

Completed acquisition by Intercontinental Exchange of Trayport

Summary of provisional findings

Notified: 16 August 2016

Background

1. On 3 May 2016, the Competition and Markets Authority (CMA) referred the completed acquisition by Intercontinental Exchange, Inc. (ICE) of Trayport, Inc. and GFI TP Ltd., including their subsidiaries (together referred to as Trayport) (the Merger) for further investigation and report by a group of CMA panel members (the Group). ICE and Trayport are together referred to as the 'Parties' or the main parties. We are required to publish our report by 18 October 2016.
2. Both ICE and Trayport supply services to participants in wholesale energy trading. The energy industry encompasses a range of different commodities, including coal, oil, gas, power (electricity) and emissions (together, European utilities).
3. ICE is a global operator of derivatives exchanges and clearinghouses. It owns 11 exchanges and 6 clearinghouses serving a range of financial markets and offers its clients trade execution, central clearing, data services, instant messaging and listing services. ICE supplies its own proprietary 'front-end screen',¹ WebICE, which gives traders access to ICE's exchanges for price discovery and execution purposes, and it also has its own proprietary 'back-end'² software or central matching engine which matches trades on its exchanges. For European utilities, ICE operates an exchange and clearinghouse for derivatives with underlying commodities in European gas,

¹ A front-end screen facilitates price discovery and enables a trader to enter quotes and initiate the execution of trades on electronic trading venues.

² A back-end is a dynamic IT database operated by a venue (broker or exchange) containing all active price quotations at a given time (product, maturity, quantity, price, trader name). The back-end system reorders in real time all these prices into an order book (the purchase prices ('bid') and the sales prices ('ask') are ordered from the highest to the lowest) and provides matching capabilities between the best available prices provided by the traders.

power, coal, emissions and oil. ICE and its subsidiaries generated turnover of \$3.3 billion in financial year 2015.

4. Trayport supplies software technology to traders, venues (brokers and exchanges) and clearinghouses. Its products include: (i) a front-end trading screen and aggregation engine supplied to traders (Joule/Trading Gateway), which aggregates prices from broker and exchange venues for price discovery and execution purposes; (ii) back-end matching engines for venues, which are supplied to brokers (BTS) and exchanges (ETS); and (iii) a straight-through-processing (STP) link (Clearing Link), which connects its broker venues' back-ends to clearinghouses allowing trades to be routed for clearing. It also connects exchange venues, which are using an alternative back-end to its ETS software, into the Joule/Trading Gateway through its GlobalVision Portal (GV Portal) thereby enabling price discovery and execution for these venues on its front-end. Trayport generated revenues of approximately £50 million in 2015.
5. Trayport's software products communicate with each other through an access programming interface (API) and as a result of this inter-functionality together form a platform which supports the entire lifecycle of a trade: from price discovery through to execution and clearing (the Trayport platform). The Trayport platform is closed to other providers who can only connect with Trayport's permission. More specifically, Trayport operates a policy whereby it does not allow users of its back-end systems to connect via an API to an alternative front-end screen or STP clearing link without the permission of Trayport. Many third parties referred to this as Trayport's 'Closed API' policy.
6. All major brokers active in European utilities trading currently use Trayport's back-end BTS software. Each of the major exchanges active in European utilities trading either use their own back-end matching software and connect to Joule/Trading Gateway via GV Portal, or use Trayport's ETS back-end. For ICE, Trayport has developed a single software component to connect Trading Gateway to certain ICE exchanges for price listing purposes (also referred to as 'ICE Link'). Finally, all major clearinghouses are connected to broker venues using BTS for the purposes of clearing over-the-counter (OTC) transactions through Trayport's Clearing Link.³
7. Joule/Trading Gateway provides traders with a view of all the major European utilities trading venues via a single, aggregated front-end screen. Over 85% of European utilities derivative trades are underpinned by the Trayport platform⁴

³ In May 2016, ICE and Trayport agreed terms for the licensing of its Clearing Link. The implementation of this agreement is currently suspended.

⁴ This includes all power, gas, coal, emissions and freight futures and forwards as reported on [Trayport's website](#).

and it is the key conduit through which all participants (traders, venues and clearinghouses) in European utilities interact.

Jurisdiction

8. We first considered whether the acquisition of Trayport by ICE was a 'relevant merger situation' within the meaning of section 23 of the Enterprise Act 2002. We provisionally concluded that it met the share of supply test in the supply of energy trading front-end access services, for which, in 2015, the Parties held a combined share of supply of approximately [80–90]%, with an increment of [70–80]% as a result of the acquisition. Therefore, we provisionally concluded that a 'relevant merger situation' had been created.

Market definition

9. We considered the relevant product and geographic market definitions. When assessing the vertical effects of a merger, it is necessary to consider the effects of foreclosure on relevant downstream markets. Therefore, we decided to assess the effects of the Merger in the following product markets supplied both by ICE and by Trayport's customers:
 - (a) trade execution services to energy traders; and
 - (b) trade clearing services to energy traders.
10. For the purposes of assessing the competitive effects of the Merger, we also considered market definition by reference to the goods and services supplied by Trayport to venues and clearinghouses. We used the following product markets:
 - (a) back-end technology supplied to brokers and exchanges, respectively; and
 - (b) access services supplied to clearinghouses for OTC executed trades.
11. Finally, we assessed the effects of the Merger under a product market for the supply of energy trading front-end access services to traders; a service supplied by both ICE and Trayport.
12. In defining our product markets, we noted that our competitive assessment would need to take into account the interdependence of the software products which make up the Trayport platform. The Trayport products, taken together, serve multiple sets of customers, whose reliance on each other is an important factor in the strength of the Trayport offering. More specifically, the value that trading venues realise from Trayport depends on the number of

traders licensing the Joule/Trading Gateway front-end, and the value that traders realize from Trayport depends on them being able to access liquidity provided by venues using Trayport's back-end. Similarly, the success of Trayport's Clearing Link relies on the number of clearinghouses connected to it and on the volume of OTC cleared trades flowing through the Trayport front and back-ends. Accordingly, the number of traders, venues and clearinghouses licensing Trayport's software affects the profitability of each product, and the success of the Trayport platform as a whole. We considered these network effects in our competitive assessment.

13. On the geographic market, we provisionally concluded that the effects of the Merger should be assessed on an EEA-wide basis.

Counterfactual

14. We considered what would have been the competitive situation in the absence of the Merger (the counterfactual). We provisionally found that, absent the Merger, Trayport would most likely have been sold to an alternative purchaser that would have continued to run Trayport on the same basis at its previous owners.
15. We considered the agreement signed between ICE and Trayport, post-Merger, on new interface development and support relating to the display of additional ICE products on Joule/Trading Gateway, and setup of an ICE STP link to its clearinghouse. Taking into account the pre-Merger relationship between the two companies and the timing of the signed agreement, we provisionally concluded that it was not sufficiently certain that the agreement would have been reached on the same terms absent the Merger.
16. We therefore provisionally decided that the agreement should not form part of our counterfactual but that we should consider the relevance of any potential future agreement between ICE and Trayport in our competitive assessment.
17. Our provisional view therefore is that the counterfactual would have been broadly consistent with the pre-Merger conditions of competition.

Pre-Merger competition

18. Before considering the likely competitive effects of the Merger, we assessed the nature of competition between ICE and its rival trading venues and clearinghouses, and the role of Trayport in facilitating this competition.
19. We first assessed the factors which drive traders' choices during the lifecycle of a trade. We received consistent views from all parties that liquidity was the

most important factor in deciding where to trade. This was because trading on highly liquid venues enabled traders to secure the best contract prices. Third parties told us that Trayport was the key price aggregator of this liquidity. The main and third parties agreed that there were other secondary factors which affected traders' choices. These were: execution fees charged by venues; the extent to which the particular financial product being traded was standardised and therefore potentially available on different venues, ie broker and exchange venues; a trader's need for anonymity or disclosure of a counterparty's identity; and, for some trades, the different regulations governing trades on exchange or via a broker OTC.

20. We were told that the primary factor affecting traders' choice of clearinghouse was their margin and open interest with a particular clearinghouse. Secondary factors were clearing fees and the ease of registering trades with a particular clearinghouse, including whether Trayport's Clearing Link was available for routing OTC trades for clearing.
21. We assessed competition between different types of venues, and between clearinghouses. In doing so, we took into account assessments of competition between trading venues in previous cases and trading volumes in each relevant asset class over the last five years. We also took into account the views of the main and third parties, and relevant information from the Parties' internal documents about the nature of competition.
22. We found that ICE was the largest exchange operating in European utilities asset classes and that its closest competitors were other exchanges. ICE held a high volume share of exchange-based trades in a number of European utilities asset classes, particularly gas and emissions.⁵ In these asset classes, it faced head-to-head competition with other exchanges, particularly EEX, which had liquidity in the same products. We observed examples of execution volumes shifting over time and exchanges competing aggressively over price and other discount schemes to win trader business.
23. We found that ICE also faced potential head-to-head competition from rival exchanges threatening to take liquidity in asset classes where ICE had a strong presence and in asset classes where ICE is currently absent (or small) and may enter. Lastly, we found that another important aspect of competition was dynamic competition where exchanges competed to introduce new products and services to capture liquidity in emerging markets and/or move liquidity from rival venues. We provisionally concluded that ICE faced a substantial competitive constraint from other exchanges.

⁵ ICE is active in the supply of exchange venue services for secondary emissions.

24. We also found that ICE had large or significant shares in clearing volumes of OTC trades across a number of asset classes: gas, emissions and coal. The proportion of OTC trades being cleared had increased in the last five years across each asset class and we observed an overall increase in clearing volumes in this period. Our assessment focussed on OTC cleared trades because it is for these volumes that Trayport's Clearing Link is an input and which routes some volumes for clearing.
25. ICE faced head-to-head competition for clearing volumes where liquidity was shared between clearinghouses, for example, from CME in coal. Where clearing was largely carried out on ICE's clearinghouse, ICE faced competition in the form of potential head-to-head competition from other clearinghouses threatening to take its liquidity. Similar to competition between exchanges, we also found that there was dynamic competition between clearinghouses for the introduction of new products and services. We observed examples of the share of clearing volumes changing over time and clearinghouses competing aggressively over price and ease of registration. We provisionally concluded that ICE competed with other clearinghouses to win clearing volumes of OTC trades.
26. We also carried out an assessment of competition between brokers and exchanges in European utilities trading. Our assessment of liquidity shares over the last five years showed an increase in the share of trades carried out on exchanges and a decrease in the share carried out OTC. Our provisional view is that this trend reflects two factors: (i) asset classes becoming more liquid and moving to electronic trading, thereby making exchange-traded products closer competitors to OTC traded products; and (ii) changes in regulation. We received mixed views on the likely effect of recent regulatory changes and the consequences of a carve-out from the regulation for certain OTC trades. Overall, we expect the increase in the share of exchange-based trades to continue but that OTC trading will remain traders' preferred method for certain types of European utilities trades.
27. In assessing the extent of competition between brokers and exchanges, we reviewed evidence submitted by the main and third parties, including ICE's internal documents, venue submissions, and responses from traders to our market questionnaire. This evidence indicated that there was competition between brokers and exchanges for execution volumes where markets were more liquid and financial products more standardised. Our provisional view is that while venues of the same type remain closest competitors, there is also ongoing competition for trades between exchanges and brokers.
28. Overall, we provisionally concluded that ICE competes strongly with rival exchanges and clearinghouses, and also to a degree with brokers. We found

that such competition delivers a wide range of benefits to traders, including lower fees, price incentives such as fee holidays, rebate schemes and trader 'market maker' agreements aimed at generating liquidity on a venue, and also innovative trading solutions and new products that are quickly brought to the market.

29. We assessed the role of Trayport in facilitating this competition. For this purpose we analysed volume data, examined internal documents and we considered the views of the main and third parties. The Parties submitted that Trayport was essentially a software vendor and that there were a number of alternative software products that traders, venues and clearinghouses could switch to as an alternative to Trayport's products.
30. As set out above, liquidity is the key factor in driving traders' choice of venue. We found that Joule/Trading Gateway is the primary front-end screen through which traders access venues' liquidity as part of an aggregated view, and it is through using Trayport's back-end software, or GV Portal, that venues are able to access traders in order to generate liquidity. The two are mutually dependent. Clearinghouses also rely on Trayport's Clearing Link to some extent to provide STP access to brokers using Trayport's BTS back-end, and this increases the ease by which OTC trades can be routed for clearing. The ease of clearing an OTC trade is an important parameter on which clearinghouses compete.
31. As set out above, the Trayport platform serves multiple sets of customers and as a result generates significant network effects. This, combined with Trayport's Closed API policy, means that having access to the Trayport platform is important for venues and clearinghouses in order to compete in generating, maintaining and/or shifting liquidity in the asset classes where ICE is active. These network effects and Trayport's Closed API make switching away from the Trayport platform very difficult, as it would require a coordinated shift in liquidity by traders and venues away from the Trayport platform. We provisionally found that whilst there is competing or equivalent software available for each of Trayport's front-end, back-end and Clearing Link software, separately, the interconnectivity of its software as part of the Trayport platform makes these alternatives weak in the absence of network effects.
32. Our analysis of the evidence showed that Trayport's services are used to some extent by almost all traders, venues and clearinghouses operating in these markets, and our analysis of volume data indicated that many third party venues were dependent on the Trayport platform for trading volumes. Moreover, all third party venues told us that Trayport was extremely important to their success. We also provisionally found that Trayport was more than a

passive supplier of software: it facilitated new entrants and financial products supplied by venues seeking to challenge an incumbent's position, and it targeted expansion into new markets not currently traded electronically for OTC trades, eg oil.

33. We provisionally concluded that ICE's rival venues and clearinghouses were reliant on Trayport to compete effectively in European utilities trading. Trayport plays an important role in facilitating competition between trading venues and between clearinghouses, and the available alternatives are weak as a result of network effects and Trayport's Closed API. Having reached this provisional conclusion, we therefore explored whether there existed any mechanisms through which Trayport could be used to lessen competition between ICE and its rivals in our assessment of the competitive effects of the Merger.

Competitive effects of the Merger

34. Taking into account our assessment of pre-Merger competition, we examined the competitive effects of the Merger. We assessed the likely effect on competition between ICE and rival venues and clearinghouses, which use Trayport software. As such, we primarily considered vertical theories of harm: we considered the merged entity's ability and incentives to foreclose ICE's rivals, and the potential effects on competition of a partial or total foreclosure strategy. We also considered whether the Merger would result in a loss of competition between the Parties' respective front-ends as part of a horizontal theory of harm.
35. Based on evidence from third parties, internal documents and analysis of volume data, we found that rival trading venues and clearinghouses licensing Trayport's software are largely dependent on Trayport to disseminate their prices and offering to traders. Our provisional view is that brokers and exchanges that currently use Trayport's back-end rely significantly on Trayport to win traders' business in competition with ICE. We also provisionally concluded that exchanges that currently have their own matching engine but are connected to Trayport's aggregation screen via GV Portal are also dependent on Trayport to compete in certain asset classes and products where they are present and/or to enter successfully in new asset classes and products. Lastly, we found that clearinghouses are also dependent on Trayport, but to a somewhat lesser degree, in order to compete for clearing business in certain asset classes and products where they are present and/or to enter successfully in new asset classes and products.
36. Our provisional view is that a total foreclosure strategy is less likely because of the risks to the underlying Trayport business model. However, we identified

a number of mechanisms through which Trayport could weaken ICE's competitors and reduce competition as part of a partial foreclosure strategy. We consider this likely to involve a series of incremental changes over time, such as increasing the cost of Trayport's software to ICE's rivals, de-prioritising the development and improvement of its software so as to disadvantage ICE's rivals, and delaying and hampering the ability of rivals to enter new markets by delaying the listing of new products on the Trayport platform. Our provisional view is that the contractual arrangements in place between Trayport and its venue and clearinghouse customers are unlikely to sufficiently protect ICE's rivals from all such strategies. We therefore concluded that the merged firm would possess the ability to partially foreclose ICE's rivals.

37. When considering the merged entity's incentives to carry out a partial foreclosure strategy we noted that, pre-Merger, ICE and Trayport had conflicting incentives. Trayport's objective was to support competition between multiple competing venues and clearinghouses, with liquidity fragmented between them. This meant that its aggregation software offered significant value to traders. ICE's aim was to concentrate as much liquidity as possible on its own exchange and clearinghouse.
38. Our provisional view is that the pre-Merger ownership of Trayport by a broker was not, as the Parties argued, informative of ICE's incentives post-Merger. This is because ICE additionally offers clearing services, and as a large exchange has a different position in the market for execution services, including a particularly strong incumbent position relative to other venues in a number of asset classes. Moreover, revenues from Trayport represent a significantly smaller proportion of ICE's overall revenues than they did for Trayport's previous owner and so any costs of a partial foreclosure strategy are likely to be less significant to ICE by comparison.
39. Our provisional view is that the merged entity would likely have a strong incentive to grow further its position in asset classes and products where it already has a substantial presence at the expense of its rivals. Further, weakening the effectiveness of ICE's rivals would prevent those rivals from threatening to take ICE's volumes in asset classes and products where it currently has a strong position. Also, where there are pre-existing industry trends, ICE would likely be able to use its control of Trayport to accelerate these and direct them in its favour.
40. Taking into account our assessment of the importance of dynamic competition in these markets, we provisionally found that ICE's control of Trayport would help it to gain control of new markets and segments. We considered this is likely to be highly significant because we found evidence of important first-

mover advantages. For example, we identified strong incentives for ICE to seek to disrupt rivals in competing for new types of asset classes and geographies as they migrate from voice to electronic trading, and new types of offering that emerge in light of regulatory developments. Overall, we provisionally found significant gains for the merged firm which would likely result from a weakening of rivals.

41. On the basis that foreclosure was likely to take the form of incremental changes that would not fundamentally undermine the Trayport platform and could be hard to detect, we provisionally identified likely low costs to the merged entity from lost revenues. Also, we were not persuaded by the Parties' arguments that traders would retaliate in other ways as we found little evidence that the threat of switching away from ICE to extract concessions would not have been fully reflected in pre-Merger conditions. We therefore provisionally concluded that the merged firm would likely experience only limited costs as a result of a partial foreclosure strategy.
42. As a cross-check, we quantitatively analysed the likely gains and losses to the merged firm of a partial foreclosure strategy. Taking into account the degree of uncertainty in the amount and timing of any switches in liquidity, we considered a number of scenarios. Our qualitative assessment of the likely incentives was supported by all of the scenarios we considered.
43. We provisionally concluded that the effect of any foreclosure strategy would be to harm ICE's main rivals and, as a result, have an impact on their ability to compete effectively with ICE for the execution and clearing of trades. In practice, we considered the effects of a partial foreclosure strategy would likely have a direct impact on the products and services offered to traders.
44. We provisionally concluded that there would likely be a loss of competition between ICE and other trading venues/clearinghouses to be the principal host of liquidity and/or clearing volumes. A partial foreclosure strategy would likely have the greatest impact on other exchanges, which are ICE's closest competitors, and then on rival broker venues which are close competitors in some asset classes. We also considered that a partial foreclosure strategy would likely adversely affect ICE's rival clearinghouses but that the impact on them would be less significant than on exchanges and brokers because clearinghouses' reliance on Trayport's Clearing Link was less pronounced.
45. We provisionally found that this weakening of competition between ICE and its rivals was likely to directly harm traders by allowing fees for execution and clearing to increase and/or the service offered to traders to be worsened. The loss of competition between ICE and its rivals would also relate to their efforts to launch new products and find innovative trading solutions in order to be the

first to move into markets with new offerings. We placed particular weight on the loss of this dynamic competition which is likely to harm traders by offering them a more limited range of trading opportunities and tools.

46. We also considered the potential effect on competition resulting from the loss of rivalry between the Parties for front-end access services. We found the evidence on this to be mixed. There was some evidence that the Parties constrained each other pre-Merger. However, there was not significant evidence that customers would have switched between ICE and Trayport for the supply of front-end access services in response to a price increase. We provisionally found that there would likely be a reduction in competition but on its own this was not sufficient to represent a substantial effect.
47. Based on an assessment in the round of all theories of harm, and taking into account the likely effects overall, we provisionally concluded that the Merger between ICE and Trayport may be expected to result in a substantial lessening of competition (SLC) in the supply of trade execution services to energy traders and trade clearing services to energy traders in the EEA, including to UK based customers, as a result of the merged entity implementing a partial foreclosure strategy.