servicing network is also easy to be established, because the vending segment is "plug-and-play" and thus no complicated training of technicians is required. The R&D costs or existing patents also do not, according to the Notifying Party, pose a significant barrier to entry.
113. The Notifying Party further argues that customers in the vending segment, such as Coca-Cola, Autobar or Selecta exercise significant buying power. Finally, the Notifying Party states that the vending segment is in decline and there is excess capacity which exerts downward pressure on prices.

Results of the market investigation on the impact of the proposed transaction on coin recyclers based on tubes

114. The customers, in particular in the vending segment, voiced concerns that the proposed transaction will lead to "*less choice – portfolio could be rationalised. Price increases*", "*higher prices*", "*likely price increase and product overlap*"⁹⁴. Others mentioned that innovation might suffer.⁹⁵ One vending customer explained that the concern is based on the experience, that when introducing one of the Parties as an additional supplier this led the other Party to offer lower prices.⁹⁶ Among retail kiosk customers the concerns was raised that the transaction will lead to higher prices.⁹⁷

Market Structure

115. In the EEA, in the market for coin recyclers based on tubes, the Parties have a high combined market share of [70-80]% with a significant overlap of [20-30]%. The next largest players - Azkoyen and Sanden - have significantly lower market shares of [10-20]% and [5-10]% respectively, while the market shares of the remaining suppliers of tube based coin recycler would be below [5-10]%. According to the Notifying Party's estimates, market shares have been relatively stable over the past three years.

94 Responses to question 69.2 of the Questionnaire to customers in vending.

95 Response to question 69.1 of the Questionnaire to customers in vending.

96 Minutes of the conference call of 3 July 2013 with a customer.

97 Response to question 69.2 of the Questionnaire to customers in retail kiosks.

Table 3: Market shares in the EEA for coin recyclers based on tubes

	2012	2011	2010
Crane	[20-30]%	[20-30]%	[20-30]%
MEI	[40-50]%	[40-50]%	[40-50]%
Crane+MEI	[70-80]%	[70-80]%	[60-70]%
Azkoyen	[10-20]%	[10-20]%	[10-20]%
Sanden	[5-10]%	[5-10]%	[5-10]%
Coinco	[0-5]%	[5-10]%	[5-10]%
Jofemar	[0-5]%	[0-5]%	[0-5]%
PayTech	[0-5]%	[0-5]%	[0-5]%
Comestero	[0-5]%	[0-5]%	[0-5]%
Other	[0-5]%	[0-5]%	[0-5]%
Total	100%	100%	100%

Source: Notifying Party

Closeness of competition and the removal of an important competitive constraint

116. The Commission has not been able to confirm the Notifying Party's argument that Crane and MEI are not each other's closest competitors with respect to coin recyclers based on tubes on the basis of the market investigation or the internal documents. To add, the examination of the bidding data supplied by both Crane and MEI shows that the Parties often compete head-to-head and that as a result of the merger an important competitive constraint will be lost.
117. In the market investigation, all but one competitor stated that Crane and MEI are each other's closest competitors in coin recyclers based on tubes.⁹⁸ Also a clear majority of the customers in the vending segment stated that Crane and MEI are each other's closest competitors in coin recyclers based on tubes in the EEA.⁹⁹
118. The competitors give the average highest rating to both Crane and MEI in terms of quality, product portfolio, servicing and maintenance, distribution network and reputation.¹⁰⁰ Other suppliers of coin recyclers based on tubes, i.e. Azkoyen, Jofemar, Paytec and Sanden generally perceive themselves as weaker than Crane and MEI as regards these criteria. Compared to the Parties Azkoyen, Jofemar and Paytec admit they have a worse distribution network and Sanden considers it has a much worse product portfolio. As regards the regional presence it was noted by a competitor that "*Crane (NRI) and MEI are "absolutely" represented in Europe, they are everywhere.*"¹⁰¹ Another supplier sees Crane and MEI as each other's closest competitors and refers to the other manufacturers of coin payment mechanisms as "*niche players selling very small volumes*".¹⁰²

98 Responses to question 41 of the Questionnaire to competitors in coins.

99 Responses to question 46 of the Questionnaire to customers in vending.

100 Responses to question 43 of the Questionnaire to competitors in coins.

101 Minutes of conference call of 3 July 2013 with a competitor.

102 Minutes of conference call of 25 June 2013 with a competitor.

119. The customers in the vending segment perceive Crane and MEI as similarly strong in terms of quality, product portfolio, servicing and maintenance, distribution network and reputation. Compared to other suppliers of tubes-based coin recyclers such as Azkoyen, Coinco, Jofemar, Paytec and Sanden, Crane and MEI obtain the highest rating for the above-mentioned criteria from their customers in the vending segment.¹⁰³ One of the respondents in the market investigation noted that a particular strength of both Crane and MEI lays in research and development capacities, while no other competitor was mentioned as having such strength.¹⁰⁴ In the market investigation one of the big customers in the vending segment stated: *"In tube-based coin recyclers, MEI and Crane are the clear market leaders in the EEA, due to the features of their products, reliability and distribution and service network. [...] There are also others, such as Azkoyen, Coges and Jofemar, but they are not as good as the leading two companies. As to other suppliers, Sanden is present in the market but is mainly concentrated in Asia."*¹⁰⁵ Another large vending customer added that from technological perspective Crane and MEI are equal.¹⁰⁶
120. Both competitors and customers not only attribute to Crane and MEI higher rating points for quality, product portfolio, servicing and maintenance, distribution network and reputation than those attributed to other suppliers, but they also award very similar rating to Crane and MEI on average. For instance a majority of both customers and competitors awarded the same (and highest) rate for quality both to MEI and Crane.¹⁰⁷
121. The analysis of the internal documents of the Parties also confirms that MEI and Crane are each other's closest competitors in the full line vending segment, which is particularly important for [...].¹⁰⁸ Internal documents over the past three years consistently show that [...], by stating: [...].¹⁰⁹ Another document specifies MEI's strength as being [...] and Crane's as holding the [...].¹¹⁰ Their competitors, such as [...] and [...]'s sales are "[...]."¹¹¹
122. Additionally it is evident from these documents that Crane has been highly successful in expanding in the European full line vending segment over the recent

103 Responses to question 51 of the Questionnaire to customers in vending.

104 Response to question 51 of the Questionnaire to customers in vending.

105 Minutes of conference call of 21 June 2013 with a customer in vending.

106 Minutes of the conference call of 3 July 2013 with a customer.

107 Responses to question 43 of the Questionnaire to competitors in coins and to question 51 of the Questionnaire to customers in vending.

108 As noted above, due to the fact that more than [80-90]% of tube based coin recyclers are sold to the vending customers the analysis of Parties internal documents concerning the vending vertical is particularly informative with respect to the market for tube-based coin recyclers.

109 Annex 5.5(a) to the Form CO, documents submitted by email of 5 April 2013, Document 280: Crane Payment Solutions 2010 Operating Plan, p. 37.

110 Annex 5.5(a) to the Form CO, documents submitted by email of 5 April 2013, Document 903: Crane: Payment Solutions Strategic Plan 2012-2015, p. 11.

111 Annex 5.5(a) to the Form CO, documents submitted by email of 5 April 2013, Document CVS 6: CPS Global Vending – Final, p. 18.

past, thanks to a combination of product innovation and the development of effective local sales and support networks. This growth has come at the expense of MEI, generating a significant price response. This shows that Crane and MEI are vigorously competing with each other, and that an important competitive constraint would be lost as a result of the transaction. Crane has been particularly successful in the European vending market following the introduction of its 'Currenza C²' coin recycler, which is mentioned as [...].¹¹² Crane refers to the Currenza C² [...] and Crane plans to win market share with [...].¹¹³ As a result of the introduction of this new product, [...].¹¹⁴ An internal document shows that Crane is [...].¹¹⁵ The fact that MEI has [...] is reflected in the internal documents, which mention, for instance, [...],¹¹⁶ [...] ¹¹⁷ and [...] ¹¹⁸. [...] ¹¹⁹, [...] ¹²⁰ and [...] ¹²¹. Internal documents also show that [...].¹²²

123. The fact that Crane and MEI compete vigorously in the vending segment was confirmed by one of the vending customers, which noted that switching part of the supplies from one of the Parties to another enabled them to obtain better prices.¹²³
124. The discussion above shows that Crane is the key challenger to MEI in the full line vending segment in the EEA and it is making significant inroads into MEI's strong position across the EEA, while MEI is responding to this competitive threat by reducing its prices.
125. The evidence from the internal documents and the market investigation is corroborated by the analysis of the Parties' bidding data. The Commission received extensive bidding data from the Parties in the full line vending segment from both Crane and MEI, separately. Crane's submission includes [400-500] EEA tenders for tube-based coin recyclers while MEI's submission is comprised of [200-300] EEA tenders in this segment for the period between 2010 and 2012.¹²⁴ The conclusions

112 Annex 5.5(a) to the Form CO, Document 2162: Payment Solutions in a Global Vending Market, p. 6.

113 Annex 5.5(a) to the Form CO, Document 734: Crane Payment Solutions Company Strategic Plan 2010-2013, p. 40 and p. 6.

114 Annex 5.5(a) to the Form CO, Document 2162: Payment Solutions in a Global Vending Market, p. 6.

115 Annex 5.5(a) to the Form CO, Document: CVS 6 CPS Global Vending – Final, p. 20.

116 Annex 5.5(a) to the Form CO, Document: CVS 6 CPS Global Vending – Final, p. 18.

117 Annex 5.5(a) to the Form CO, Document 903: Crane: Payment Solutions Strategic Plan 2012-2015, p. 26.

118 Annex 5.5(a) to the Form CO, Document 1221: Payment Solutions: 2011 Operating Plan, p. 44.

119 Annex 5.5(a) to the Form CO, Document 810: Payment Solutions Presentation, p. 16.

120 Crane internal document: Strategic Issue Development Form Vending Europe 1 (4 May 2011), Crane_FTC--2_0009837, p. 1.

121 Crane internal document: Strategic Issue Development Form Vending Europe 1 (4 May 2011), Crane_FTC--2_0009837, p. 1.

122 Annex 5.5(a) to the Form CO, Document CVS 6: CPS Global Vending – Final, p. 18-19.

123 Minutes of a conference call of 3 July 2013 with a customer.

124 The analysis was performed separately for Crane and MEI, respectively as it was not possible for the Parties to identify which contracts in each dataset were overlap contracts and which contracts were not.

that can be drawn from the analysis of bidding data are similar across the two datasets. In particular, the data indicates that the Parties are the most successful players in the EEA, that they are each other closest competitors, and that the competitive constraint from Crane, the challenger, on MEI, the incumbent, has been growing significantly in the recent past. The following paragraphs outline the results of the bidding analysis in more detail.

126. The results across the two datasets show that Crane has been awarded between [...] of overall win events, whilst MEI accounts for [...] of all win events.¹²⁵ This confirms the high combined market shares provided by the Parties. Moreover, the data also shows that there is a high frequency of joint wins for Crane and MEI, indicating that customers perceived the Parties as the two best options, and are therefore close competitors. In particular, in Crane's dataset about [...] of Crane's wins are joint with MEI between 2010 and 2013 (whilst the equivalent figure for MEI is of [...]¹²⁷).
127. The bidding data also contain an indication of competitors which were present in each tender, but that were not awarded the contract. This information also supports the conclusion that the Parties are a particularly close constraint on each other. In particular looking at the sole wins of Crane in Crane's data set, in [...] of the cases MEI is considered as an alternative supplier, while [...] is mentioned in [...] of the cases. [...] and [...] are mentioned as alternative supplier in [...] and [...] of Crane's sole wins, respectively. [...] other competitors are mentioned as potential suppliers in Crane's sole wins. An analogous assessment of MEI's sole wins in MEI's dataset shows that Crane has been considered in [...] as an alternative supplier, followed by [...] with [...]. [...] and [...] were mentioned as an alternative supplier in about [...] and [...] of Crane's sole wins, respectively. [...], [...] and [...] were only mentioned in less than [...] of MEI's sole wins.
128. Crane's data for the period 2010-2012 also indicates that the largest competitor to the Parties, [...], accounts for [...] wins ([...] of all wins) between 2010 and 2012 of which almost [...] are sole wins. [...], however, has a strong regional focus, with close to [...] of its wins obtained in [...], almost [...] of wins in [...], and only [...] win in each of [...] and [...]. Moreover, [...] annual win rate aggregating over sole and joint wins has not increased to any significant extent over time, ranging between [...] during the 2010-2012 period. Other competitors have minimal win events in Crane's dataset: [...], [...] and [...], respectively have less than [...] wins in the data between 2010 and 2012.

125 A "win event" is defined as a contract or part of a contract that is allocated to a supplier. If the customer single sources on a given contract then the win event would be equal to an entire contract won (this is labelled as "sole win"). In case customer multi-sources each supplier would be serving a share of the contract volume and the win event would be the share of the contract won (this is labelled as "joint win").

126 This takes all contracts into account in which only MEI and Crane were suppliers. If one takes contracts into account where Crane, MEI as well as additional suppliers won the contract, Crane has about [...] of joint wins with MEI.

127 This takes all contracts into account in which only MEI and Crane were suppliers. If one takes contracts into account where Crane, MEI as well as additional suppliers won the contract, MEI has about [...] of joint wins with Crane.

129. An analysis of Crane's data by year shows that Crane's share of wins (including both sole and joint wins) increased rapidly during the 2010-2012 period, growing from [...] in 2010, to [...] in 2011, and [...] in 2012. Over the same period, Crane's share of sole wins (as a percentage of all tenders) increased even more from [...] in 2010, to [...] in 2011, and [...] in 2012. The data also shows that Crane's growth has come at the expense of MEI, whose share of sole wins (as a percentage of all contracts) dropped from [...] in 2010, to [...] in 2011 and [...] in 2012. This trend is also evident in terms of reported revenues, with revenues reported for MEI-alone wins falling from [...] USD in 2010 to [...] USD in 2012, whilst at the same time Crane-alone wins increased from [...] USD to [...] USD (whilst reported revenues to Crane in joint wins with others increased from [...] in 2010 to [...] in 2012). This successful growth by Crane is in line with the evidence from the Crane internal documents that is summarised above.¹²⁸
130. To conclude, the evidence of the market investigation and the internal documents clearly show that the Parties compete strongly and that they are viewed as each other's closest competitors. This is corroborated by the evidence of the bidding data. The latter analysis also points to the fact that Crane has been the key challenger in the market for coin recyclers based on tubes in which MEI is the traditional incumbent and that Crane is increasingly making inroads into the market at the expense of the incumbent MEI, generating in turn a strong price reaction from MEI. Therefore, the Commission finds that the proposed transaction would remove an immediate competitive constraint in the market for tube-based coin recyclers. In order to outweigh such a development, it would have to be more likely than not that another competitor could replicate the significant competitive constraint exercised by Crane on the present market leader MEI. Taking into account the high combined market shares, the evidence of the market investigation, the internal documents and the bidding data analysis, the Commission considers that it is unlikely that the remaining competitors in the market would be able to exercise the necessary competitive constraint to compensate the significant loss in competition resulting from the merger.

Barriers to expansion and barriers to entry

Expansion of existing competitors and entry

131. According to the Notifying Party a number of competitors have in the last five years successfully entered the market for tube-based coin recyclers. These include:

128 This conclusion is further supported if one also considers Crane's performance with customers for which there is information for each year of three-year period contained in the data, and whose purchasing choices can therefore be tracked during the period. Bidding events for these customers cover roughly half the sample in the Crane's dataset. Crane has been growing strongly within this customer group, going from [...] joint wins ([...] of wins worth [...] USD) and [...] sole wins in 2010, to [...] sole wins ([...] of all tenders) and [...] joint wins ([...] of wins) in 2012, with revenues of [...] USD. The analogous assessment for MEI in the same time period shows that MEI's sole wins declines from [...] in 2010 ([...] of all tenders) to [...] ([...] of all tenders) in 2012 and that the joint wins declines as well from [...] in 2010 to [...] in 2012. Moreover, some customers previously exclusively sourcing from MEI switched to dual-source from both MEI and Crane in 2012. This constitutes [...] contracts worth about [...] USD. In summary, this information confirms that Crane made significant inroads into the market during the 2010-2012 period, and that this was largely at the expense of MEI. [...] had a negative or flat performance for the same customers over the same period. The number of sole wins declines from [...] ([...] of all tenders) in 2010 to [...] ([...] of all tenders) in 2012 and the picture looks similar for joint wins which declines from [...] to [...] between 2010 and 2012.

Comestero in 2012, Paytec in 2011 and ICT.¹²⁹ Panasonic and Fuji Electric are, in the opinion of the Notifying Party, potential entrants into the market.¹³⁰ However, as discussed above in paragraph 115, the market shares of the Parties' competitors have stayed roughly constant over the period 2010 to 2012. Moreover, Comestero has remained at zero market share during that period. Overall, none of these competitors have been able to expand considerably in the last three years.

132. The only three respondents in the market investigation that mentioned Comestero and the one respondent that mentioned ICT as recent entrants into the market for coin recyclers are in fact distributors of payment systems.¹³¹ None of the customers in vending were able to provide a name of a potential entrant into the market of payment systems.¹³²
133. Comestero confirmed that it introduced its own coin recycler based on tubes in 2012, having earlier been a distributor of other manufacturers' products. However, Comestero stated that they are mostly only able to target small and medium size customers with their product.¹³³
134. ICT, a Taiwanese company, traditionally active in bill payment systems, did launch their tube-based coin recycler one to two years ago; however, they did not manage to win any contract for it in Europe or even to participate in any tender. According to ICT, they still need to develop the distribution and after-sales network in Europe and build up relationships with the vending customers. In addition, since ICT does not have vending machines among their product portfolio, they need to carry out longer testing of their coin recyclers than those suppliers which are vertically integrated in order to ensure that their recyclers are compatible with the vending machines.¹³⁴
135. Some of the customers expressed doubts as to whether Asia-based manufacturers can become credible suppliers of coin recyclers based on tubes in the EEA market, due to the difficulty in obtaining a "*satisfactory level of after-sales support from them. Also due to the inadequate quality of their products, not well established image in the EEA and lack of sales network*".¹³⁵ The visibility of ICT in the EEA appears to be indeed limited, since in the market investigation one of the bigger customer stated that they were not aware that ICT offers coin recyclers based on tubes.¹³⁶ A competitor in coin recyclers based on tubes noted that ICT's "*products have deficits in terms of quality and reliability because they [i.e. ICT] do not have the engineering capacity*".¹³⁷

129 Form CO, paragraph 467.

130 Form CO, paragraph 470.

131 Responses to question 60 of the Questionnaire to customers in vending.

132 Responses to question 61 of the Questionnaire to customers in vending.

133 Minutes of the conference call of 3 July 2013 with a competitor.

134 Minutes of the conference call of 25 June 2013 with a competitor.

135 Minutes of the conference call of 21 June 2013 with a customer in vending.

136 Minutes of the conference call of 3 July 2013 with a customer.

137 Minutes of the conference call of 25 June 2013 with a competitor.

136. Another competitor who won a few contracts over Crane or MEI considers it is not competitive compared to the Parties, as it does not have global presence nor an established brand reputation.¹³⁸ Another competitor that is active in coin payment systems but does not offer coin recyclers based on tubes estimated that it would need approximately 3 years and at least EUR 1,500,000 for the development of such a product.¹³⁹
137. It results from the market investigation that the competitors which have introduced new coin recyclers based on tubes are not likely to gain market share sufficiently quickly with their products in the EEA in order to replicate the competitive constraint Crane has exercised on MEI until now. ICT is an Asia-based manufacturer, and did not manage to obtain sufficient presence in the coin recyclers market in the EEA to become a credible supplier for the customers. As a result, it is not viewed by customers and competitors alike as a clear alternative to Crane and MEI nor to other market participants. Comestero is a niche player, while Jofemar has also not gained any significant footprint in the market. Paytec's market share has remained stable and low in the last three years. As to the potential entrants mentioned by the Notifying Party, i.e. Panasonic and Fuji Electric, none of the competitors or customers named them as potential entrants.
138. The internal documents provided by Crane on the European vending market that cover the period between 2010 and 2012 are consistent with the qualitative evidence from the market investigation. They indicate that other competitors have been unsuccessful in their efforts to make inroads to the market.¹⁴⁰ The documents also more generally [...] the position of some of the competitors, for example by stating that [...] has [...] ¹⁴¹ and is also described as having a focus on [...]. Because of this focus [...].¹⁴² Figure 3 shows [...].

Figure 3: Overview of Acquisition Target Companies

[...]

Sales & Distribution and Service Network

139. While the full line vending segment includes a number of large buyers such as Selecta, Autobar and Mars, it is mainly characterised by a very fragmented demand, with thousands of small customers in the EEA with which a customer relationships needs to be established and maintained. Sales are typically made directly with the operators of vending machines and the Parties make the vast majority of their sales via their direct sales force. Suppliers therefore need to take a significant distribution effort to reach the whole potential customer base. This is in contrast with other verticals, e.g. transport, where the number of potential customers is significantly lower.

138 Minutes of the conference call of 25 June 2013 with a competitor in vending.

139 Minutes of conference call of 26 June 2013 with a competitor.

140 Annex 5.5(a) to the Form CO, Document CVS 6: CPS Global Vending – Final, p. 18.

141 Annex 5.5(a) to the Form CO, Document 903: Crane: Payment Solutions Strategic Plan 2012-2015, p. 11.

142 Annex 5.5(a) to the Form CO, Document CVS 6: CPS Global Vending – Final, p. 19.

140. The market investigation has shown that it is crucial to have a well-developed sales network (both direct and indirect sales force) in order to penetrate the market and to continue to be a successful market player.
141. The majority of the vending customers mentioned the availability of after-sales technical network as the one of the four (apart from price, quality and reliability) main factors taken into account when choosing a supplier of payment systems (both coin and bills).¹⁴³ Also a majority of competitors in coins mention distribution and technical network as key success factors for the suppliers of coin payment systems.¹⁴⁴ One of the competitors in coins emphasised that in particular for the vending segment, where "*customers (operators) are many and spread in the territory*" it is necessary to set up a national distribution/sales network and to have local servicing.¹⁴⁵ Another competitor noted that "*customers need close assistance during all stages of product implementation preferably in their language. Personal relationship is important to introduce the products to potential customers, if successful this is followed by an intensive testing period where customer needs assistance. This is followed by service requests during implementation and during operation.*"¹⁴⁶ According to the majority of competitors establishing a new distribution network and a service/support network requires significant investment and lead time.¹⁴⁷ ICT, which while already active in the bill payment systems is now trying to enter the market for coin recycler based on tubes in the EEA, admits that establishing "*a new network of business, distributors, servicing and sales persons*" is the main challenge in moving across the segments.¹⁴⁸ In particular training the technicians to enable them to service coin recyclers, as opposed to coin dispensers, is more time-consuming and more complex.¹⁴⁹
142. Crane and MEI clearly stand out with respect to the extent of their distribution and after-sales network. As one competitor noted "*larger companies have a much better position. MEI's network is excellent compared to others*".¹⁵⁰ Another competitor added: "*The merged entity's position is made even stronger by their presence in many countries, everywhere in Europe (e.g. sales office) and customer accounts or distributors.*"¹⁵¹
143. The internal documents show that Crane [...].¹⁵² Thus the internal documents show that [...].¹⁵³ Crane links this strategic objective to the fact that the European

143 Responses to question 33 of the Questionnaire to customers in vending.

144 Responses to question 32 of the Questionnaire to competitors in coins.

145 Responses to questions 63, 67 of the Questionnaire to competitors in coins.

146 Response to question 63 of the Questionnaire to competitors in coins.

147 Responses to questions 65, 69 of the Questionnaire to competitors in coins.

148 Minutes of the conference call of 25 June 2013 with a competitor.

149 Response to question 70 of the Questionnaire to competitors in coins.

150 Minutes of the conference call of 26 June 2013 with a competitor.

151 Minutes of the conference call of 26 June 2013 with a competitor.

152 Annex 5.5(a) to the Form CO, Document 903: Crane: Payment Solution Strategic Plan 2012-2015, p. 27.

153 Annex 5.5(a) to the Form CO, Document 280: Crane: Payment Solution 2010 Operating Plan, p. 37.

downstream market is [...] ¹⁵⁴, thus requiring [...] ¹⁵⁵ ([...]). In general the market for all verticals is said to be [...] and that [...]. Furthermore, [...].¹⁵⁶

144. Taking into account the market investigation, the analysis of internal documents and the other information available, the Commission considers that the specificities of the vending segment require extensive distribution and after-sales network. Both Crane and MEI are viewed both by their competitors and customers in the vending as particularly strong in terms of their servicing and distribution network.¹⁵⁷

Technical Know-how and R&D

145. Another important characteristic of the market for coin recyclers based on tubes is that it requires significant know-how on many technical features (such as measuring, sorting and dispensing of coins, distinguishing genuine coins from fake ones etc.) which can only be acquired over years of experience and through well-trained technical personnel (i.e. engineers qualifying on different technological dimensions such as mechanics, electronics, software etc.). As one of the competitors in coins put it "*This is not an exact science, it's a knowhow that one firm can master after a long time in the sector.*"¹⁵⁸ The competitors have also noted that a supplier of coin recyclers needs to establish a "coin library", i.e. a collection of samples of coins for different currencies, including their updates, modification and additions, as well as samples of fake coins, also with all the later modifications.¹⁵⁹ It takes time to establish and fine-tune such a coin library and lack of a comprehensive collection of coins will be immediately reflected in the reliability of the coin payment system.
146. Competitors and customers recognise that Crane and MEI have managed to develop and patent certain innovative technologies with respect to coin recyclers based on tubes, which make them clear market leaders in terms of patents. For instance they both have a technology, which allows for determining how many coins are stored in a tube and thus the remaining capacity of the tube.¹⁶⁰ While it might be possible to innovate around those patents, the competitors claim that it would take them several years to achieve a similar result.

154 Annex 5.5(a) to the Form CO, Document CVS 6: CPS Global Vending – Final, p. 26.

155 Annex 5.5(a) to the Form CO, Document CVS 6: CPS Global Vending – Final, p. 23.

156 Annex 5.5(a) to the Form CO, Document 903: Crane: Payment Solution Strategic Plan 2012-2015, p. 9.

157 Responses to question 43 of the Questionnaire to competitors in coins and to question 51 of the Questionnaire to customers in vending.

158 Response to question 31 of the Questionnaire to competitors in coins.

159 Minutes of the conference call of 25 June 2013 with a competitor; Minutes of the conference call of 25 June 2013 with a competitor.

160 Minutes of conference call of 25 June 2013 with a competitor. Minutes of conference call of 3 July 2013 with a customer.

147. The need to innovate, and to add functionalities and extensions to existing products is also identified by Crane in the internal documents as [...] ¹⁶¹.

Importance of reputation

148. For customers of unattended payment systems the reputation of their supplier of payment system is important, as they associate it directly with quality. ¹⁶² Customers have to be convinced about the reliability of the payment system, because only if the payment system operates smoothly the vending machine will be bringing revenues.
149. For this reason the customers in the vending segment prefer to choose "big names", i.e. the recognised, incumbent suppliers, such as Crane and MEI. ¹⁶³ Those suppliers have also succeeded in establishing good relations with the major customers, which for their competitors are difficult to penetrate. ¹⁶⁴ Moreover, customers in the EEA are conservative and have a preference for suppliers located in the EEA, the U.S. or Japan. In addition larger customers typically only consider suppliers that are active in the entire EEA because only such suppliers can provide them with EEA-wide service. ¹⁶⁵

Countervailing Buyer Power

150. While there are a number of larger customers in the vending segment in the EEA, such as Autobar or Selecta, the large majority of buyers are very small and demand is fragmented in the EEA with thousands of small operators present. The Notifying Party itself states that in addition to large multinational or national vending machine operators there are almost 10,000 regional operators in the EEA.
151. Although most coin competitors stated that customers do have buyer power, they did not clarify which of their customers and in which segments ¹⁶⁶ and it is not clear how these responses relate in particular to customers of tubes-based coin recyclers. In any event, even if a particular segment of customers, namely the large customers, had bargaining power, while others had not, this would not be sufficient to off-set potential adverse effects created by the transaction. ¹⁶⁷ In addition, one of the big customers in the vending segment noted that they might lose bargaining power vis-à-vis the merged entity. ¹⁶⁸

161 Annex 5.5(a) to the Form CO, Document CVS 6: CPS Global Vending – Final, p. 26., similar also Annex 5.5(a) to the Form CO, Document 734: Crane Payment Solutions Company Strategic Plan 2010-2013, p.20, which shows that one of Crane's high level priorities is to [...].

162 Responses to question 33 of the Questionnaire to customers in vending.

163 Minutes of the conference call of 3 July 2013 with a competitor.

164 Minutes of the conference call of 25 June 2013 with a competitor. Minutes of the conference call of 26 June 2013 with a competitor.

165 Minutes of the conference call of 3 July 2013 with a customer.

166 Responses to question 40 of the Questionnaire to competitors in coins.

167 Horizontal Merger Guidelines, paragraph 67.

168 Minutes of the conference call of 21 June 2013 with a customer in vending.

Conclusion on coin recyclers based on tubes

152. Based on the very high market shares, the fact that the Parties are each other's closest competitors, the significant barriers to entry and the substantiated customer concerns, the Commission concludes that the transaction gives rise to a serious risk of non-coordinated effects on the market of coin recyclers based on tubes in the EEA through the creation or strengthening of a dominant position, and therefore raises serious doubts as to its compatibility with the internal market and the EEA Agreement in relation to this market.

VII.2.1.2. Coin acceptors

153. The Notifying Party states that coin acceptors are commodity products used across all verticals but mostly sold in the vending and gaming segment. In the view of the Notifying Party there is strong competition between the suppliers of coin acceptors, none of them is capacity constrained and customers have no barriers to switching suppliers.¹⁶⁹ As a result the proposed transaction, according to the Notifying Party, does not raise competition concerns in the market for coin acceptors.

154. As set out in Table 4, the combined market share of the Parties in the market for coin acceptors in the EEA is significant with [40-50]%. However, the increment added by MEI is moderate with [5-10]%. Three other competitors, Azkoyen, wh'Münzprüfer and Comestero have higher market shares than MEI.

Table 4: Market shares in the EEA for coin acceptors

	2012	2011	2010
Crane	[30-40]%	[30-40]%	[30-40]%
MEI	[5-10]%	[5-10]%	[5-10]%
Crane+MEI	[40-50]%	[40-50]%	[40-50]%
Azkoyen	[10-20]%	[10-20]%	[10-20]%
wh'Münzprüfer	[10-20]%	[10-20]%	[10-20]%
Comestero	[10-20]%	[5-10]%	[5-10]%
Alberici	[0-5]%	[0-5]%	[5-10]%
Paytec	[0-5]%	[0-5]%	[0-5]%
Jofemar	[0-5]%	[0-5]%	[0-5]%
Other	[5-10]%	[5-10]%	[5-10]%
Total	100%	100%	100%

Source: Form CO

155. The results of the market investigation indicated that coin acceptors are relatively cheap¹⁷⁰, standardised products¹⁷¹ and customers do not require specific features.¹⁷²

¹⁶⁹ Form CO, paragraph 65.

¹⁷⁰ Response to question 11 of the Questionnaire to customers in vending and to question 21 of the Questionnaire to customers in retail kiosks.

¹⁷¹ Response to question 33 of the Questionnaire to customers in retail kiosks; Minutes of the conference call of 20 June 2013 with a customer in retail.

¹⁷² Responses to question 3.5 of the Questionnaire to customers in vending and to question 52.1 of the Questionnaire to customers in retail SCO.

The technology to produce coin acceptors is simpler than for coin recyclers, since for the former only the electronic sensors and the one-way coin transportation technology is required, as opposed to the transportation in and out which is needed for coin recyclers.¹⁷³

156. As to switching, in the vending, retail kiosks and gaming segments a clear majority of the customers stated that coin acceptors from one supplier can easily be replaced with those from another supplier.¹⁷⁴ A customer from the transport segment said that coin acceptors have "*identical mechanical, hardware and software interface, so it's quite easy to substitute.*"¹⁷⁵ Some customers in the gaming and transport segments clearly stated that they have enough options among suppliers of coin acceptors from which they can choose.¹⁷⁶ In particular, Azkoyen was mentioned as a credible alternative supplier of coin acceptors.¹⁷⁷
157. The market for coin acceptors is mature and in the future it might decline. One of the big customers in the vending segment noted that the use of coin acceptors is now decreasing in favour of coin recyclers and cashless solutions.¹⁷⁸ This was also confirmed by one of the competitors in coins¹⁷⁹ and a customer in transport.¹⁸⁰ Another competitor stated that the market for coin acceptors is already saturated.¹⁸¹
158. Based on the fact that sufficient competitors remain active post-transaction, the low barriers to switching and the absence of complaints, the Commission concludes that the transaction does not raise competition concerns in the market for coin acceptors in the EEA.

VII.2.2. *Bill payment systems*

159. The markets for bill payment systems for transport applications where competition concerns are identified are assessed separately at the level of bill recyclers and bill acceptors as well as at the overall level of all payment systems sold into transport applications (Sections VII.2.2.1 to VII.2.2.3). The proposed transaction leads to serious doubts as to its compatibility with the internal market and the EEA Agreement under each of those alternative market definitions.
160. The affected markets for bill payment systems where no competition concerns are identified are assessed only at the level of bill recyclers and bill acceptors (Sections

173 Response to question 31 of the Questionnaire to competitors in coin.

174 Responses to question 53 of the Questionnaire to customers in vending, to question 53 of the Questionnaire to customers in gaming and to question 53 of the Questionnaire to customers in retail kiosks.

175 Response to question 53 of the Questionnaire to customers in transport.

176 Response to question 30 of the Questionnaire to customers in gaming and to question 69.1 of the Questionnaire to customers in transport.

177 Minutes of the conference call of 18 June 2013 with a competitor.

178 Response to question 2.4 of the Questionnaire to customers in vending.

179 Response to question 77 of the Questionnaire to competitors in coins.

180 Response to question 67 of the Questionnaire to customers in transport.

181 Response to question 79.1 of the Questionnaire to competitors in coins.

206 to VII.2.2.8). The proposed transaction does not lead to serious doubts as to its compatibility with the internal market and the EEA Agreement even under these narrowest market definitions.

VII.2.2.1. Bill recyclers for transport applications

161. As explained in section VI.1.2.5.2, bill recyclers used in transport applications, in particular in ticket vending machines ("TVMs") for mass transit, are high-end products which need to have a number of characteristics, such as a full-note escrow function, multi-denomination handling, high reliability, high speed, high capacity, resistance to certain weather conditions and resistance to vandalism.
162. Both Crane and MEI are active in the supply of bill recyclers for transport applications in the sub-segment of off-street parking and mass transit. However, there is no overlap in the on-street parking sub-segment as MEI is not active in this segment.

Arguments of the Notifying Party

163. The Notifying Party argues first, that MEI is strong in the mass transit sub-segment while Crane's main focus is on off-street parking and that, hence their offering is complementary. According to the Notifying Party, alternative suppliers for bill recyclers exist. First, the manufacturers of payment systems for other verticals could easily enter the transport segment as barriers to entry are low. In addition, a number of Asian companies are well positioned to sell unattended payment systems used in transport applications into the EEA (such as GRG from China or Puloon from South-Korea). The Notifying Party argues finally that countervailing bargaining power exists.
164. The Notifying Party thus concludes that, despite the Parties' combined position in the transport segment for bill recyclers, the transaction will not lead to a significant impediment of effective competition.

Market Structure

165. The proposed transaction would lead to a combined market share of the Parties of [90-100]% in bill recyclers for transportation applications in the EEA with only one remaining competitor, TNSi. The proposed transaction can be thus considered a '3 to 2' consolidation.

Table 5: Market shares for bill recyclers for transport applications in the EEA

	2012	2011	2010
Crane	[40-50]%	[50-60]%	[40-50]%
MEI	[40-50]%	[30-40]%	[40-50]%
Crane+MEI	[90-100]%	[90-100]%	[80-90]%
TNSi	[5-10]%	[5-10]%	[10-20]%
Total	100%	100%	100%

Source: Notifying Party

166. TNSi's European focus has been historically Germany as it had entered the European market with a "Deutsche Mark" solution.¹⁸² Since TNSi only has payment systems for the EUR and for only a very limited number of other EEA-currencies such as Polish zloty PLZ and Danish crown DKK, the transaction would even result in a '2 to 1' consolidation with the merged entity being the only supplier in certain regions of the EEA.¹⁸³

Impact of the transaction

167. Many customers voiced concerns in the market investigation in relation to the fact that after the transaction they would be left with only two suppliers. For instance customers stated: *"the number of available different vendors will reduce dramatically. The true real alternative will remain Toyo [=TNSi] product, with some technical limitations"*.¹⁸⁴ *"Toyocom (JP)[=TNSi] is the only comparable competitor on the market next to the parties for bill solutions in transport"*¹⁸⁵ The same view was shared by a competitor in overall bill payment systems: *"the Parties will have [w]orldwide monopoly for high end bill recyclers"*.¹⁸⁶
168. According to the customers, the transaction would weaken their negotiation power and eliminate a key competitive constraint.¹⁸⁷ For example one customer expects *"loss of bargaining power and higher prices in bill recycling systems for transport market."*¹⁸⁸ Apart from price increases,¹⁸⁹ the customers fear reduced innovation and a smaller product portfolio¹⁹⁰.

182 Minutes of the conference call of 16 April 2013 with a competitor: *"[Apart from the EUR,] TNSi also has Zloty (PZL) and Danish Crown (DKK) solutions, as this was specifically asked by a German toll customer for the border payment. [...] In Europe, TNSi focuses on the Euro. [...] [I]nitially TNSi had only a Deutschmark (DEM) solution developed for DB. With the introduction of the Euro TNSi expanded to the Eurozone."*

183 Minutes of the conference call of 18 June 2013 with a customer in transport: *"Finding an alternative supplier for bill recyclers would be difficult for [...]. Neither JCM nor Azkoyen are experienced in high-end bill recycling."*

184 Response to question 69 of the Questionnaire to transport customers.

185 Minutes of the conference call of 15 March 2013 with a customer in transport.

186 Response to question 82 of the Questionnaire to competitors in bills.

187 Minutes of the conference call of 15 April 2013 with a customer in transport: *"There is a big price competition between Crane and MEI currently."* Minutes of the conference call of 11 April 2013 with a customer in transport: *"After the merger of Crane and MEI, the market will lose competition between the two main suppliers. [...] will lose opportunities to bargain for lower prices."*

188 Response to question 68 of the Questionnaire to transport customers.

189 Minutes of the conference call of 15 April 2013 with a customer in transport: *"The competition will not be as tough as now and this might have an effect on prices."*

190 Response to question 68 of the Questionnaire to transport customers: *"[w]e expect: [m]uch higher prices; smaller availability of products; no competition, therefore no more need of future developments (much slower technological innovation";* Minutes of the conference call of 15 March 2013 with a customer in transport: *"The parties were both always present in [our] tenders and were actively competing against each other to make the best offer in terms of price, new features and quality, approach to the customer. The Parties were a constraint for each other. With the disappearance of this competition [we are] afraid that the offers made by the newly created entity will be less attractive in terms of price and innovation."*

Closeness of competition

169. As regards closeness of competition, customers and competitors consider the Parties to be close, if not the closest, competitors with regard to bill recyclers in the transport segment.¹⁹¹ The closeness of competition was assessed by the market participants on the basis of a number of parameters, such as quality, service network, product portfolio and reputation.¹⁹²
170. With regard to the Notifying Party's argument that Crane primarily sells to off-street parking customers whereas MEI primarily sells to mass transport customers, the Commission notes that Crane's internal documents show that [...].¹⁹³ MEI had also planned [...].¹⁹⁴ In any event Crane and MEI appear to be most likely entrants in the other segment, as evidenced by Crane's [...] and MEI's [...].¹⁹⁵

Removal of an important competitive constraint

171. Crane entered the transport segment recently with its Bill-2-Bill ("B2B") transport model¹⁹⁶. As a competitor also stated, "*Crane is a relatively new entrant but was successful enough to win important market shares.*"¹⁹⁷
172. The Notifying Party regards itself as a challenger to MEI's strong position in the bill recycler transport segment. In its internal documents Crane sees itself as [...].¹⁹⁸ Crane's internal documents further confirm its role as [...]. For instance: [...].¹⁹⁹ Crane's position as an active rival in transport is further evidenced by [...].²⁰⁰

191 Minutes of the conference call of 15 March 2013 with a customer in transport: "*The parties have very similar bill dispensers (sic!) and bill recyclers*" of the conference call of 16 April 2013 with a customer in transport: "*Crane and MEI products are seen as very similar products. The same tests are performed on these two brands and prices are similar.*"

192 Responses to questions 47 and 51 of the Questionnaire to customers in transport and to questions 44 and 46 of the Questionnaire to competitors in bills; Minutes of the conference call of 15 March 2013 with a customer in transport: "*the parties were mainly active in similar sectors with similar products*".

193 See paragraph 172 and footnote 198.

194 Internal document "MEI management presentation", September 2012, page 106, submitted as part of Annex 5.4 to the Form CO.

195 The Commission had access to very few tenders in bill recycling in the transport segment to perform a bidding analysis. This information was provided by the Parties and the information was collected according to their best estimates. As such, the conclusions the Commission can draw from this data are necessarily incomplete. Subject to these limitations, the bidding data appears to support the finding that there are [...] players in the bill recycler segment in mass transit that win contracts: [...].

196 Form CO, Paragraph 730(d).

197 Minutes of the conference call of 16 April 2013 with a competitor.

198 "[...] Presentation entitled: "Crane Payment Solutions Strategic Plan 2011-2014" of August 2011, Annex 5.5(a) to the Form CO.

199 Crane internal document: " Payment Solutions Strategic Plan 2012-2015" of August 2012, Annex 5.5(a) to the Form CO.

200 Page 42 of the MEI presentation entitled "Transport Channel Review" of May 2012, Annex to the draft Form CO on 5 April 2013, MEI0003604.

173. Transport customers also confirmed that Crane has been trying to probe MEI's position, leading to fiercer competition and lower prices. Crane was very active in approaching transport customers and trying to sell the B2B to this segment. Customers stated for example "*The parties were both always present in [our] tenders and were actively competing against each other to make the best offer in terms of price, new features and quality, approach to the customer. The Parties were a constraint for each other. With the disappearance of this competition [we are] afraid that the offers made by the newly created entity will be less attractive in terms of price and innovation.*"²⁰¹ or "*There is a big price competition between Crane and MEI currently.*"²⁰²

Barriers to entry and potential entry

174. The Parties' own internal documents and the market investigation do not support the Notifying Party's argument that entry barriers are low. As will be shown below, manufacturers of payment systems for other verticals do not appear to have the ability to enter the market for bill recyclers for transport applications in a sufficiently timely manner that would be able to deter or defeat any potential anti-competitive effects of the merger.

Technical know-how, R&D, sales and distribution network

175. According to the Horizontal Merger Guidelines, incumbents in a market may enjoy technical advantages over potential new rivals in the form of preferential access to innovation and research and development ("R&D"), and potentially also intellectual property rights. Those factors may constitute a barrier to entry in the market.²⁰³
176. These barriers to entry include high development costs and long development times, the need for significant know-how and experience.²⁰⁴ One major competitor stated: "*The bill acceptors / recyclers with escrow functionality for high-end transport market is a big challenge in terms of the reliability and quality of the products.*"²⁰⁵
177. The outlined differences in product characteristics and competitive dynamics already point to the existence of barriers to entry for the sale of bill payment products to transport customers. The majority of competitors confirmed that there are generally significant barriers to sell the same bill payment system used in one vertical into another vertical.²⁰⁶ A competitor explained "*The producers of bill acceptors /*

201 Minutes of the conference call of 15 March 2013 with a transport customer.

202 Minutes of the conference call of 15 April 2013 with a transport customer.

203 Horizontal Merger Guidelines, paragraph 71.

204 Minutes of the conference call of 20 June 2013 with a customer in transport: "*It would take a new supplier five years to be able to develop and produce payments systems comparable in quality and functionality to those of Crane and MEI.*"; Minutes of the conference call of 18 June 2013 with a customer in transport: "*Entering from another segment and achieving the same quality/reliability in the market as Crane/MEI would take at least ten years.*"

205 Response to question 55 of the Questionnaire to competitors in bills.

206 Responses to question 25 of the Questionnaire to competitors in bills.

recyclers need to have the right products at right price point to enter each market."²⁰⁷

178. The results of the market investigation also point to the importance of the sales and distribution network in bill recyclers in the transport segment. In particular, the results show that bill payment producers have to understand the needs of their transportation customers before being able to develop and sell a suitable bill payment solution in the transport segment. Moreover, competitors stressed that there is a need to build up the necessary servicing and distribution networks.²⁰⁸

Importance of Reputation and perceived Switching Costs

179. Similarly, barriers to entry may also exist because of the established position of the incumbent firms, as a result of their experience and reputation for a high quality product.²⁰⁹
180. The market for bill recyclers for transport appears to be characterised by consumer inertia with conservative customers, who are unwilling to switch and require previous references for similar projects from the potential suppliers and a demonstration of a large installed base of payment systems.²¹⁰
181. The market is also characterised by elevated integration costs, in particular for the first customer of a given payment system product.²¹¹ According to one competitor *"The market is also very conservative and dominated by Mei / Crane. [...] The [...] difference in the software and footprint makes the machine producers demotivated to integrate a new product unless the price is significantly cheaper."*²¹² A major customer confirmed that it *"would not integrate a new supplier easily; it is a long journey and includes field tests and is associated with costs."*²¹³

207 Response to question 25 of the Questionnaire to competitors in bills.

208 Minutes of the conference call of 18 June 2013 call with a transport customer.

209 Horizontal Merger Guidelines, Paragraph 71.

210 Minutes of the conference call of 18 March 2013 call with a competitor in bills.

211 Minutes of the conference call of 18 June 2013 with a customer in transport: *"[...] had a long adaption period in changing to Cashcode's bill recycler, a supplier of a brand new product at that time. While integration into the machine was completed within one year, it took four years in total for various field, handling and optimization issues to be ironed out. [...] In this way, [...] would not be eager to start a relationship with a brand new supplier entering from the Asian market."*; Minutes of the conference call of 19 June 2013 with a customer in transport: *"Integration costs are high both if you are the first customer adopting a product just introduced to the market or if you are a customer adopting the product later on. However, the first adopting customer of a newly introduced product bears higher integration costs due to higher costs with respect to maintenance and warranty. When being the first adopter of a new payment product in mass transit, it could mean higher costs for us in terms of: (i) Functionality and software integration, in case the product has not yet all functionalities required for mass transit (ii) On field efforts during project start up, as it has not been installed before in mass transit. It may include technical support, firmware versions update, testing, etc. (iii) Maintenance and warranty. Although the warranty must be served by the manufacturer, it always requires some efforts from our side, considering that the contractual relationship with customer is managed by us. Apart from that, generally new products have a higher volume of incidences in the first project."*

212 Response to question 55 of the Questionnaire to competitors in bills.

213 Minutes of the conference call of 20 June 2013 with a customer in transport.

182. The Notifying Party's internal documents further support the market respondents' view about conservative customers. According to statements in internal documents [...].²¹⁴

Potential market entry by manufacturers active in other verticals

183. The Notifying Party argues that potential entrants to the transport segment could be the companies which are present in other verticals.
184. The market investigation has not supported the claim that competitors active in other verticals such as retail, gaming or vending could easily enter the transport market.
185. As regards competitors in the field of gaming or vending, these only have low-end or mid-range products, and the market investigation has pointed to the existence of significant barriers to entry, which make it difficult for suppliers of payment systems to move across segments. Some customers have pointed out that manufacturers already present in the bill market and well established in other segments, such as gaming, have unsuccessfully tried to develop a bill recycling solution, including for transport customers, but failed to provide a bill recycler with features and quality comparable to the Parties' products.²¹⁵
186. Regarding competitors in the field of retail, one of the potential entrants mentioned by the Notifying Party is Glory, who sells a bill recycler for retail self-check-out applications. Glory, however, does not have any marketing activities in the transport market according to customers. Customers also described Glory as focused on banking solutions and therefore higher priced and too expensive for transport applications.²¹⁶
187. As another potential entrant to the market, the Notifying Party named Fujitsu which has developed a bill recycler for the transport market to be launched in the near future. Fujitsu has so far been present in bill dispensing solutions for transport and retail self-check-out customers. In the market investigation it was not mentioned that Fujitsu would be a viable alternative to Crane, MEI and TNSi in the transport market, but instead Fujitsu was seen as not operating in this market.²¹⁷

Countervailing Buyer Power

188. The Horizontal Merger Guidelines set out the conditions as to when countervailing buyer power can be considered as a constraining factor on a supplier: "Countervailing buyer power cannot be found to sufficiently off-set potential adverse effects of a merger if it only ensures that a particular segment of customers,

214 Slide 4 of Crane's presentation, received from the FTC by email of 30 April 2013, Crane_FTC--2_0098453.

215 Minutes of the conference call of 15 March 2013 with a customer in transport: "*JCM also tried to develop a bill handling solution, but also failed to provide a bill recycler with comparable features and quality.*"

216 Minutes of the conference call of 21 June 2013 with a competitor: "*Glory has very high quality products suitable for retail applications but not for other applications*" Minutes of the conference call of 20 June 2013 with a customer: "*[We Use] Glory/Talaris' products for banking applications but has never seen a suitable Glory product for transport applications.*"

217 Minutes of the conference call of 16 April 2013 with a competitor: "*Fujitsu and Talaris are operating on a different market.*"

with particular bargaining strength, is shielded from significantly higher prices or deteriorated conditions after the merger. Furthermore, it is not sufficient that buyer power exists prior to the merger, it must also exist and remain effective following the merger. This is because a merger of two suppliers may reduce buyer power if it thereby removes a credible alternative.”²¹⁸

189. The results of the market investigation did not show the existence of countervailing bargaining power. In transport, the customers do not seem that large compared to, for instance, manufacturers of retail self-check-out machines, and the high perceived switching costs diminish the degree of buyer power.

Conclusion on bill recyclers for transport applications

190. Based on the very high combined market share, the existence of only one alternative supplier and the significant barriers to entry, as well as the substantiated customer concerns, the Commission concludes that the transaction gives rise to a serious risk of non-coordinated effects on the market of bill recyclers for transport applications by creating or strengthening a dominant position, and therefore raises serious doubts as to its compatibility with the internal market and the EEA Agreement in relation to this market.

VII.2.2.2. Bill acceptors for transport applications

191. Similarly to bill recyclers, bill acceptors used in transport applications, in particular in ticket vending machines ("TVMs") for mass transit, are high-end products which need to have a number of characteristics, such as a full-note escrow function, multi-denomination handling, high reliability, high speed, high capacity, resistance to certain weather conditions and resistance to vandalism. As in the case of bill recyclers, both Crane and MEI are active in the supply of bill acceptors for transport applications in the segment of off-street parking and mass transit but there is no overlap in the on-street parking segment.
192. The Commission notes that many of the arguments with regard to bill recyclers in transport also apply for bill acceptors, both for technical features and the competitive assessment. Moreover, in the market investigation, several respondents made joint statements for both bill recyclers and bill acceptors.

Arguments of the Notifying Party

193. The Notifying Party argues first that Crane does not currently offer a high-end frontload bill acceptor with multi-escrow note functionality which is often required by mass transit customers in the transport segment. Crane rather competes in the "lower" transport segment, off-street parking.
194. Moreover, according to the Notifying Party, in the lower-end of transport bill acceptors there are valid alternatives. The Notifying Party argues finally, as in the case of bill recycler for the transport segment, that countervailing bargaining power exists.

²¹⁸ Horizontal Merger Guidelines, paragraph 67.

195. The Notifying Party thus concludes that, despite the Parties' combined position in the transport segment for bill acceptors, the transaction will not lead to a significant impediment of effective competition.

Market Structure

196. With regard to bill acceptors in the transport segment the transaction would lead to a combined market share of the Parties of [70-80]% in the EEA currently with only two remaining competitor, JCM and TNSi. The transaction can be thus considered a '4 to 3' consolidation. Given TNSi's limited portfolio of currencies out the euro-zone, covering only the Polish Zloty and the Danish Crown, the effect of the concentration is even stronger in EEA countries that do not have the EUR.

Table 6: Market shares for bill acceptors in transport in the EEA

	2012	2011	2010
Crane	[10-20]%	[5-10]%	[10-20]%
MEI	[50-60]%	[60-70]%	[60-70]%
Crane+MEI	[70-80]%	[70-80]%	[70-80]%
JCM	[10-20]%	[10-20]%	[10-20]%
TNSi	[5-10]%	[5-10]%	[5-10]%
G&D ²¹⁹	-	[5-10]%	[0-5]%
Total	100%	100%	100%

Source: Notifying Party

197. As to the Notifying Party's claim that Crane does not currently offer a high-end frontload bill acceptor and that in the "lower" transport segment, off-street parking, JCM is equally strong ([20-30]%), the Commission notes first that the relevant market to be looked at is the entire transport segment. Secondly, even in the lower-end segment, many customers see only JCM as a viable alternative. One customer explained: "*JCM can be considered [...] as the only other alternative supplier for non-high end bill acceptors. [...] However, JCM's product cannot be considered high-end.*"²²⁰ Finally, the Notifying Party itself explained that Crane has the technical capability to offer a high-end bill acceptor in the short term. In fact, in the market investigation customers stated that Crane is actively approaching customers and offers a downgraded version of the B2B as a bill acceptor which is viewed by the customers as an alternative to MEI's bill acceptor BNA.²²¹

Results of the market investigation

198. Customers raised concerns during the market investigation with regard to bill acceptors. For example, one customer indicated that "*the main effect could be for the*

²¹⁹ G&D's bill acceptor (offered through its JV CI-Tech) is an old product, considered to be too expensive, and it is running out of market.

²²⁰ Minutes of the conference call of 18 June 2013 with a customer in transport.

²²¹ Minutes of the conference call of 19 June 2013 with a customer in transport: "*the Crane B2B is a bill recycler. However, it can be used also as a bill acceptor with escrow and no recycling capabilities, but with the possibility of installing the recycling modules later. [...] [in mass transit] [...] has never seen any other real alternative for bill acceptors. [...] does not see any likely entrants in bill acceptors for transport customers but for possibly Japanese companies.*"

*purchasing of bill acceptors, as we only use products from MEI and Crane. This could affect us if the prices increase, as there is no real alternative to MEI and Crane for bill acceptors in transit segment. We can anticipate that this will not only affect us but the whole transit market. Summarizing, MEI is considered the 'de facto' standard for bill acceptors in transit. The unique alternative for it now is Crane."*²²²

Closeness of competition

199. As regards closeness of competition, both customers and competitors consider the Parties close, if not the closest, competitors with regard to bill acceptors. According to one customer "For [...] bill acceptors [...] for transport customers, MEI and Crane are very close competitors [...] the BNA competes with the downgraded B2B)."²²³ JCM is also mentioned as a close competitor for the lower end of the transport segment (i.e. parking). As pointed out in paragraph 169, the closeness of competition was assessed by the market participants on the basis of a number of parameters, such as quality, service network, product portfolio and reputation.²²⁴
200. The Commission thus concludes that the Parties are close competitors in the supply of bill acceptors for transport applications.

Potential entry and barriers to entry

201. With regard to barriers to entry the same considerations and assessment apply as for bill recyclers although the barriers to entry in terms of technology seem slightly lower for bill acceptors as they have a less complicated technology as regards the transportation of the banknote within the payment system (one-way transportation into the stacker bag, as opposed to the two-way transportation of a bill recycler).
202. For the detailed assessment on entry see in particular paragraphs 174 to 187 above. The barriers to entry result from the need to have sufficient capabilities in terms of technical know-how, R&D as well as sales and distribution network and from the importance of reputation and perceived switching costs in transport applications. Furthermore, the Commission did not find evidence of a sufficiently timely entry by competitors from other verticals.

Countervailing buyer power

203. With regard to countervailing buyer power the same considerations and assessment apply as for bill recyclers. For the assessment on countervailing buyer power see in particular paragraphs 188 and 189 above. The Commission finds that countervailing buyer power cannot be found to sufficiently off-set potential adverse effects of a merger if it only ensures that a particular segment of customers, with particular bargaining strength, is shielded from significantly higher prices or deteriorated conditions after the merger. Furthermore, the results of the market investigation did

²²² Response to question 68 of the Questionnaire to customers in transport.

²²³ Minutes of the conference call of 20 June 2013 with a customer in transport.

²²⁴ Responses to questions 47 and 51 of the Questionnaire to customers in transport and to questions 44 and 46 of the Questionnaire to competitors in bills.

not show the existence of sufficient countervailing bargaining power in transport applications.

Conclusion on bill acceptors for transport applications

204. Based on the very high market shares, the existence of only limited alternative suppliers and the significant barriers to entry, as well as the substantiated customer concerns, the Commission concludes that the transaction gives rise to a serious risk of non-coordinated effects on the market of bill acceptors for transport applications through the creation or strengthening of a dominant position, and therefore raises serious doubts as to its compatibility with the internal market and the EEA Agreement in relation to this market.

VII.2.2.3. Overall bill payment systems for transport applications

205. With regard to the overall market for bill payment systems for transport applications the transaction would lead to a combined market share of the Parties of [70-80]% in the EEA.

Table 7: Market shares for overall bill payment systems in transport in the EEA

	2012	2011	2010
Crane	[20-30]%	[20-30]%	[20-30]%
MEI	[40-50]%	[50-60]%	[50-60]%
Crane+MEI	[70-80]%	[70-80]%	[70-80]%
JCM	[5-10]%	[5-10]%	[5-10]%
TNSi	[5-10]%	[5-10]%	[5-10]%
Fujitsu	[5-10]%	[0-5]%	[0-5]%
G&D	[0-5]%	[0-5]%	[0-5]%
Other	[0-5]%	[0-5]%	[0-5]%
Total	100%	100%	100%

Source: Notifying Party

206. The detailed assessment in sections VII.2.2.1 and VII.2.2.2 equally applies to the overall market for bill payment systems for transport applications. The Commission finds that TNSi' capabilities to compete effectively with the merged entity are limited to a certain extent due to its limited currency portfolio. Furthermore, the results of the market investigation point to adverse effects on competition of the proposed transaction in terms of price and product innovation. Moreover, Crane and MEI are closely and strongly competing in the market of bill payment products for transport applications and the proposed transaction will thus result in the removal of an important competitive constraint. In addition, there are important barriers to entry and there is a lack of sufficient countervailing buyer power by customers in the transport vertical.

207. On that basis, the Commission considers that the transaction gives rise to a serious risk of non-coordinated effects on the market of bill payment systems for transport applications through the creation or strengthening of a dominant position, and therefore raises serious doubts as to its compatibility with the internal market and the EEA Agreement in relation to this market.

VII.2.2.4. Bill recyclers for retail SCO applications

208. The Notifying Party argues that in relation to retail SCO bill recyclers, its sales are very modest and [...]. Those legacy sales relate to contracts awarded in the past and include replacement systems and spare parts. The Notifying Party submits that as of today it has no new orders for bill handling products in retail SCO. As such, there is no material overlap. In addition, the Notifying Party argues that retail SCO OEMs have already selected their providers and these providers are broadly speaking "locked" into the current generation of products in the marketplace. Moreover, the Notifying Party submits that its products are not entirely suitable for retail SCO customers.

Table 8: Market shares for bill recyclers in retail SCO applications in the EEA

	2012	2011	2010
Crane	[0-5]%	[0-5]%	[0-5]%
MEI	[30-40]%	[0-5]%	[10-20]%
Crane+MEI	[30-40]%	[0-5]%	[10-20]%
Glory	[60-70]%	[90-100]%	[80-90]%
Total	100%	100%	100%

Source: Notifying Party

209. The Commission notes that the Parties' combined market shares and the market share increment are relatively modest. Furthermore, the award of contracts in the retail SCO markets is based on tenders. Customers issue tenders when they develop a new generation of retail SCO terminals and usually continue working with that supplier until a new generation is developed. Customers contacted in the market investigation identified a number of competitors to the Parties as potential suppliers of bill recyclers for retail SCO applications to be considered in those tenders. In addition to Glory, Fujitsu, CI Tech and JCM were identified by customers as alternative suppliers.²²⁵
210. The Commission notes that in relation to retail SCO applications, the internal documents of MEI show that [...].²²⁶ In those documents, MEI only identifies [...] as competitors for [...] in particular²²⁷ while Crane [...].
211. The Commission also takes into consideration that the retail SCO market is characterized by four large and sophisticated customers, namely NCR, Wincor Nixdorf, Toshiba²²⁸ and Fujitsu who use sophisticated tender procedures. Two of those customers, Wincor Nixdorf and Toshiba, already have in-house payment systems.
212. In view of the above, the Commission concludes that the proposed transaction does not raise competition concerns with respect to bill recyclers for retail SCO applications.

²²⁵ Minutes of the conferences call of 13 March, 19 June and 20 June 2013 with two customers.

²²⁶ See only Annex 5.5(b) to the Form CO, Document MEI0002372 of November 2010, page 6.

²²⁷ Annex 5.5(b) to the Form CO, Document MEI0002013 of July 2012, page 9.

²²⁸ Toshiba acquired the SCO business from IBM in 2012.

VII.2.2.5. Bill acceptors for retail SCO applications

213. Similarly to the bill recyclers for retail SCO, the Notifying Party argues that in relation to retail SCO bill acceptors, Crane's sales are very modest and [...]. Those legacy sales relate to contracts awarded in the past and include replacement systems and spare parts. The Notifying Party submits that as of today Crane has no new orders for bill handling products in retail SCO. As such, there is no material overlap. In addition, the Notifying Party argues that retail SCO OEMs have already selected their providers and these providers are broadly speaking "locked" into the current generation of products in the marketplace.

Table 9: Market shares for bill acceptors in retail SCO applications in the EEA

	2012	2011	2010
Crane	[0-5]%	[0-5]%	[0-5]%
MEI	[80-90]%	[70-80]%	[70-80]%
Crane+MEI	[80-90]%	[80-90]%	[70-80]%
JCM	[10-20]%	[10-20]%	[30-40]%
Total	100%	100%	100%

Source: Notifying Party

214. The Commission notes that the market share increment is relatively modest. As the size of the EEA market of bill acceptors for retail SCO is limited at around EUR [...], Crane's EEA market share of [0-5]% was equivalent to sales of EUR [...] to one customer in 2012. According to Crane, [...]. Moreover, the market is characterised by the presence of other competitors. JCM and CI Tech were expressly identified in the market investigation as alternative supplier to the Parties.²²⁹ CI Tech currently has no sales of bill acceptors to retail SCO customers but was identified as a potential supplier.
215. The Commission also notes that the internal documents of MEI generally [...] and that the market is characterized by four large and sophisticated customers who in part already have in-house payment systems as already explained in section 206.
216. In view of the above, the Commission concludes that the proposed transaction does not raise competition concerns with respect to bill acceptors for retail SCO applications.

VII.2.2.6. Bill acceptors for retail kiosk applications

217. According to the Notifying Party, the payment systems sold to retail kiosk customers are the same products that are developed and sold in other verticals and there are no unattended payment systems developed particularly for this segment. Thus, the same competitive constraints that exist for these payment systems in other verticals operate with equal force in this segment.

229 Minutes of the conference call of 19 June 2013 with a customer.

Table 10: Market shares for bill acceptors in retail kiosk applications in the EEA

	2012	2011	2010
Crane	[10-20]%	[10-20]%	[10-20]%
MEI	[20-30]%	[20-30]%	[30-40]%
Crane+MEI	[40-50]%	[40-50]%	[40-50]%
JCM	[20-30]%	[20-30]%	[20-30]%
Innovative	[10-20]%	[10-20]%	[10-20]%
ICT	[5-10]%	[5-10]%	[5-10]%
Pyramid	[0-5]%	[0-5]%	[0-5]%
Other	[5-10]%	[5-10]%	[5-10]%
Total	100%	100%	100%

Source: Notifying Party

218. Customers in retail kiosks indeed pointed out that payment mechanisms are usually not customized for their individual needs.²³⁰ No substantiated concerns were raised during the market investigation.
219. The Commission notes that there are alternative suppliers on the market, with JCM and Innovative having a considerable market share with a market share above or around the market share increment added by Crane. Respondents also named a few alternative competitors.²³¹
220. In view of the above, the Commission concludes that the proposed transaction does not raise competition concerns with respect to bill acceptors for retail kiosk applications.

VII.2.2.7. Bill acceptors for gaming applications

221. According to the Notifying Party the transaction does not raise competition concerns in the market for bill acceptors for gaming applications, since the combined market share is not high and the Parties will continue to face competitive constraints from other significant competitors.²³² The Notifying Party also argues that in the gaming segment the customers (i.e. the OEMs of the AWP machines and the casinos) due to their buyer power ensure a high level of competition before choosing suppliers of payment systems and tend to multi-source.²³³
222. The transaction would create the third strongest player in the market for bill acceptors for gaming application, with the combined market share of [20-30]%. The leader in the market is JCM with [40-50]%, followed by Innovative with [20-30]%.

230 Responses to question 52 of the Questionnaire to customers in retail kiosks.

231 Responses to question 35 of the Questionnaire to customers in retail kiosks.

232 Form CO, paragraphs 884–885.

233 Form CO, paragraphs 895–898 and 913–914.

Table 11: Market shares for bill acceptors in gaming in the EEA

	2012	2011	2010
Crane	[10-20]%	[5-10]%	[10-20]%
MEI	[10-20]%	[10-20]%	[10-20]%
Crane+MEI	[20-30]%	[20-30]%	[20-30]%
JCM	[40-50]%	[40-50]%	[30-40]%
Innovative	[20-30]%	[20-30]%	[20-30]%
ICT	[5-10]%	[5-10]%	[5-10]%
GPT	[0-5]%	[0-5]%	[0-5]%
Micro/GBA/Astro	[0-5]%	[0-5]%	[0-5]%
Other	[0-5]%	[0-5]%-	[0-5]%
Total	100%	100%	100%

Source: Notifying Party

223. In the course of the market investigation the major competitor confirmed that the big gaming customers tend to double-source in order to minimise the risk of fraud.²³⁴ An overwhelming majority of respondents in the market investigation confirmed that they apply multi-sourcing strategy for bill payment systems.²³⁵
224. As regards switching, gaming customers are viewed by the competitors in bill as more flexible and ready to switch than transport customers.²³⁶ The major competitor noted that, as opposed to the transport segment "*in gaming segment, the bill acceptor / recycler producers provide the products with same communication protocol (software) and the same footprint. For the machine producers it is relatively easy to switch from one supplier to another, as it does not involve redesign or reprogramming of their machines.*"²³⁷ The same major competitor confirmed that bill payment products of different suppliers can be integrated into one gaming machine.²³⁸ In addition, bill acceptors for the gaming application are considered as low-end or mid-range products compared to those used in transport.²³⁹
225. The gaming customers indicate that switching between payment systems suppliers is easy.²⁴⁰ One of the customers clearly stated that they have enough options among suppliers of bill acceptors from which they can choose.²⁴¹ In the course of market investigation the gaming customers did not express concerns as to the negative impact of the transaction on the market for bill acceptors in the gaming

234 Response to question 81 of the Questionnaire to competitors in bill.

235 Responses to question 42 of the Questionnaire to customers in gaming.

236 Response to question 36 of the Questionnaire to competitors in bills.

237 Response to question 48 of the Questionnaire to competitors in bill.

238 Response to question 77 of the Questionnaire for competitors in bill.

239 Minutes of the conference call of 15 March 2013 with a competitor; Minutes of the conference call of 20 June 2013 with a competitor.

240 Minutes of the conference call of 1 February 2013 with a customer.

241 Responses to question 30 of the Questionnaire to customers in gaming.

application.²⁴² In fact some customers expect positive effects of the transaction in terms of greater product range.²⁴³

226. In view of the limited combined market share of the Parties, existence of strong competitors, the fact that the customers tend to multi-source and find it easy to switch and due to the lack of concerns raised by the customers in the course of market investigation the Commission concludes that no competition concerns arise with respect to the market for bill acceptors for gaming applications.

VII.2.2.8. Bill acceptors for vending applications

227. Bill acceptors used in vending applications are usually 'back-loading' products with limited functionalities, and they are considered low-end products in the range of bill acceptors.²⁴⁴ Bill acceptors are not widely used in vending in the EEA due to the high value of euro coins when compared to, for example, the US-dollar notes, but they are required in some locations where the values of the vended products are high, such as in airports or leisure destinations.²⁴⁵

228. The Notifying Party submits that the proposed transaction does not lead to competition concerns with respect to bill acceptors. The Notifying Party justifies its view by, e.g. referring to other competitors being present and the ease of switching.

229. EEA market shares concerning bill acceptors in vending are given in Table 12 below.

Table 12: Market shares for bill acceptors in vending in the EEA

	2012	2011	2010
Crane	[20-30]%	[10-20]%	[10-20]%
MEI	[20-30]%	[30-40]%	[20-30]%
Crane+MEI	[40-50]%	[40-50]%	[30-40]%
Azkoyen	[10-20]%	[10-20]%	[10-20]%
Coinco	[0-5]%	[0-5]%	[0-5]%
ICT	[20-30]%	[20-30]%	[30-40]%
Innovative	[5-10]%	[5-10]%	[5-10]%
JCM	[5-10]%	[5-10]%	[5-10]%
Others	0%	0%	0%
Total	100%	100%	100%

Source: Notifying Party

230. It is apparent from the market shares that the merged entity would become a market leader. However, the merged entity would nonetheless have slightly less than half of the market with at least two notable competitors, ICT and Azkoyen, together with some smaller ones left to compete with it.

²⁴² Responses to question 69.5 of the Questionnaire to customers in gaming.

²⁴³ Responses to question 69.5 of the Questionnaire to customers in gaming.

²⁴⁴ Form CO, paragraphs 199–200 and 233.

²⁴⁵ Form CO, paragraph 233.

231. The results of the market investigation support the idea that switching between bill acceptors of different manufacturer is easy for customers in vending: Payment systems used in vending machines follow industry standards when it comes to, e.g. communication protocols. The results of the market investigation also showed that it is technically easy to switch a bill acceptor from one manufacturer to a bill acceptor from another manufacturer in vending machines.²⁴⁶ A significant amount of customers are also already multi-sourcing.²⁴⁷
232. In the market investigation, the majority of both competitors and customers did not raise concerns with respect to bill acceptors in vending applications.²⁴⁸
233. In light of the above, the Commission considers the proposed transaction does not raise competition concerns with the internal market with respect to bill acceptors in vending.

VII.3. Non-Horizontal Assessment

234. The proposed transaction gives rise to a vertical link between Crane's activities in the supply of vending machines and the Parties' activities in the supply of unattended payment systems, in particular tube-based coin recyclers, which are primarily used in vending machines. In addition, the proposed transaction potentially gives rise to a vertical link between Crane's activities in the supply of vending machines and MEI's activities in the supply of VMS and telemetry.
235. According to the Non-Horizontal Merger Guidelines,²⁴⁹ the Commission mainly considers the question of foreclosure in the assessment of vertical links. This foreclosure can take two forms: customer foreclosure or input foreclosure. Customer foreclosure may occur when a supplier integrates with an important downstream customer, enabling it to hamper or eliminate access to a sufficient customer base by its upstream rivals. Input foreclosure may arise where the merged entity could hamper or eliminate access to the products that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger.
236. The Parties to the transaction are also active in a number of related or neighbouring product markets. According to the Non-Horizontal Merger Guidelines,²⁵⁰ the Commission will mainly consider the question of foreclosure in the assessment of conglomerate mergers. The combination of products in related markets may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another by means of tying or bundling or other exclusionary

²⁴⁶ Responses to question 53 of the Questionnaire to customers in vending.

²⁴⁷ Responses to question 42 to the Questionnaire to customers in vending.

²⁴⁸ Responses to question 69.5 to the Questionnaire to customers in vending, and to question 83.2 to the Questionnaire to competitors in bills.

²⁴⁹ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings. OJ C 265/6, 18.10.2008, paragraphs 18 and 29ff.

²⁵⁰ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings. OJ C 265/6, 18.10.2008, paragraphs 18 and 93ff.

practices. In this context, the Commission analysed how important it is for a competing unattended payment systems manufacturer to be able to offer different kinds of payment systems, in particular systems for both coins and banknotes, and whether payment system manufacturers apply special rebates if a customer buys a multitude of different products.

VII.3.1. Customer foreclosure for tube-based coin recyclers

237. In the present case, customer foreclosure could occur if the merged entity could substantially hamper or eliminate the ability of upstream rivals in tube-based coin recyclers to sell their products to downstream customers. As the merged entity only controls a very small percentage of the downstream market, i.e. [0-5]% of the EEA market of vending machines,²⁵¹ it would not have the ability or the incentive to engage in customer foreclosure. Even if one considers the UK vending market separately, Crane only accounts for [20-30]% of the market and is therefore unable to engage in profitable customer foreclosure. This is corroborated by the market investigation in which no concerns related to customer foreclosure arose.
238. In light of the above, the Commission considers that the proposed transaction does not raise competition concerns with respect to customer foreclosure in the vertical link between vending machines and tube-based coin recyclers.

VII.3.2. Input foreclosure for tube-based coin recyclers

239. In the present case, input foreclosure could take place if the merged entity could substantially hamper or eliminate its downstream vending machine competitors' access to unattended payment systems, in particular tube-based coin recyclers, thereby raising their costs.
240. The issue of whether the merged entity would have an incentive to exercise market power upstream to engage in input foreclosure is closely related to the horizontal assessment discussed in Section VII.2 in which the ability of the merged entity to increase prices to downstream customers is assessed. In other words, any potential for input foreclosure concerns derive mainly from the market power that the merged entity would achieve in the upstream market for unattended payment systems. The results of the horizontal assessment therefore apply accordingly here, and the Commission accordingly considers the proposed transaction to result in the creation of a dominant market position for the merged entity in tube-based coin recyclers.
241. In the market investigation, some respondents also considered that competition concerns might arise in relation to the vertical link between unattended payment systems and vending machines.²⁵²
242. Nonetheless, any putative concern would be resolved by remedies that remove the horizontal concern in the markets for unattended payment systems. As the Notifying Party has submitted Commitments that remove the horizontal concerns in relation to bill recyclers, bill acceptors and tube-based coin recyclers (see below), the

²⁵¹ Of the Parties, only Crane is active in the downstream market of vending machines.

²⁵² Responses to question 78 of the Questionnaire to competitors in coins and to question 25 of the Questionnaire to competitors in vending machines.

Commission considers that the putative input foreclosure concerns would be removed as well.

243. In light of the above, the Commission considers that the proposed transaction does not raise competition concerns with respect to input foreclosure in the vertical link between vending machines and tube-based coin recyclers.

VII.3.3. *Customer and input foreclosure for VMS and telemetry*

244. MEI's EEA market share in VMS and telemetry is below 10%, and VMS and telemetry only constitute vertically affected markets if different types of vending machines were assessed separately in the UK.²⁵³
245. Given the limited market shares on both upstream and downstream markets, and the existence of alternative suppliers on both levels, the Commission considers that the vertical links between vending machines, VMS and telemetry do not give rise to customer or input foreclosure concerns. It follows that the proposed transaction does not raise competition concerns with respect to the vertical links between vending machines, VMS and telemetry.

VII.3.4. *Conglomerate assessment*

246. The majority of unattended payment system manufacturers that responded to the market investigation reported that the ability to offer a wide product portfolio would be beneficial for the manufacturer.²⁵⁴ However, competitors nonetheless confirmed that payment systems from different manufacturers can easily be integrated in the same machine.²⁵⁵ As to customers, they were divided on whether it was important for them that the payment system manufacturer offered a broad range of unattended payment systems.²⁵⁶
247. The majority of payment system manufacturers responded in the Commission's market investigation that they use rebates schemes across multiple products while customers' responses to this question were mixed. However, the market investigation also revealed that the majority of customers in practice multi-source across different payment systems.²⁵⁷
248. Moreover, a larger product portfolio may also generate efficiencies in the form of lower transaction costs for both supplier and customers. In this respect, the replies to

253 The Commission considers that the relevant geographic market for vending machines is likely to be EEA wide. See above paragraph 100.

254 Responses to questions 76 and 78–79 of the Questionnaire to competitors in bills and to questions 71 and 73–74 of the Questionnaire to competitors in coins.

255 Responses to question 77 of the Questionnaire to competitors in bills and to question 72 of the Questionnaire to competitors in coins.

256 Responses to question 66 of the Questionnaires to customers in retail kiosks, in retail SCO, in transport, in vending and in gaming.

257 Responses to question 64 of the Questionnaires to customers in retail kiosks, in retail SCO, in transport, in vending and in gaming.

the market investigation contained references to the ease of having only one contact person or a one-stop-shop.²⁵⁸

249. Moreover, any feasible competition concerns would arise from the merged entity's increased market power in some of the unattended payment systems.²⁵⁹ Hence, any putative concern would be resolved by remedies that remove the horizontal concern in the markets for unattended payment systems. As the Notifying Party has submitted Commitments that remove the horizontal concerns in relation to bill recyclers, bill acceptors and tube-based coin recyclers (see below), the Commission considers that the putative foreclosure concerns would be removed as well.
250. In light of the above, the Commission considers that the proposed transaction does not raise competition concerns with respect to conglomerate effects.

VII.4. Conclusion on the competitive assessment

251. The Commission concludes that the proposed transaction gives rise to serious doubts as to its compatibility with the internal market and the EEA Agreement in the markets of:
- coin recyclers in the EEA under a horizontal assessment concerning the overlaps between the Parties' activities,
 - bill recyclers for transport applications in the EEA, and
 - bill acceptors for transport applications in the EEA.
252. The Commission concludes that the proposed transaction does not give rise to competition concerns in the markets of coin acceptors in the EEA as well as the markets of bill recyclers and bill acceptors for other than transport applications in the EEA.

VIII. PROPOSED REMEDIES

253. In order to render the concentration compatible with the internal market, the Notifying Party modified the notified concentration by entering into the following commitments, which are annexed to this decision and form an integral part thereof.

VIII.1. Proposed remedies in coin payment systems

254. On 28 June 2013 the Notifying Party submitted a first commitment package in order to eliminate the Commission's serious doubts in the market for coin recycler based on tubes ("Coin Commitments of 28 June"). This remedy package was not market tested because the Commission considered that it fell short of remedying the competition concerns.
255. The Notifying Party submitted revised coin commitments on 4 July 2013 ("Coin Commitments of 4 July") for which a market test was launched on the same day.

258 Responses to question 66 in the Questionnaires to customers.

259 Responses to question 78 of the Questionnaire to competitors in coins and to question 25 of the Questionnaire to competitors in vending machines.

256. Finally, on 12 July 2013, the Notifying Party submitted the final coin commitments ("Coin Commitments of 12 July").

VIII.1.1. Description and assessment of the Coin Commitments of 28 June

257. The Notifying Party offered a behavioural commitment consisting in relieving the members of MEI distribution and service network of any exclusivity thus allowing them to sell and service also those products, which compete with Crane and MEI. In addition the Notifying Party proposed a modification of its volume rebate schemes [...]. Finally the Notifying Party proposed that it will not enter into new exclusivity agreements with distributors or service providers in the EEA with respect to coin recycler products.
258. The Coin Commitments of 28 June were not market tested as they did not address the competition concerns in a full and clear cut manner.

VIII.1.2. Description of the Coin Commitments of 4 July

259. The Coin Commitments of 4 July consist in a proposal to sell various intangible assets necessary to manufacture Notifying Party's Currenza C² coin recycler line of products currently manufactured by NRI and sold into the EEA ("the Coin Divestment Business"), including the following coin recycler models: Currenza C² blue, Currenza C² green, Currenza C² white and Currenza C² silver ("Coin Recycler Product Line").
260. The Coin Divestment Business includes the following:
- a. exclusive right to use the Currenza C² brand for the Coin Recycler Product Line in the EEA;
 - b. licences to all intangible assets (including all necessary intellectual property rights), which contribute to the current operation or are necessary to ensure the viability of the Coin Divestment Business and which include a technology licence for all for the manufacturing equipment, know-how and tooling as well as a licence for the currency validation and control software;
 - c. all customer orders and contracts (including any customer lists) for the Coin Recycler Product Line concluded between NRI and EEA Customers;
 - d. the opportunity to interview and employ the employees of the Notifying Party from the following function groups: engineers/R&D personnel ([...]), sales personnel ([...]) and technical support ([...]).
261. On the other hand, the Coin Divestment Business does not include the following:
- a. manufacturing equipment and tooling products used in the production of the Coin Recycler Product Line;
 - b. products manufactured by NRI which are not exclusively categorised as part of the Coin Recycler Product Line; and
 - c. the Coin Recycler Product Line sold to non-EEA Customers.

262. The Notifying Party also proposed to enter into a transitional toll manufacturing agreement on the basis of which the Notifying Party would supply the purchaser of the Coin Divestment Business with the Coin Recycler Product Line at a cost calculated on an objective basis or at NRI's purchasing cost for products currently not manufactured by NRI and also sold under the Currenza C2 brand. During the toll manufacturing agreement, Crane would provide training to enable the Purchaser to support the Coin Recycler Product Line. Crane would also provide engineering and technical support reasonably necessary to support the Purchaser's own manufacturing of the Coin Recycler Product Line at cost, for a period of up to [...] following the termination of the toll manufacturing agreement.
263. The perpetual, royalty-free technology licence for the manufacturing equipment, know-how and tooling would cover all the current technologies relating to the Coin Recycler Product Line and any subsequent improvements of technology carried by the Notifying Party up until the [...] after the expiry of the toll manufacturing agreement.
264. The Notifying Party proposed to licence the current version of the control and validation software (i.e. both source code and object code) necessary for the Coin Recycler Product Line. The Purchaser would have the right to use and reproduce the licensed software and prepare derivative works thereof. Any improvement made by the Notifying Party to the software would be available to the purchaser also up until the [...] after the expiry the toll manufacturing agreement.
265. The Notifying Party proposed to grant a licence to all patents that are necessary to manufacture the Coin Recycler Product Line.
266. The Notifying Party would not market or sell the Coin Recycler Product Line to customers located inside the EEA, while the purchaser of the Coin Divestment Business would not market and sell the Coin Recycler Product Line to customers located outside the EEA. After a period of [...] from the Commission's decision, both Notifying Party and the purchaser would have the right to market and sell products developed using technology derived from the Coin Recycler Product Line to all customers.

VIII.1.3. Assessment of the Coin Commitments of 4 July

267. The responses in the market test for Coin Commitments of 4 July were mixed. The customers and competitors noted certain shortcomings, which could negatively impact the viability of the Coin Divestment Business to compete effectively on a lasting basis.
268. Regarding the non-compete clause for [...] the clear majority of competitors in the market test indicated that this is too short and suggested time periods of 5-10 years. Customers mostly did not express an opinion. Some considered three years as sufficient but others, including one of the largest customers, proposed 6 or 10 years.
269. As regards the limitation of the geographic scope of the Coin Divestment Business, whereby the sale and marketing is limited to the EEA most respondents found that this restriction could affect the ability of the Coin Divestment Business to compete effectively on a lasting basis. In particular, the use by the Notifying Party of the Currenza brand outside the EEA could create confusion and it was unclear how it would be enforced in practice (as for instance the Notifying Party's products might

enter the EEA through secondary channels). Others specifically mentioned that in case a geographic restriction is maintained, it should be clear that this covers EEA-based customers, even if the customers might produce vending machines for other geographies.

270. With regard to personnel, several respondents stated that the number of engineers to be interviewed is not sufficient and should be equal to at least [...]. Other functions, which were mentioned as important include: purchasing/procurement and logistics personnel, knowledgeable with the supply chain (this was noted both by the competitors and one of the big customers) as well as quality, design and manufacturing experts. Sales/marketing and technical support was considered sufficient by the respondents. The competitors were also not certain whether the period of the engineering support after the expiry of toll manufacturing agreement is sufficient.
271. With respect to the overall attractiveness of the Coin Divestment Business the majority of competitors do not express an opinion. Some competitors consider it attractive, whilst some do not. Customers are split on this question. Only two competitors expressed an interest in acquiring the Coin Divestment Business, however not in the form as proposed the Coin Commitment of 4 July, but with certain modifications.²⁶⁰ Another one expressed some interest, but says might not have the financial resources.
272. On the basis of the market test and based on its own analysis of the Coin Commitments the Commission found the following major shortcomings in the Coin Commitments of 4 July:
- (i) the duration of [...] of the mutual non-compete. Instead it should be at least [...] from the actual transfer of the business in order to allow the purchaser enough time to establish a foothold in the EEA;
 - (ii) the limitation of the geographic scope of the Coin Divestment Business; the Commission finds here that the purchaser should have the right to sell the products outside the EEA as soon as the toll manufacturing agreement ends, while the Parties would be barred from selling into the EEA until the end of the non-compete clause;
 - (iii) the insufficient number of the R&D personnel, as a higher number R&D personnel is necessary to allow for an effective transfer of the know-how.
273. With regard to the fact that the software is licenced but not sold to the Purchaser, the Commission communicated to the Notifying Party that it did not consider that this structure would effectively eliminate its serious doubts, unless the licence would be granted to a Purchaser that can combine it with an existing stand-alone business, create synergies with other relevant assets and on this basis compete in a lasting manner with the merged entity. The Commission also indicated that the licence structure may significantly reduce the attractiveness of the remedy for a large number of purchasers. The Commission underlined that this was the case even though there is no licence fee and the purchaser would have the right to develop

²⁶⁰ Responses to question 20 of the Questionnaire Currenza Divestiture to competitors.

further the software and use it for other tube-based coin recyclers it may develop in the future.

274. The Commission is of the view that, the deficiencies as described in paragraph 272 above affect the future viability of the Coin Divestment Business and as such its attractiveness for potential purchasers, as this was pointed out during the market test. Consequently, it is questionable whether the Coin Divestment Business is likely to attract a suitable purchaser and as such will effectively compete on a lasting basis with the merged entity. The Commission therefore considers that the Coin Commitments of 4 July are most likely not suitable to solve competition concerns.
275. Based on the above, the Commission considers that the Coin Commitments of 4 July were not capable of removing the competition concerns and serious doubts still remained with regard to coin recyclers based on tubes. This assessment was communicated to the Notifying Party.

VIII.1.4. Description of the Coin Commitments of 12 July

276. On 12 July 2013, the Notifying Party submitted improved coin commitments. The Notifying Party proposes also to sell the same intangible assets necessary to manufacture the Coin Recycler Product Line. The modifications vis-à-vis the Coin Commitments of 4 July are set out below.
277. First, the Coin Commitments of 12 July provide for a higher number key personnel and include now [...] instead of [...] engineers/R&D person.
278. With regard to the non-compete clause, the Coin Commitments of 12 July prolonged the non-compete clause to [...]. In particular, Crane shall have the right to market and sell products developed using technology derived from the Coin Recycler Product Line to EEA Customers only after a period of [...] from Closing. On the other hand, the Purchaser shall not market or sell the Coin Recycler Product Line to customers located outside the EEA. Following the termination of the Toll Manufacturing Agreement, the Purchaser shall have the right to market and sell coin recyclers developed using technology derived from the Coin Recycler Product Line both within and outside the EEA.
279. With regard to the suitable purchaser criteria, the Coin Commitments of 12 July provide for the Purchaser to be independent of and unconnected to Crane and/or MEI; and currently be a manufacturer of payment systems (cash or cashless), a manufacturer of machines incorporating such systems, including but not limited to manufacturers of vending machines, or otherwise have current or recent proven experience in the payment systems industry.
280. Lastly, the concentration between Crane and MEI will not be implemented unless and until Crane has entered into binding agreements with an approved purchaser for the transfer of the Coin Divestment Business ("the upfront buyer clause").

VIII.1.5. Assessment of the remedies of Coin Commitments of 12 July

281. The Commission notes that the Notifying Party addressed the main concerns identified on the basis of the market test with regard to the Coin Commitments of 4 July.

282. Under the Coin Commitment of 12 July, firstly, the non-compete clause is extended to [...]; secondly the Purchaser is able to sell, following the termination of the Toll Manufacturing Agreement, coin recyclers developed using technology derived from the Coin Recycler Product Line both within and outside the EEA, while the Notifying Party is barred to sell the coin recyclers developed using technology derived from the Coin Recycler Product Line into the EEA for the duration of the non-compete clause ("asymmetric non-compete clause"), and, thirdly, the number of R&D personnel has been increased to include [...] people.
283. The Notifying Party also specifically refers to a Purchaser which must be currently a manufacturer of payment systems or manufacturer of machines incorporating such systems, or otherwise have current or recent proven experience in the payment systems industry. The Commission notes that this suitable Purchaser clause ensures the viability of the Coin Divestment Business in order to compete effectively on the EEA market for tube-based coin recyclers.
284. Furthermore, the Notifying Party included an upfront buyer clause, according to which the proposed transaction will not be implemented unless and until Crane has entered into binding agreements with an approved purchaser.
285. The improved commitments, together with the upfront buyer clause and the purchaser requirements address in a fully satisfactory manner the identified concerns as to whether the Coin Divestment Business will indeed be transferred to a suitable purchaser. On the basis of the upfront buyer clause and the purchaser requirements the Commission also concludes that the licence structure is appropriate.
286. The Commission is thus of the view that Coin Commitments of 12 July give the necessary safeguards that the Coin Divestment Business will be sold and will as such compete on a lasting basis with the merged entity in the market for tube-based coin recyclers in the EEA.
287. Consequently, the Commission considers that the improved Coin Commitments of 12 July remove the competition concerns and that the Coin Divestment Business is likely to be viable and to attract a suitable purchaser. On the basis of the above, the Commission concludes that the Coin Commitments of 12 July are sufficient to remove the competition concerns in the market for tube-based coin recyclers in the EEA.

VIII.2. Proposed remedies in bill payment systems

288. On 28 June 2013 the Notifying Party submitted a first commitment package in order to eliminate the Commission's competition concerns in the bill recycler and bill acceptor markets ("Bill Commitments of 28 June"). This remedy package was not market tested because the Commission considered that it fell short of remedying the competition concerns.
289. The Notifying Party submitted revised bill commitments on 3 July 2013 ("Bill Commitments of 3 July") for which a market test was launched on the same day.
290. On 12 July 2013, the Notifying Party submitted the final bill commitments ("Bill Commitments of 12 July").

VIII.2.1. Description of the Bill Commitments of 28 June 2013

291. In the Bill Commitments of 28 June the Notifying Party offered a divestment in relation to concerns identified in bill payment systems (recyclers and acceptors) used in transport applications.
292. The Bill Commitments of 28 June were not market tested as they did not fully and in a clear and cut manner address the competition concerns.

VIII.2.2. Description of the Bill Commitments of 3 July 2013

293. In the Bill Commitments of 3 July 2013, the Notifying Party proposed to sell its global business relating to bill recyclers and bill acceptors used in transport applications ("the Bill Divestment Business"). The Bill Divestment Business consists of a series of Crane's bill recycler line of products²⁶¹ ("Bill Recycler Product Line"). This business is based in Toronto, Canada, as part of Crane's subsidiary CashCode. Crane does not have any bill recycler activities outside of its Toronto plant.
294. The Bill Divestment Business includes the following:
 - a. all tangible and intangible assets which contribute to the current operation or are necessary to ensure the viability of the Bill Divestment Business;
 - b. all licences to all intellectual property rights exclusively for the benefit of the Bill Divestment Business;
 - c. all permits and authorisations issued by any governmental organization exclusively for the benefit of the Bill Divestment Business;
 - d. all customer orders, contracts, leases, commitments of the Bill Divestment Business;
 - e. all personnel currently employed exclusively by Crane in the Bill Divestment Business, whilst other Personnel would be excluded;
 - f. a licence for the Currency Validation software and for patents and patent applications which are not exclusive to the Bill Divestment Business but are required for its operation.

295. The Notifying Party thus proposes to sell to the Purchaser the software that is necessary and exclusive to the Bill Divestment Products ("assigned software"). They will not sell the software that is also used by Crane for other unattended payment products, most notably the so-called Currency Validation Software. However, they propose to enter into a non-exclusive software licence agreement with the purchaser for this software ("licensed software"). Both the source code and object code would be delivered to the Purchaser who would have the right to use and reproduce the licensed software and prepare Derivative Works thereof.

²⁶¹ B2B 100, 100XE, 200, 200G, 200XE, 300 and 300XE. The Bill Recycler Product Line also includes the MFL bill acceptor.

296. On the other hand, the Bill Divestment Business does not include the following:
- a. the personnel and assets not devoted entirely or substantially to the Bill Divestment Business;
 - b. Crane's remaining business relating to its other bill recyclers (including the "BB-60" and the Currenza Bill recycler), to its other bill acceptors (including all backload bill acceptors and the frontload bill acceptors "Ardac Elite" and "Cash Code One") and to the products "FL", BV08", "Lumina" and "VU", based in Toronto. These products are used for other applications such as vending and gaming applications.

VIII.2.3. Assessment of the Bill Commitments of 3 July

297. The results of the market test were mixed, but generally negative. Some of the comments indicated serious shortcomings of the remedy. The concerns raised in the market test are the following.
298. The respondents considered that a series of assets, components and inputs are critical for the viability of the Bill Divestment Business, but were not explicitly included in the Commitments. In particular, the following assets were listed:
- supplier/manufacture documentation (development specifications, drawings, service manuals, user manuals);
 - interfaces between the buyer infrastructure and the listed equipment;
 - testing-related equipment, layout;
 - inclusion of the so-called "bill library"²⁶² and/or giving access to (test) banknotes.
299. The respondents also mentioned that since the scope of the business is worldwide, all Central Bank authorisations (worldwide) which require certifications of banknotes should be transferred and not only the European Central Bank authorisation. In terms of personnel the respondents to the market investigation pointed to the following function groups which were either not offered, or in which not enough personnel was offered: (i) sales network and marketing (i.e. "front office") as a key factor to maintain the customer relationships; (ii) the technical support to maintain the installed base; (iii) the proposed number of engineers was considered too low, as different engineering qualifications are required (mechatronic, electronic, software, banknotes, sensor, manufacturing).
300. Regarding the licenced software the respondents replied that it is of key importance for the competitiveness of the products. Many respondents suggested that the software should be sold and not merely licenced. They indicated that Crane should not be the owner of the software anymore as the Bill Divestment Business would otherwise not have a competitive advantage over the merged entity. It was suggested that through the licence the purchaser would stay too dependent on Crane. In addition, respondents pointed out that the purchaser should be allowed to use the

262 I.e. a collection of new and used banknotes for each relevant currency.

software for other products and not only for the divestment products, in order to allow for a consolidation and synergies in the purchaser's portfolio.

301. Overall, the market test respondents were of the view that the Bill Commitments of 3 July do not offer a viable solution, so that a purchaser can effectively compete with Crane on a lasting basis. Respondents also mentioned that the Divestment Business is too small (only one product) and is not under the full control of the buyer. There was one respondent who showed interest for the Bill Divestment Business, but not in the form proposed by the Notifying Party.
302. The Commission considers that the main deficiencies of the Bill Commitments of 3 July are (i) the lack of clarity about the necessary equipment and the tools included, (ii) the need for inclusion of additional assets, and (iii) the insufficient sales, marketing, support and engineering personnel.
303. With regard to the criticism in relation to the proposed licence structure that the software is licenced but not sold to the Purchaser, the Commission communicated to the Notifying Party that it did not consider that this structure would effectively eliminate its serious doubts, unless the licence would be granted to a Purchaser that can combine it with an existing stand-alone business, create synergies with other relevant assets and on this basis compete in a lasting manner with the merged entity. The Commission also indicated that the licence structure may significantly reduce the attractiveness of the remedy for a large number of purchasers. The Commission underlined that this was the case even though there is no licence fee and the purchaser would have the right to develop further the software and use it for other bill acceptor and bill recyclers for transport applications it may develop in the future.
304. The Commission is of the view that, the deficiencies as described in paragraph 302 above affect the future viability of the Bill Divestment Business and as such its attractiveness for potential purchasers, as this was pointed out during the market test. Consequently, the Bill Divestment Business is not likely to attract a suitable purchaser and as such compete on a lasting basis with the merged entity. The Commission therefore considers that the Bill Commitments of 3 July are not suitable to solve the identified competition concerns.
305. Based on the above, the Commission considers that the Bill Commitments of 3 July are not capable of removing the competition concerns with regard to payment systems for transport applications.

VIII.2.4. Description of the Bill Commitments of 12 July

306. The Bill Commitments of 12 July are an improved version of the Bill Commitments of 3 July. Crane thus proposes also under Bill Commitments of 12 July to sell the same tangible and intangible assets necessary to manufacture the Bill Recycler Product Line. The modifications with regard to the Bill Commitments of 3 July are set out below.
307. First, the Notifying Part amended and specified the remedy and the Bill Commitments of 12 July now contains explicit reference to all Central Bank authorisations, CE and UL approvals and Federal Transit Administration approval.
308. Second, the Notifying Party provided a detailed list of tooling and equipment included in the tangible assets. In addition, a suitable subset of the worldwide

currency denominations held in Crane's bill library reasonably sufficient to enable the Purchaser to design, manufacture and test the Bill Recycler Product Line is included.

309. The Bill Commitments of 12 July also provide for an increased number of key personnel (in addition to the personnel exclusively devoted to the Bill Recycler Product line): [...] sales personnel focused on transportation, [...] marketing personnel (including the product manager), [...] Engineers/R&D personnel (including software, mechanical, tooling engineers). In addition, for a period of up to 18 months after Closing, Crane shall provide training to the Purchaser in the use and operation of the licenced software at cost.
310. Similarly to the Coin Commitments of 12 July, the Bill Commitments of 12 July provide for the Purchaser to be independent of and unconnected to Crane and/or MEI; and be a manufacturer of payment systems (cash or cashless), a manufacturer of machines incorporating such systems, including but not limited to manufacturers of vending machines, or otherwise have current or recent proven experience in the payment systems industry. Moreover, the Bill Commitments of 12 July also contain a so-called upfront buyer clause.

VIII.2.5. Assessment of the Bill Commitments of 12 July

311. The Commission notes that by this improved set of commitments the Notifying Party addressed the concerns identified with regard to the Bill Commitments of 3 July.
312. The Commission notes first that the number of R&D personnel has been increased, and sales and marketing personnel have been included in the remedy package. The Notifying Part also specified further all the tooling and equipment to be included in the Bill Divestment Business, as well as added, among others, worldwide Central Bank authorisation, and the necessary bill library which were regarded as essential to operate on the transport market.
313. The Notifying Party also specifically refers to a Purchaser which must be currently a manufacturer of payment systems or manufacturer of machines incorporating such systems, or otherwise have current or recent proven experience in the payment systems industry. The Commission notes that this suitable Purchaser clause is capable of ensuring the viability of the Bill Divestment Business in order to compete effectively on the EEA market for bill recycler and acceptors for transport applications.
314. Furthermore, the Notifying Party included an upfront buyer clause, according to which the proposed transaction will not be implemented unless and until Crane has entered into binding agreements with an approved purchaser.
315. The improved commitments together with the upfront buyer clause and the purchaser requirements remove the doubts as to whether the Bill Divestment Business will indeed be transferred to a suitable purchaser. On the basis of the upfront buyer clause and the purchaser requirements the Commission is of the view that the licence structure is appropriate.
316. The Commission is thus of the view that Bill Commitments of 12 July give sufficient safeguards that the Bill Divestment Business will be sold and will as such compete

on a lasting basis with the merged entity on the EEA market for bill recycler and acceptors for transport applications.

317. Consequently, the Commission considers that the improved Bill Commitments of 12 July remove the doubts as to whether the Bill Divestment Business is likely to be viable and to attract a suitable purchaser. On the basis of the above, the Commission concludes that the Bill Commitments of 12 July are sufficient to remove all the competition concerns identified on the EEA market for bill recycler and acceptors for transport applications.

VIII.3. Conclusion on the proposed remedies

318. For the reasons outlined above, the Coin commitments of 12 July and the Bill commitments of 12 July entered into by the Notifying Party are sufficient to eliminate the competition concerns as regards the compatibility of the transaction with the internal market.
319. Under the first sentence of the second subparagraph of Article 6(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the internal market.
320. The fulfilment of the measure that gives rise to the structural change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal market no longer stands. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.
321. The commitments in section B of the Coin commitments of 12 July (Annex I to this decision) and in section B of the Bill commitments of 12 July (Annex II to this decision), constitute conditions attached to this decision, as only through full compliance therewith can the structural changes in the relevant markets be achieved. The other commitments set out in the Coin commitments of 12 July and in the Bill commitments of 12 July constitute obligations, as they concern the implementing steps which are necessary to achieve the modifications sought in a manner compatible with the internal market.
322. The full texts of the commitments are contained in annexes I and II to this decision and form an integral part thereof.

IX. CONCLUSION

323. For the above reasons, the Commission has decided not to oppose the notified operation as modified by the Coin commitments of 12 July and the Bill commitments of 12 July, and to declare it compatible with the internal market and with the functioning of the EEA Agreement, subject to full compliance with the conditions set out in sections B of the Coin commitments of 12 July and of the Bill commitments of 12 July annexed to the present decision and with the obligations contained in the other sections of the said commitments. This decision is adopted in application of Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation.

*For the Commission
(signed)
Tonio BORG
Member of the Commission*

Annex I

BY HAND AND BY EMAIL

European Commission Merger Registry
DG Competition
Place Madou 1
1210 Saint-Josse-ten-Noode

Case M.6857 - Crane Co./MEI Group

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EEC) No. 139/2004 as amended ("**Merger Regulation**"), Crane Co. ("**Crane**") hereby provides the following Commitments ("**Commitments**") in order to enable the European Commission ("**Commission**") to declare the acquisition of sole control by Crane of MEI Conlux Holdings (US), Inc. and MEI Conlux Holdings (Japan) Inc. (together "**MEI**") compatible with the internal market and the EEA Agreement by its decision pursuant to Article 6(1)(b) of the Merger Regulation ("**Decision**").

The Commitments shall take effect upon the date of adoption of the Decision.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Union law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004.

Section A. Definitions

For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by Crane, whereby the notion of control shall be interpreted pursuant to Article 3 Merger Regulation.

Closing: the entering into of the Technology Licence and the Toll Manufacturing Agreement by Crane and the Purchaser.

Cost: cost calculated on the basis of an objective formula, consistent with general industry practice, which will include the direct cost of material plus the direct cost of labour for manufacturing and support.

Derivative Work: a work that is based upon one or more pre-existing works, such as a revision, modification, translation, abridgement, condensation, expansion, or any other form in which a pre-existing work may be recast, transformed, or adapted, and that, if prepared without the authorisation of the owner of the pre-existing work, would constitute a copyright infringement.

Divestment Business: the business or businesses as defined in Section B and the Schedule that Crane commits to divest.

Divestiture Trustee: one or more natural or legal person(s), independent from Crane and MEI, who is approved by the Commission and appointed by Crane and who has received from Crane the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.

EEA Customers: customers for coin recycler products located in the EEA.

Effective Date: the date of adoption of the Decision.

First Divestiture Period: the period of [...] from the Effective Date.

Key Personnel: personnel listed as Key Personnel in the Schedule.

Know-How: any form of technical information or assistance relating to the manufacture or placing into operation of the Coin Recycler Product Line.

Monitoring Trustee: one or more natural or legal person(s), independent from Crane and MEI, who is approved by the Commission and appointed by Crane, and who has the duty to monitor Crane's compliance with the conditions and obligations attached to the Decision.

Personnel: all personnel listed in Schedule.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Trustee(s): the Monitoring Trustee and the Divestiture Trustee.

Trustee Divestiture Period: the period of [...] from the end of the First Divestiture Period.

Section B. The Divestment Business

Commitment to divest

1. In order to ensure effective competition, Crane commits to divest, or procure the divestment of, the Divestment Business by the end of the Trustee Divestiture Period on terms approved by the Commission in accordance with the procedure described in paragraph 42. To carry out the divestiture, Crane commits to find a purchaser and to enter into a binding Technology Licence and Toll Manufacturing Agreement for the Divestment Business ("**Agreements**") within the First Divestiture Period. If Crane has not entered into such an agreement at the end of the First Divestiture Period, Crane shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in the Trustee Divestiture Period in accordance with the procedure described in paragraph 51. The proposed concentration shall not be implemented unless and until Crane or the Divestiture Trustee has entered into final binding Agreements for the transfer of the Divestment Business, and the Commission has approved the Purchaser and the terms in accordance with paragraph 42.
2. Crane shall be deemed to have complied with this commitment if, by the end of the Trustee Divestiture Period, Crane has entered into final binding Agreements, if the Commission approves the Purchaser and the terms in accordance with the procedure described in paragraph 42 and if the Closing takes place within a period not exceeding [...] after the approval of the Purchaser and the terms of the Agreements by the Commission.
3. In order to maintain the structural effect of the Commitments, Crane and MEI shall, for a period of 10 years after the Effective Date, not acquire direct or indirect influence over the whole or part of the Divestment Business, unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the internal market.

Structure and definition of the Divestment Business

4. The Divestment Business consists of a technology licence for the manufacturing equipment, Know-How and tooling necessary to manufacture Crane's Currenza C² coin recycler line of products, including spare parts, currently manufactured by National Rejectors, Inc. GmbH ("NRI"), and sold into the EEA, including the following coin recycler models: Currenza C² blue, Currenza C² green, Currenza C² white and Currenza C² silver ("**Coin Recycler Product Line**"). The Divestment Business, supported by a toll manufacturing agreement, should

enable the Purchaser to manufacture, market and sell the Coin Recycler Product Line, meet the customer-required standards, and be a competitive force in the EEA.

5. The present legal and functional structure of the Divestment Business as operated to date is described in the Schedule. The Divestment Business, described in more detail in the Schedule, includes:
 - (a) exclusive right to use the Currenza C² brand for the Coin Recycler Product Line in the EEA;
 - (b) licences to all intangible assets (including all necessary intellectual property rights), which contribute to the current operation or are necessary to ensure the viability of the Divestment Business;
 - (c) all customer orders and contracts (including any customer lists) for the Coin Recycler Product Line concluded between NRI and EEA Customers;
 - (d) the opportunity to interview and employ the Personnel; and
 - (e) engineering and technical support necessary for the Coin Recycler Product Line in the EEA (items referred to under (a) to (e) hereinafter collectively referred to as "**Assets**").
6. The Divestment Business does not include the tooling and manufacturing assets of NRI. Crane shall retain all rights, title and interest in all of the Crane and NRI names, and product brands, anywhere in the world, and the Currenza C² brand outside the EEA.

Section B. Related commitments

Technology Licence Commitment

7. Crane commits to grant a perpetual, royalty-free technology licence ("**Technology Licence**") for the manufacturing equipment, Know-How and tooling necessary for the Purchaser to manufacture the Coin Recycler Product Line, which has been manufactured and sold by NRI ("**Licensed Technology**"). The Technology Licence is limited to the technology required for the manufacture and sale of the Coin Recycler Product Line to EEA Customers. The Technology Licence does not restrict the Purchaser from manufacturing the products outside of the EEA as long as the products are for sale to EEA Customers only.
8. The Technology Licence is intended to be comprehensive and will permit the Purchaser to replicate the manufacturing of the Coin Recycler Product Line. The Purchaser will take any and all steps necessary to preserve the confidentiality of those aspects of the manufacturing equipment, Know-How and tooling necessary for the manufacture the Coin Recycler Product Line.
9. The Technology Licence shall cover all of the current technologies relating to the Coin Recycler Product Line, and any subsequent improvements of technology in the Coin Recycler Product Line carried out by Crane after the Effective Date up to [...] following expiry of the Toll Manufacturing Period (as defined below). The Purchaser shall be free to carry out its own improvement of the Licensed Technology and shall remain the owner of any intellectual property rights arising out of such new developments. The Licensed Technology shall be used only for sale of the Coin Recycler Product Line to EEA Customers. Any further improvements shall be used solely for the sale of coin recyclers to EEA Customers, provided that the Purchaser shall have the right to market and sell coin recyclers using technology derived from the Coin Recycler Product Line both within and outside the EEA following the termination of the Toll Manufacturing Agreement.

10. Crane shall indemnify the Purchaser for any claims incurred by the Purchaser arising from infringement of third party intellectual property by the Licensed Technology incurred by the Purchaser excluding any and all infringement claims based upon the Purchaser's improvements to the Licensed Technology. The Purchaser shall indemnify Crane for any other legal claims arising from the Purchaser's use, sale, or other disposition of the Licensed Technology. Should Crane and the Purchaser disagree on the matter, they will refer the matter to an (ad hoc) arbitration proceeding, which will rule on the matter expeditiously.

Toll Manufacturing Commitment

11. At the time of Closing and to the extent required by the Purchaser, Crane shall commence deliveries under a toll manufacturing agreement ("**Toll Manufacturing Agreement**") for the supply of all or some of the Coin Recycler Product Line ("**Supplied Products**"). The Purchaser shall sell the Supplied Products exclusively to EEA Customers.
12. For a period of up to [...], to be determined by the Purchaser ("**Toll Manufacturing Period**"), the Supplied Products shall be sold to the Purchaser at NRI's cost or, for the products not currently manufactured by NRI and sold to EEA Customers under the Currenza C² brand, at NRI's purchasing cost. Cost shall be calculated on the basis of an objective formula which will include the direct cost of material plus the direct cost of labour for manufacturing and support ("**Cost**").
13. The Supplied Products shall be of the same quality and specifications as the Coin Recycler Product Line products sold by Crane to customers outside the EEA.
14. During the Toll Manufacturing Period, Crane shall ensure that orders placed to Crane by the Purchaser for the Supplied Products are fulfilled in priority to orders placed to Crane for the Coin Recycler Product Line products by customers outside the EEA.
15. Crane shall make available to the Purchaser the details of all suppliers supporting the Supplied Products. During the Toll Manufacturing Period, Crane shall use reasonable endeavours to ensure supply to the Purchaser on the same terms as under Crane's existing supply contracts. Crane shall use reasonable endeavours to facilitate the Purchaser's negotiation of supply contracts with Crane's existing suppliers.
16. Terms for delivery and payment under the Toll Manufacturing Agreement shall be negotiated with the Purchaser but in any event should be made at not less than the standard terms of Crane's coin recycler business.

Brand Licence Commitment

17. Crane is the owner of all right, title and interest in and to the Currenza brands, and all the goodwill associated with the same. Crane commits to grant the Purchaser a perpetual, royalty-free exclusive licence for the use of the Currenza C² brand, and to develop derivatives thereof, for the sale of the Coin Recycler Product Line to EEA Customers. The brand licence permits the Purchaser to use the Currenza C² trademark, and any Purchaser developed derivative thereof, alone or together with the Purchaser's own trademark ("**Co-branding**"). The Purchaser shall be permitted to change from Co-branding to the Purchaser's own brand at any time. The Purchaser will be prohibited from developing and using any derivative of the Currenza C² brand that is confusingly similar to, or disparaging to, Crane's family of Currenza brands or that detrimentally impacts Crane's goodwill in the family of Currenza brands.
18. Crane will be prohibited from marketing any products to EEA Customers under the Currenza C² trademark. For the avoidance of doubt, Crane is the exclusive owner of all right, title and interest in and to any and all Crane or NRI brands.
19. The Currenza C² brand is licensed to the Purchaser solely for the sale of the Coin Recycler Product Line to EEA Customers.

Software Licence Commitment

20. Crane commits to grant a perpetual, royalty-free non-exclusive licence to the control and validation software necessary to the Coin Recycler Product Line to the Purchaser (“**Licensed Software**”).
21. Crane shall deliver both source code and object code of the current version of the Licensed Software as of the date of Closing. Crane shall grant a non-exclusive right and licence to:
 - (a) use and reproduce the Licensed Software, and prepare Derivative Works thereof, in object code or source code form, for the purposes of development, technical support, maintenance, and/or warranty service of the Coin Recycler Product Line; and
 - (b) use, reproduce, and distribute copies of the Licensed Software, or Derivative Works thereof, in object code form only, as products or parts of products, in furtherance of the marketing of the Coin Recycler Product Line.
22. The Purchaser shall be the exclusive owner of all right, title and interest in and to any and all Derivative Works that the Purchaser creates based upon the Licensed Software. Ownership of all underlying right, title and interest in the Licensed Software will remain exclusively with Crane.
23. The Licensed Software is intended to be comprehensive and will permit the Purchaser to replicate the manufacturing of the Coin Recycler Product Line.
24. The Licensed Software shall cover all of the current software relating to the Coin Recycler Product Line, and any subsequent improvements to the Licensed Software carried out by Crane after the Effective Date up to [...] following expiry of the Toll Manufacturing Period. The Licensed Software shall be used by the Purchaser only for the manufacturing of coin recyclers. The Purchaser agrees to maintain in confidence the source code version of the Licensed Software by using at least the same physical and other security measures as the Purchaser uses for its own confidential technical information and documentation. The Purchaser further agrees not to disclose the source code version of the Licensed Software, or any aspect thereof, to anyone other than employees of the Purchaser who have a need to know or obtain access to such information in order to support the manufacturing of coin recyclers and are bound to protect such information against any other use or disclosure. These obligations shall not apply to any information:
 - (a) generally available in the public domain;
 - (b) ascertainable based on the operation of the object code version of the Licensed Software;
 - (c) independently developed or obtained without reliance on the Purchaser’s information; or
 - (d) approved for release by Crane without restriction.
25. The Purchaser shall indemnify Crane for any legal claims arising from the Purchaser’s use of the Licensed Software. Crane shall have the right to control the defence of such claims with counsel of its choosing. Crane shall indemnify the Purchaser for any claims of infringement related to the Purchaser’s valid use of the Licensed Software (excluding any infringement based on a Derivative Work). Should Crane and the Purchaser disagree on the matter, they will refer the matter to an (*ad hoc*) arbitration proceeding, which will rule on the matter expeditiously.

Patent Commitment

26. Crane commits to grant a perpetual, royalty-free non-exclusive licence to any and all patents and patent applications necessary to the Coin Recycler Product Line to the Purchaser in the Coin Recycler Product Line field of use ("**Licensed Patents**"). The term of the non-exclusive licence will be for the term of each licensed patent. The non-exclusive licence limits sales of the Coin Recycler Product Line geographically to the EEA for a period of [...] from the Effective Date, and thereafter the Purchaser shall have the right to market and sell coin recyclers developed using technology derived from the Coin Recycler Product Line outside the EEA. The Purchaser shall agree to mark any and all Coin Recycler Product Line products made or sold in the EEA in accordance with the laws and regulations then applicable in each such EEA country.
27. Crane is the owner of the Licensed Patents and shall have exclusive responsibility for the preparation, filing, prosecution and maintenance of the Licensed Patents, including choice of patent counsel. The Purchaser shall cooperate with Crane to ensure that the claims for each Licensed Patent reflects and will reflect, to the extent practicable and to the best of the Purchaser's knowledge, all items of commercial interest to the Purchaser that are contemplated to be sold or procedures to be practiced under the licence. The Purchaser shall reimburse Crane for half maintenance (or annuity as the case may be) fee cost for all Licensed Patents accruing on and after the Effective Date.

Support and Services

28. Crane shall provide full warranty coverage to the Purchaser for the Coin Recycler Product Line at Cost.
29. During the Toll Manufacturing Period, Crane shall provide training to enable the Purchaser to support the Coin Recycler Product Line, and any improvements thereto, for EEA Customers at Cost.
30. Crane shall provide engineering services reasonably necessary to support the Purchaser's own manufacturing of the Coin Recycler Product Line, at Cost, for a period of up to one year following the termination of the Toll Manufacturing Agreement.
31. During the Toll Manufacturing Period, Crane will use reasonable endeavours at least equal to its own efforts to provide the Purchaser, in a timely manner and at Cost, with any necessary counterfeit response relating to the Coin Recycler Product Line.
32. During the Toll Manufacturing Period, Crane shall make available to the Purchaser any necessary EEA coin sets in relation to the Coin Recycler Product Line, at Cost, no later than such coin sets are made available to other Crane or MEI coin recycler products.
33. Crane shall make available to the Purchaser details of all EEA distributors and service providers relating to the Coin Recycler Product Line. Crane shall not prevent the Purchaser from entering into distribution or service agreements with such distributors or service providers.

Non-compete

34. Crane shall not market or sell the Coin Recycler Product Line to customers located inside the EEA. Crane shall have the right to market and sell products developed using technology derived from the Coin Recycler Product Line to EEA Customers after a period of [...] from Closing.
35. The Purchaser shall not market or sell the Coin Recycler Product Line to customers located outside the EEA. Following the termination of the Toll Manufacturing Agreement, the

Purchaser shall have the right to market and sell coin recyclers developed using technology derived from the Coin Recycler Product Line both within and outside the EEA.

Personnel

36. Crane undertakes to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business.
37. Crane undertakes, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Personnel for a period of five years after Closing.

Due Diligence

38. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, Crane shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
 - (a) provide to potential purchasers sufficient information as regards the Divestment Business; and
 - (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

39. Crane shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request).
40. Crane shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of an information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section C. The Purchaser

41. In order to ensure the immediate restoration of effective competition, the Purchaser, in order to be approved by the Commission, must:
 - (a) be independent of and unconnected to Crane and/or MEI;
 - (b) currently be a manufacturer of payment systems (cash or cashless), a manufacturer of machines incorporating such systems, including but not limited to manufacturers of vending machines, or otherwise have current or recent proven experience in the payment systems industry;
 - (c) have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the merged entity and other competitors; and
 - (d) neither be likely to create, in the light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed, and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the

acquisition of the Divestment Business (the before-mentioned criteria for the purchaser hereafter the “**Purchaser Requirements**”).

42. The Agreements shall be conditional on the Commission’s approval. When Crane has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. Crane must be able to demonstrate to the Commission that the purchaser meets the Purchaser Requirements and that the Divestment Business is being transferred in a manner consistent with the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Requirements and that the Divestment Business is being transferred in a manner consistent with the Commitments. The Commission may approve the transfer of the Divestment Business without one or more Assets, if this does not affect the viability and competitiveness of the Divestment Business after the transfer, taking account of the proposed purchaser.

Section D. Trustee

I APPOINTMENT PROCEDURE

43. Crane shall appoint a Monitoring Trustee to carry out the functions specified in the Commitments for a Monitoring Trustee. If Crane has not entered into the Agreements one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Crane at that time or thereafter, Crane shall appoint a Divestiture Trustee to carry out the functions specified in the Commitments for a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Extended Divestment Period.
44. The Trustee shall be independent of Crane and MEI, possess the necessary qualifications to carry out its mandate, for example as an investment bank or consultant or auditor, and shall neither have nor become exposed to a conflict of interest. The Trustee shall be remunerated by Crane in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final transfer value of the Divestment Business, the fee shall also be linked to a divestiture within the Trustee Divestiture Period.

Proposal by Crane

45. No later than one week after the Effective Date, Crane shall submit a list of one or more persons whom Crane proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period, Crane shall submit a list of one or more persons whom Crane proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the proposed Trustee fulfils the requirements set out in paragraph 44 and shall include:
- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
 - (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks; and
 - (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

46. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the

Trustee to fulfil its obligations. If only one name is approved, Crane shall appoint or cause to be appointed, the individual or institution concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Crane shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by Crane

47. If all the proposed Trustees are rejected, Crane shall submit the names of at least two more individuals or institutions within one week of being informed of the rejection, in accordance with the requirements and the procedure set out in paragraphs 43 and 46.

Trustee nominated by the Commission

48. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom Crane shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II FUNCTIONS OF THE TRUSTEE

49. The Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or Crane, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

50. The Monitoring Trustee shall:
- (i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision;
 - (ii) monitor the splitting of assets and the allocation of personnel between the Divestment Business and Crane or Affiliated Undertakings;
 - (iii) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision;
 - (iv) propose to Crane such measures as the Monitoring Trustee considers necessary to ensure Crane's compliance with the conditions and obligations attached to the Decision;
 - (v) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process, (a) potential purchasers receive sufficient information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and (b) potential purchasers are granted reasonable access to the Personnel;
 - (vi) provide to the Commission, sending Crane a non-confidential copy at the same time, a written report within 15 days after the end of every month. The report shall cover Crane's compliance with the Commitments; and
 - (vii) within one week after receipt of the documented proposal referred to in paragraph 42, submit to the Commission a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the

transfer and as to whether the Divestment Business is transferred in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the transfer of the Divestment Business without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the transfer, taking account of the proposed purchaser.

Duties and obligations of the Divestiture Trustee

51. Within the Trustee Divestiture Period, the Divestiture Trustee shall transfer at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding Technology Licence and Toll Manufacturing Agreement in accordance with the procedure laid down in paragraph 42. The Divestiture Trustee shall include in the Technology Licence and Toll Manufacturing Agreement such terms and conditions consistent with these Commitments as it considers appropriate for an expedient transfer in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the Technology Licence and Toll Manufacturing Agreement such customary representations and warranties and indemnities as are reasonably required to effect the transfer. The Divestiture Trustee shall protect the legitimate financial interests of Crane, subject to the Parties' unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.
52. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to Crane.

III DUTIES AND OBLIGATIONS OF CRANE

53. Crane shall provide and shall cause its advisors to provide the Trustee with all such cooperation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of Crane's or the Divestment Business's books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and Crane and the Divestment Business shall provide the Trustee upon request with copies of any document. Crane and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.
54. Crane shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. Crane shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. Crane shall inform the Monitoring Trustee on possible purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.
55. Crane shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the transfer, the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the transfer and the Closing, including the appointment of advisors to assist with the transfer process. Upon request of the Divestiture Trustee, Crane shall cause the documents required for effecting the transfer and the Closing to be duly executed.

56. Crane shall indemnify the Trustee and its employees and agents (each an “**Indemnified Party**”) and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to Crane for any liabilities arising out of the performance of the Trustee’s duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
57. At the expense of Crane, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Crane’s approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should Crane refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard Crane. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 56 shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served Crane during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient divestment.

IV. REPLACEMENT, DISCHARGE AND REAPPOINTMENT OF THE TRUSTEE

58. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:
- (a) the Commission may, after hearing the Trustee, require Crane to replace the Trustee; or
 - (b) Crane, with the prior approval of the Commission, may replace the Trustee.
59. If the Trustee is removed according to paragraph 58, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 43 to 48.
60. Beside the removal according to paragraph 58, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

The Review Clause

61. The Commission may, where appropriate, in response to a request from Crane showing good cause and accompanied by a report from the Monitoring Trustee:
- (i) Grant an extension of the time periods foreseen in the Commitments; or
 - (ii) Waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.

Where Crane seeks an extension of a time period, it shall submit a request to the Commission no later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall Crane be entitled to request an extension within the last month of any period.

Date: 12 July 2013

Duly authorised for and on behalf of Crane

Douglas Lahnborg, Partner, Orrick, Herrington & Sutcliffe (Europe) LLP

SCHEDULE

1. Crane commits to enter into a technology licence for the manufacturing equipment, Know-How and tooling necessary to manufacture Crane's coin recycler line of products currently manufactured by National Rejectors, Inc. GmbH ("**NRI**"), and sold into the EEA, which includes the following coin recycler models: Currenza C² blue, Currenza C² green, Currenza C² white and Currenza C² silver ("**Coin Recycler Product Line**").
2. Crane also commits to enter into a toll manufacturing agreement for the Coin Recycler Product Line for a period of up to [...] years.
3. The Coin Recycler Product Line currently is manufactured at NRI's facility in Buxtehude, Germany. The Coin Recycler Product Line is sold to EEA Customers through [...].
4. As set out at paragraph 5 of these Commitments, the Divestment Business includes, but is not limited to:
 - a) licences to the following main intangible assets:
 - The Currenza C² brand
 - The Coin Recycler Product Line model names
 - The following patents used for the Coin Recycler Product Line. All of these patents are under review by legal counsel of Crane to determine which will be used by the Divestment Business. The Monitoring Trustee will oversee the licensing of these patents to the Purchaser:

Case #	Title	Application Number	Patent Number	Filing Date	Date of Grant	Expiration Date
[...]	[...]	[...]	[...]	[...]	[...]	[...]

- The Currenza C² trademark registered in [...] and [...] used by the Divestment Business
- Firmware/software used by the Divestment Business, including the following:
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
- All relevant other intellectual property, including trade secrets, Know-How, technology, methods, inventions, processes, databases, schematics, specifications, designs and trademarks used by the Divestment Business

- The following product types:

Product Type	Specific Product	Description
[...]	[...]	[...]

For the avoidance of doubt, no third party intellectual property is required for the Divestment Business.

- b) all customer orders and contracts (including any customer lists) for the Coin Recycler Product Line concluded between NRI and EEA Customers
 - c) the CE authorisations held for the Coin Recycler Product Line
 - d) lists of supply contracts used for the Divestment Business
 - e) lists of EEA distributors and service providers used by the Divestment Business
 - f) the following Key Personnel (number of employees in brackets):
 - Engineers/R&D personnel ([...])
 - Sales/marketing personnel focused on the EEA Customers ([...])
 - g) Personnel in the following areas exclusively devoted to the Coin Recycler Product Line (number of employees in brackets):
 - Technical support ([...])
5. To the extent that there are any assets not listed in 4(a) to (e) above which are used exclusively by the Divestment Business, or are otherwise necessary for the operation of the Divestment Business (but taking into consideration the pre-existing capabilities of the Purchaser), these assets will also be included in the Divestment Business.
6. The Divestment Business shall not include:
- a) manufacturing equipment and tooling products used in the production of the Coin Recycler Product Line;
 - b) products manufactured by NRI which are not exclusively categorised as part of the Coin Recycler Product Line; and
 - c) the Coin Recycler Product Line sold to non-EEA Customers.

Annex II

BY HAND AND BY EMAIL

European Commission Merger Registry
DG Competition
Place Madou 1
1210 Saint-Josse-ten-Noode
Belgium

Case M.6857 - Crane Co./MEI Group

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EEC) No. 139/2004 as amended ("**Merger Regulation**"), Crane Co. ("**Crane**") hereby provides the following Commitments ("**Commitments**") in order to enable the European Commission ("**Commission**") to declare the acquisition of sole control by Crane of MEI Conlux Holdings (US), Inc. and MEI Conlux Holdings (Japan) Inc. (together "**MEI**") compatible with the internal market and the EEA Agreement by its decision pursuant to Article 6(1)(b) of the Merger Regulation ("**Decision**").

The Commitments shall take effect upon the date of adoption of the Decision.

This text shall be interpreted in the light of the Decision to the extent that the Commitments are attached as conditions and obligations, in the general framework of Union law, in particular in the light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004.

Section C. Definitions

For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by Crane, whereby the notion of control shall be interpreted pursuant to Article 3 Merger Regulation.

Closing: the transfer of the legal title of the Divestment Business to the Purchaser.

Cost: cost calculated on the basis of an objective formula, consistent with general industry practice, which will include the direct cost of material plus the direct cost of labour for manufacturing and support.

Derivative Work: a work that is based upon one or more pre-existing works, such as a revision, modification, translation, abridgement, condensation, expansion, or any other form in which a pre-existing work may be recast, transformed, or adapted, and that, if prepared without the authorisation of the owner of the pre-existing work, would constitute a copyright infringement.

Divestment Business: the business or businesses as defined in Section B and the Schedule that Crane commits to divest.

Divestiture Trustee: one or more natural or legal person(s), independent from Crane and MEI, who is approved by the Commission and appointed by Crane and who has received from Crane the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.

Effective Date: the date of adoption of the Decision.

Excluded Personnel: the personnel currently employed by Crane Payment Systems who will be excluded from the Divestment Business.

First Divestiture Period: the period of [...] from the Effective Date.

Hold Separate Manager: the person appointed by Crane for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Key Personnel: personnel listed as Key Personnel in the Schedule.

Know-How: any form of technical information or assistance relating to the manufacture or placing into operation of the Bill Recycler Product Line.

Monitoring Trustee: one or more natural or legal person(s), independent from Crane and MEI, who is approved by the Commission and appointed by Crane, and who has the duty to monitor Crane's compliance with the conditions and obligations attached to the Decision.

Personnel: all personnel currently employed by Crane exclusively or substantially in the Bill Recycler Product Line, including the Key Personnel and does not include the Excluded Personnel.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Trustee(s): the Monitoring Trustee and the Divestiture Trustee.

Trustee Divestiture Period: the period of [...] from the end of the First Divestiture Period.

Section D. The Divestment Business

Commitment to divest

1. In order to ensure effective competition, Crane commits to divest, or procure the divestment of, the Divestment Business by the end of the Trustee Divestiture Period on terms approved by the Commission in accordance with the procedure described in paragraph 27. To carry out the divestiture, Crane commits to find a purchaser and to enter into a binding Sale and Purchase Agreement of the Divestment Business within the First Divestiture Period. If Crane has not entered into such an agreement at the end of the First Divestiture Period, Crane shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 36 in the Trustee Divestiture Period. The proposed concentration shall not be implemented unless and until Crane or the Divestiture Trustee has entered into a final binding Sale and Purchase Agreement for the sale of the Divestment Business, and the Commission has approved the Purchaser and the terms of sale in accordance with paragraph 27.
2. Crane shall be deemed to have complied with this commitment if, by the end of the Trustee Divestiture Period, Crane has entered into a final binding Sale and Purchase Agreement, if the Commission approves the Purchaser and the terms in accordance with the procedure described in paragraph 27 and if the Closing takes place within a period not exceeding [...] after the approval of the purchaser and the terms of sale by the Commission.
3. In order to maintain the structural effect of the Commitments, Crane and MEI shall, for a period of 10 years after the Effective Date, not acquire direct or indirect influence over the whole or part of the Divestment Business, unless the Commission has previously found that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the internal market.

Structure and definition of the Divestment Business

4. The Divestment Business consists of Crane's bill recycler line of products ("**Bill Recycler Product Line**") currently manufactured by Crane Payment Solutions ("**CPS**") as operated by Cash Code, a branch of Crane Canada Co., including the following bill recycler models: 100, 100XE, 200, 200G, 200XE, 300 and 300XE. The Bill Recycler Product Line also includes the MFL bill acceptor. The Divestment Business should enable the Purchaser to sell the Bill Recycler Product Line, meet the customer-required standards, and to be a competitive force in the sector for high-end bill recyclers and high-end bill acceptors.
5. The present legal and functional structure of the Divestment Business as operated to date is described in the Schedule. The Divestment Business, described in more detail in the Schedule, includes:
 - (a) all tangible and intangible assets (including all necessary intellectual property rights), which contribute to the current operation or are necessary to ensure the viability of the Divestment Business;
 - (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business;
 - (c) all customer orders, contracts, leases, commitments of the Divestment Business;
 - (d) all customer, credit and other records of the Divestment Business (items referred to under (a) to (d) hereinafter collectively referred to as "**Assets**");
 - (e) the Personnel; and
 - (f) the benefit of a perpetual, royalty-free software licence required for the operation of the Divestment Business.
6. The Divestment Business does not include the Excluded Personnel and the current assets of and personnel currently employed by CPS not devoted entirely or substantially to the Divestment Business.

Section E. Related commitments

Software Licence Agreement

7. Crane commits to assign all right, title and interest in and to the software and firmware that is necessary and exclusive to the Bill Recycler Product Line to the Purchaser ("**Assigned Software**"). Crane shall deliver both source code and object code of the current version of the Assigned Software as of the Effective Date.
8. Crane commits to grant a perpetual, royalty-free, non-exclusive licence to the Currency Validation Software necessary and not exclusive to the Bill Recycler Product Line to the Purchaser ("**Licensed Software**").
9. Crane shall deliver both source code and object code of the current version of the Licensed Software as of the date of Closing. Crane shall grant a non-exclusive right and licence to:
 - (a) use and reproduce the Licensed Software, and prepare Derivative Works thereof, in object code or source code form, for the purposes of development, technical support, maintenance, and/or warranty service of the Bill Recycler Product Line; and
 - (b) use, reproduce, and distribute copies of the Licensed Software, or Derivative Works thereof, in object code form only, as products or parts of products, in furtherance of the marketing of the Bill Recycler Product Line.

10. The Purchaser shall be the exclusive owner of all right, title and interest in and to any and all Derivative Works that the Purchaser creates based upon the Licensed Software. Ownership of all underlying right, title and interest in the Licensed Software will remain exclusively with Crane.
11. The Assigned Software and Licensed Software are intended to be comprehensive and will permit the Purchaser to manufacture the Bill Recycler Product Line.
12. The Licensed Software shall cover all of the current software relating to the Bill Recycler Product Line, but not any subsequent improvements to the Licensed Software carried out by Crane after Closing. The Purchaser shall have the right to use the Licensed Software to manufacture, market and sell the Bill Recycler Product Line as it is constituted on the date of Closing in any market worldwide. For next and succeeding generation high-end bill recycler and high-end bill acceptor products derived from the Bill Recycler Product Line, the Purchaser shall have the right to use the Licensed Software to manufacture, market and sell such products worldwide, but in the Transportation sector only. The Purchaser agrees to maintain in confidence the source code version of the Licensed Software by using at least the same physical and other security measures as the Purchaser uses for its own confidential technical information and documentation. The Purchaser further agrees not to disclose the source code version of the Licensed Software, or any aspect thereof, to anyone other than employees of the Purchaser who have a need to know or obtain access to such information in order to support the Bill Recycler Product Line and are bound to protect such information against any other use or disclosure. These obligations shall not apply to any information:
 - (a) generally available in the public domain;
 - (b) ascertainable based on the operation of the object code version of the Licensed Software;
 - (c) independently developed or obtained without reliance on the Purchaser's information; or
 - (d) approved for release by Crane without restriction.
13. For a period of up to 18 months after Closing, Crane shall provide training to the Purchaser in the use and operation of the Licensed Software, at Cost.
14. The Purchaser shall indemnify Crane for any legal claims arising from the Purchaser's use of the Licensed Software. Crane shall indemnify the Purchaser for any claims of infringement related to the Purchaser's valid use of the Licensed Software (excluding any infringement based on a Derivative Work). Should Crane and the Purchaser disagree on the matter, they will refer the matter to an (*ad hoc*) arbitration proceeding, which will rule on the matter expeditiously.

Patent Commitment

15. Crane commits to assign all right, title and interest in and to any and all patents and patent applications that are necessary and exclusive to the Bill Recycler Product Line to the Purchaser ("**Assigned Patents**"). The Purchaser shall grant Crane a fully paid-up licence back to the Assigned Patents.
16. Crane commits to grant a perpetual, royalty free, non-exclusive licence to any and all patents and patent applications necessary and not exclusive to the Bill Recycler Product Line to the Purchaser in the Bill Recycler Product Line field of use ("**Licensed Patents**"). The Purchaser shall agree to mark any and all Bill Recycler Product Line products sold into the United States of America in accordance with 35 U.S.C. §287(a) and will mark any and all Bill Recycler Product Line products made or sold in any other country in accordance with the laws and regulations then applicable in each such country.

17. Crane is the owner of the Licensed Patents and shall have exclusive responsibility for the preparation, filing, prosecution and maintenance of the Licensed Patents, including choice of patent counsel. The Purchaser shall cooperate with Crane to ensure that the claims for each Licensed Patent reflects and will reflect, to the extent practicable and to the best of the Purchaser's knowledge, all items of commercial interest to the Purchaser that are contemplated to be sold or procedures to be practiced under the licence. The Purchaser shall reimburse Crane for half maintenance (or annuity as the case may be) fee cost for all Licensed Patents accruing on and after the Effective Date.

Preservation of Viability, Marketability and Competitiveness

18. From the Effective Date until Closing, Crane shall preserve the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business. In particular Crane undertakes:
- (a) not to carry out any act upon its own authority that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;
 - (b) to make available sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans; and
 - (c) to take all reasonable steps, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business.

Hold-separate obligations of Crane

19. Crane commits, from the Effective Date until Closing, to keep the Divestment Business separate from the businesses it is retaining and to ensure that Key Personnel of the Divestment Business - including the Hold Separate Manager - have no involvement in any business retained and *vice versa* (to the extent this is reasonably practicable and does not adversely affect the viability of any part of the Divestment Business or Crane, in which case appropriate safeguards shall be put in place to protect confidential information). Crane shall also ensure that the Personnel do not report to any individual outside the Divestment Business.
20. Until Closing, Crane shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable entity separate from the businesses retained by Crane and MEI. Crane shall appoint a Hold Separate Manager who shall be responsible for the management of the Divestment Business, under the supervision of the Monitoring Trustee. The Hold Separate Manager shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by Crane and MEI.

Ring-fencing

21. Without prejudice to paragraph 19, Crane shall implement all necessary measures to ensure that it does not after the Effective Date obtain any business secrets, Know-How, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business. In particular, the participation of the Divestment Business in a central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. Crane may obtain information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business or whose disclosure to Crane is required by law.

Non-solicitation clause

22. Crane and MEI undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Business for a period of five years after Closing.

Due Diligence

23. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, Crane shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
- (a) provide to potential purchasers sufficient information as regards the Divestment Business;
 - (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

24. Crane shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request).
25. Crane shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall submit a copy of an information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section F. The Purchaser

26. In order to ensure the immediate restoration of effective competition, the Purchaser, in order to be approved by the Commission, must:
- (a) currently be a manufacturer of payment systems (cash or cashless) or a manufacturer of machines incorporating such systems, or otherwise have current or recent proven experience in the payment systems industry;
 - (b) be independent of and unconnected to Crane and/or MEI;
 - (c) have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the merged entity and other competitors;
 - (d) neither be likely to create, in the light of the information available to the Commission, *prima facie* competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed, and must, in particular, reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business (the before-mentioned criteria for the purchaser hereafter the "**Purchaser Requirements**").
27. The final binding Sale and Purchase Agreement shall be conditional on the Commission's approval. When Crane has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), to the Commission and the Monitoring Trustee. Crane must be able to demonstrate to the Commission that the purchaser meets the Purchaser Requirements and that the Divestment Business is being sold in a manner consistent with the Commitments. For the approval, the

Commission shall verify that the purchaser fulfils the Purchaser Requirements and that the Divestment Business is being sold in a manner consistent with the Commitments. The Commission may approve the sale of the Divestment Business without one or more Assets, if this does not affect the viability and competitiveness of the Divestment Business after the sale, taking account of the proposed purchaser.

Section G. Trustee

I APPOINTMENT PROCEDURE

28. Crane shall appoint a Monitoring Trustee to carry out the functions specified in the Commitments for a Monitoring Trustee. If Crane has not entered into a binding Sale and Purchase Agreement one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by Crane at that time or thereafter, Crane shall appoint a Divestiture Trustee to carry out the functions specified in the Commitments for a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Extended Divestment Period.
29. The Trustee shall be independent of Crane and MEI, possess the necessary qualifications to carry out its mandate, for example as an investment bank or consultant or auditor, and shall neither have nor become exposed to a conflict of interest. The Trustee shall be remunerated by Crane in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Business, the fee shall also be linked to a divestiture within the Trustee Divestiture Period.

Proposal by Crane

30. No later than one week after the Effective Date, Crane shall submit a list of one or more persons whom Crane proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period, Crane shall submit a list of one or more persons whom Crane proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the proposed Trustee fulfils the requirements set out in paragraph 29 and shall include:
- (a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
 - (b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks;
 - (c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

31. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, Crane shall appoint or cause to be appointed, the individual or institution concerned as Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Crane shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by Crane

32. If all the proposed Trustees are rejected, Crane shall submit the names of at least two more individuals or institutions within one week of being informed of the rejection, in accordance with the requirements and the procedure set out in paragraphs 28 and 31.

Trustee nominated by the Commission

33. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom Crane shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II FUNCTIONS OF THE TRUSTEE

34. The Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or Crane, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

35. The Monitoring Trustee shall:
- (i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.
 - (ii) oversee the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by Crane with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:
 - (a) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the business retained by Crane, in accordance with paragraphs 18 and 19 of the Commitments;
 - (b) supervise the management of the Divestment Business as a distinct and transferrable entity, in accordance with paragraph 20 of the Commitments;
 - (c) (i) in consultation with Crane, determine all necessary measures to ensure that Crane does not after the Effective Date obtain any business secrets, Know-How, commercial information, or any other information of a confidential or proprietary nature relating to the Divestment Business, in particular strive for the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business, and (ii) decide whether such information may be disclosed to Crane as the disclosure is reasonably necessary to allow Crane to carry out the divestiture or as the disclosure is required by law provided that any information required to be disclosed to Crane to satisfy legal reporting requirements will be supplied without objection;
 - (d) monitor the splitting of assets and the allocation of personnel between the Divestment Business and Crane or Affiliated Undertakings;
 - (iii) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision;

- (iv) propose to Crane such measures as the Monitoring Trustee considers necessary to ensure Crane's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;
- (v) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process, (a) potential purchasers receive sufficient information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and (b) potential purchasers are granted reasonable access to the Personnel;
- (vi) provide to the Commission, sending Crane a non-confidential copy at the same time, a written report within 15 days after the end of every month. The report shall cover the operation and management of the Divestment Business so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers. In addition to these reports, the Monitoring Trustee shall promptly report in writing to the Commission, sending Crane a non-confidential copy at the same time, if it concludes on reasonable grounds that Crane is failing to comply with these Commitments;
- (vii) within one week after receipt of the documented proposal referred to in paragraph 27, submit to the Commission a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the sale and as to whether the Divestment Business is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the sale of the Divestment Business without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser.

Duties and obligations of the Divestiture Trustee

- 36. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding Sale and Purchase Agreement in accordance with the procedure laid down in paragraph 27. The Divestiture Trustee shall include in the Sale and Purchase Agreement such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the Sale and Purchase Agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of Crane, subject to the Parties' unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.
- 37. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to Crane.

III DUTIES AND OBLIGATIONS OF CRANE

- 38. Crane shall provide and shall cause its advisors to provide the Trustee with all such cooperation, assistance and information as the Trustee may reasonably require to perform its tasks. The Trustee shall have full and complete access to any of Crane's or the Divestment Business's books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and Crane and

the Divestment Business shall provide the Trustee upon request with copies of any document. Crane and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.

39. Crane shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. Crane shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. Crane shall inform the Monitoring Trustee on possible purchasers, submit a list of potential purchasers, and keep the Monitoring Trustee informed of all developments in the divestiture process.
40. Crane shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the transfer, the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the transfer and the Closing, including the appointment of advisors to assist with the transfer process. Upon request of the Divestiture Trustee, Crane shall cause the documents required for effecting the transfer and the Closing to be duly executed.
41. Crane shall indemnify the Trustee and its employees and agents (each an “**Indemnified Party**”) and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to Crane for any liabilities arising out of the performance of the Trustee’s duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.
42. At the expense of Crane, the Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Crane’s approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should Crane refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard Crane. Only the Trustee shall be entitled to issue instructions to the advisors. Paragraph 41 shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served Crane during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient divestment.

IV. REPLACEMENT, DISCHARGE AND REAPPOINTMENT OF THE TRUSTEE

43. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a conflict of interest:
 - (a) the Commission may, after hearing the Trustee, require Crane to replace the Trustee;
or
 - (b) Crane, with the prior approval of the Commission, may replace the Trustee.
44. If the Trustee is removed according to paragraph 43, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 28 to 33.

45. Beside the removal according to paragraph 43, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section H. The Review Clause

46. The Commission may, where appropriate, in response to a request from Crane showing good cause and accompanied by a report from the Monitoring Trustee:
- (i) Grant an extension of the time periods foreseen in the Commitments, or
 - (ii) Waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments.

Where Crane seeks an extension of a time period, it shall submit a request to the Commission no later than one month before the expiry of that period, showing good cause. Only in exceptional circumstances shall Crane be entitled to request an extension within the last month of any period.

Date: 12 July 2013

Duly authorised for and on behalf of Crane

Douglas Lahnberg, Partner, Orrick, Herrington & Sutcliffe (Europe) LLP

SCHEDULE

1. Crane commits to enter into a Sale and Purchase Agreement to divest the bill recycler line of products ("**Bill Recycler Product Line**") currently manufactured by Crane Payment Solutions ("**CPS**") as operated by Cash Code, a branch of Crane Canada Co., including the following bill recycler models: 100, 100XE, 200, 200G, 200XE, 300 and 300XE. The Bill Recycler Product Line also includes the MFL bill acceptor.
2. The Bill Recycler Product Line currently is manufactured at CPS's facility in Toronto, Canada.
3. The Purchaser shall supply Crane with [...] for a period of [...] from Closing at [...] to enable Crane to [...].
4. As set out at paragraph 5 of these Commitments, the Divestment Business includes, but is not limited to:
 - a) the following main tangible assets:
 - Production lines and workstations located in Toronto, including:
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - Tooling, including:
 - [...]
 - [...]
 - Inventory
 - Testing equipment, including:
 - [...]
 - [...]
 - [...]

- Tooling documentation, specifications, manuals, schematics and drawings, including:
 - [...]
 - [...]
 - [...]
 - [...]
 - [...]
 - Interfaces between customer infrastructure and the equipment of the Divestment Business
 - a necessary subset of the worldwide currency denominations held in Crane's bill library to enable the Purchaser to design, manufacture and test the Bill Recycler Product Line
- b) the following main intangible assets:
- The B2B brand
 - The Bill Recycler Product Line model names
 - The patents used exclusively by the Divestment Business
 - The trademarks used exclusively (to be assigned) or predominantly (to be licensed) by the Divestment Business
 - All relevant other intellectual property, including trade secrets, Know-How, technology, methods, inventions, processes, firmware/software, databases, schematics, specifications, designs and trademarks used exclusively (to be assigned) or predominantly (to be licensed) by the Divestment Business
- c) the following main licences, permits and authorisations:
- All Central Bank authorisations
 - CE and UL approvals
 - Federal Transit Administration approval
 - All other relevant certificate, licences, permits, approvals and authorisations
- d) the following customer, credit and other records:
- Supply contracts for electronic and mechanical products
 - Other records as identified during the sale process
- e) Personnel in the following areas exclusively devoted to the Bill Recycler Product Line (number of employees in brackets):
- Indirect manufacturing ([...])

- Quality control ([...])
 - Direct labour ([...])
 - Technical support ([...])
- f) the following Key Personnel (number of employees in brackets):
- Sales personnel focused on Transportation ([...])
 - Marketing personnel ([...], including the Product Manager)
 - Engineers/R&D personnel ([...]), including the following types:
 - Embedded engineer ([...])
 - Mechanical engineer ([...])
 - Software developer ([...])
 - Application engineer ([...])
 - Tooling engineer ([...])
 - Hold-Separate Manager (Product Manager) ([...])
5. To the extent that there are any assets not listed in 4(a) to (d) above which are used exclusively or predominantly by the Divestment Business, or are otherwise necessary for the operation of the Divestment Business (but taking into consideration the pre-existing capabilities of the Purchaser), these assets will also be included (whether assigned or licensed) in the Divestment Business.
6. The Divestment Business shall not include:
- d) products manufactured by CPS which are not exclusively categorised as part of the Bill Recycler Product Line;
 - e) technology held by Crane not used exclusively in the manufacture of the Bill Recycler Product Line, such technology to be licensed; and
 - f) other than those identified in 4(e) and (f) above, employees not exclusively devoted to the Bill Recycler Product Line.

**SCHEDULE A TO BILL RECYCLER COMMITMENTS SUBMITTED BY CRANE CO. TO THE
EUROPEAN COMMISSION ON 12 JULY 2013**

Tangible assets

1. The following production lines and work-stations, tooling equipment, testing equipment, components and other supplied materials/equipment are used for the assets and are to be divested with the Divestment Business, unless the assets are used in common with other Crane products, in which case the Purchaser will be able to obtain the assets from Crane's suppliers or elsewhere:

(i) *Production Lines and Workstations*

**Table 1
Production lines and workstations**

	Workstation name	Testing equipment	Cell capacity (per shift)	Max. no. of operators needed for 1 shift at full capacity	Floor space (ft²)
1	[...]	[...]	[...]	[...]	[...]
2	[...]	[...]	[...]	[...]	
3	[...]	[...]	[...]	[...]	
4	[...]	[...]	[...]	[...]	
5	[...]	[...]	[...]	[...]	
6	[...]	[...]	[...]	[...]	
7	[...]	[...]	[...]	[...]	
8	[...]	[...]	[...]	[...]	
9	[...]	[...]	[...]	[...]	[...]
10	[...]	[...]	[...]	[...]	
11	[...]	[...]	[...]	[...]	
12	[...]	[...]	[...]	[...]	
Total:				[...]	[...]

(ii) Tooling Equipment

Table 2
Tooling unique for BB

	Number of Tools
[...]	[...]

Table 3
Tooling common with other products (MFL/FLC)

	Number of Tools
[...]	[...]

(iii) Testing Equipment

Testing equipment is included in Production Lines and Workstations noted above.

(iv) Components and other supplied materials/equipment

Table 4

Supply Chain	Suppliers
[...]	[...]

Table 5

Parts	Components
[...]	[...]

Intangible assets

2. The following product/equipment designs and design platforms are used for the assets and are to be included in the Divestment Business:

Table 6
Bill Recycler Product Line descriptions

Product Type	Specific Product	Description
[...] [1]	[...]	[...]

Note: [1] These are products common to the Divestment Business and other Crane products. Access will be granted to these designs and design platforms but will be retained by Crane.

3. The following know-how, methods, processes, tooling documentation and databases (including specifications and schematics) are used for the assets and are to be included in the Divestment Business:

Table 7
Description of know-how, etc. used for the Bill Recycler Product Line

Product	Info	Information
[...]	[...]	[...]

Note: [1] These are products common to the Divestment Business and other Crane products. Access will be granted to these designs and design platforms but will be retained by Crane.

4. The following firmware and software are used for the assets and are to be included in the Divestment Business:

Table 8
Firmware and software used for the Bill Recycler Product Line

Product	Info	Information
[...]	[...]	[...]

5. The following patents are used for at least the Bill Recycler Product Line. All of these patents are under review by legal counsel of Crane to determine which will be used exclusively (all right, title and interest to be assigned to the Purchaser) or non-exclusively (either assigned to the Purchaser with a non-exclusive license back to Crane or a paid-up field-of-use licence will be granted to the Purchaser) by the Divestment Business. The Monitoring Trustee will oversee the assignment and licensing of patents to the Purchaser.

Table 9
Patents used for at least the Bill Recycler Product Line

Case #	Title	Application No.	Patent No.	Filing Date	Date of Grant	Expiration Date
[...]	[...]	[...]	[...]	[...]	[...]	[...]

6. The following trademark associated with the Bill Recycler Product Line (Registration Number [...]) is used for the assets and is to be included in the Divestment Business:

[...]