

ICE / Trayport

Response to Provisional Findings

5 September 2016



Contents

- **Part A: Executive Summary**
- **Part B: Core deficiencies in PFs**
- **Part C: Other manifest errors of assessment; procedural unfairness**
- **Part D: Conclusions**

Part A: Executive Summary

Executive Summary (I)

- As the PFs now recognise, the relevant SLC to consider is purely vertical (not horizontal) in nature.
 - There is no horizontal SLC finding
- Starting point/presumption is that vertical mergers are less likely to give rise to concerns than mergers between rivals.
 - CMA Merger Assessment Guidelines, 5.6.1: "Non-horizontal mergers do not involve a direct loss of competition between firms in the same market, and it is a well-established principle that most are benign and do not raise competition concerns."
- In this case, there is no evidence of any underlying anticompetitive intent on ICE's part.
- To the contrary, ICE's intention to continue operating Trayport as currently is demonstrated by ICE's Board papers approving the acquisition, its public statements to shareholders, its internal valuation model for the transaction and its customer letter (not sent at the CMA's direction).
- From the outset, the Parties recognised that ICE's rivals might question the acquisition and so provided detailed evidence/analysis to demonstrate that concerns can be discounted because of a lack of either ability or incentive for ICE to use Trayport to foreclose its competitors.
- The PFs validate the core propositions on which the Parties' clearance case is based – namely:
 - The primary drivers of competition and trader choice of trading venue and/or clearinghouse are liquidity and open interest.
 - Trayport's key feature is venue aggregation and price dissemination.
 - Undermining the availability of venue-neutral aggregation would be fatal for Trayport's attraction and business model.
- Hence the PFs discount total foreclosure as a concern – there is no total foreclosure SLC finding.
- The PFs do not disclose the CMA's specific reasoning to discount total foreclosure but it can be inferred that overt interference in price aggregation by Trayport has been ruled out because it would destroy Trayport's business model.

Executive Summary (II)

- Nonetheless, the PFs retain allegations about a highly speculative and theoretical partial foreclosure concern.
- The concern is based on an incorrect and unsubstantiated suggestion that partial foreclosure mechanisms exist which are hard to detect but equally can be effective to put ICE's rivals at a substantial competitive disadvantage (8.57) and with no retaliation (8.41).
 - Hard to detect yet still effective partial foreclosure is not a TOH that has been tested with the Parties.
 - This is simply implausible – given the nature of Trayport's core service proposition and the drivers of competition and trader choices.
- Neither the third party evidence nor the Parties' internal documents substantiate the idea of hard to detect yet effective foreclosure.
- Fundamentally, the PFs partial foreclosure allegation is speculative, illogical and inconsistent with other PFs analysis.
 - The specific concern is asserted not proven – it cannot be reconciled with other findings in the PFs (e.g. related to Trayport's core features and the drivers of competition in ICE's markets).
 - Ability to foreclose is not addressed with reference to the specific partial foreclosure theory – there is no explanation of how such behaviour can be effective or be hard to detect.
 - The PFs rely on qualitative incentives analysis which basically assumes incentive because there is (allegedly) an ability to foreclose through undetectable actions– the Parties' detailed quantitative analysis is ignored and the limited quantitative analysis undertaken by the CMA as a 'cross check' is overly simplistic, analytically flawed and doesn't address the specific partial foreclosure allegations
- Intuitions heavily influenced by third parties with commercial agendas seem to shape the SLC finding rather than the forensic, evidence based analysis needed to reach coherent and robust conclusions
 - This is evident from the analysis provided in this submission and the separate economic critique by Oxera
- In short: the PFs fail to take the core findings of the CMA's analysis to their logical conclusions and rule out partial as well as total foreclosure.

Part B:

Core deficiencies in the PFs

Whilst the PFs reach appropriate findings on a number of key issues...

- Market fundamentals.
 - PFs have correctly identified the importance of liquidity, open interest and ability to margin offset in the context of traders' choice of execution venue / clearing house (7.8).
 - This said, the Financial Regulation summary in Appendix C contains a number of material inaccuracies. See Annex 2.
- Closeness of competition.
 - Exchanges are each other's closest competitors e.g. EEX is ICE's main rival in European utilities (7.63).
 - There is some competition between exchanges and brokers but less than exchange vs. exchange competition and brokers are each other's closest competitors (27, 5.14).
 - The competitive interaction between OTC bilateral (uncleared) and exchanges is more limited – hence the PFs did not consider the interaction in any detail (7.37).
- The horizontal theory of harm has effectively been discounted given that any possible effect on competition would not be substantial (46, 8.114-5) – there is no horizontal SLC finding.
 - The Parties have maintained from the outset that they do not compete.
 - As the PFs have recognised, the evidence in support of the horizontal theory of harm was always "mixed" at best.
- Total foreclosure is ruled out on the basis that this would undermine the Trayport business model (36, 11.5).
 - The reasoning on which total foreclosure has been discounted is not explained other than to reference "the risks to the underlying Trayport business model" (36, 11.5).
 - However, we infer that the CMA considers that foreclosure which prevents venues from being displayed on and accessible via Trayport can be discounted, as this would be inconsistent with its core service proposition (venue aggregation and price dissemination) and thus inherently undermine the value that traders see in Trayport.

...the PFs fails to take into account the implications of these findings for the partial foreclosure theory – leading to conclusions that are manifestly erroneous

- The concern about partial foreclosure involves incremental changes over time that would not undermine the Trayport platform and be hard to detect ("not be readily identifiable to market participants"), that would not be prevented through contractual restrictions, but could, nonetheless have a substantial impact on the ability of ICE's trading/clearing rivals to compete over time (41, 8.57) – without retaliation.
- Reason is clearly being stretched beyond its breaking point.
- Given the PFs have ruled out total foreclosure, the theory can only mean that the partial foreclosure actions do not involve preventing the display of prices of other venues through Trayport.
 - Actions resulting in this outcome would effectively mean total foreclosure – and can accordingly be discounted on the basis of the same reasoning in 11.5.
- Given the provisional findings that: 1) traders choose venues/clearinghouses for factors unrelated to Trayport functionality (e.g. liquidity and open interest); and 2) the actions of concern do not prevent a trader from using Trayport to access the desired pool of liquidity/open interest, there can be no basis for the alleged foreclosure actions to have a substantial effect on rival venues/clearinghouses.
- The PFs do not explain how these actions could have such an effect – understandably, given that they cannot.
- The theoretical concept of hard to detect partial foreclosure which is nonetheless capable of foreclosing rival venues/clearinghouses is implausible and certainly not evidenced. Moreover it is inconsistent with the findings on 1) total foreclosure and 2) the key drivers of traders' choice of execution venue and clearinghouse.
 - See further detailed criticism on slides 10 -13.

PFs give disproportionate weight to views of rivals with commercial agendas

- Traders (not venues, clearinghouses or ISVs) control where liquidity and open interest coalesce. It is their prices which are being displayed on and traded via Trayport.
- Their views should be afforded greater weight than ICE's venue/clearinghouse rivals, whose concerns are clearly self-motivated.
- It is evident that competitors are using the CMA process to try to force Trayport to open up its API/network which is not something Trayport would ever contemplate in the ordinary course – for legitimate reasons discussed elsewhere.
- There are some **[Confidential]** trader firms that license Trayport's Trading Gateway product.
- The CMA received responses to 39 trader questionnaires.
- Only two or three traders appear to have expressed concerns to the CMA.
- There is a concerning disparity between the number of traders using Trayport software and the few whose views are being relied upon in the PFs to support the SLC finding.
- ICE's own impression is that most traders are neutral towards its ownership of Trayport.
- The CMA's rejection of the Parties' request to have access to the trader questionnaire responses is all the more concerning in light of this.

PFs do not establish that the theoretical partial foreclosure actions of concern are capable of impacting ICE's rivals' ability to compete (I)

- The PFs set out a list of partial foreclosure "mechanisms" in 8.56. The first criticism to be made is that the cross-referenced paragraphs are incorrect in a number of instances and/or do not contain relevant evidence for the specific foreclosure steps of concern.
 - 8.21-22 do not discuss de-prioritising the development/improvement of software.
 - 8.23 does not discuss restricting the functionalities of the software.
- More fundamentally, despite the claim to have identified "specific mechanisms" that Trayport could use to implement partial foreclosure of ICE's rivals, the body of third party evidence cited in support of the CMA's theory, in particular from ICE's venue/clearinghouse rivals,
 - 1) is extremely vague and unsubstantiated, and
 - 2) to the extent that it is specific, overwhelmingly concerns overt foreclosure steps which, insofar as they are capable (on the PFs logic) of being effective, would necessarily damage the core Trayport service proposition (venue aggregation and price dissemination) and have effectively been discounted in discounting total foreclosure as an SLC.
- The PFs have therefore failed to analyse forensically the third party evidence in the context of the specific 'hard to detect' partial foreclosure theory of harm.
- Further detailed criticism is set out in slides 11-13 and Annex 6.

PFs do not establish that the theoretical partial foreclosure actions of concern are capable of impacting ICE's rivals' ability to compete (II)

Lowering the service level and hindering new product development (8.24-29)

- The PFs do not explain how the theory works in practice (without being "readily identifiable to market participants"):
 - 8.24 "delaying or withholding new software features" – Which features? How do they concern Trayport's core service elements? How can they change traders' choice of venue/clearinghouse?
 - 8.28 "by just tweaking the user interface or workflow" – What kind of "tweak"? How will this materially impact price dissemination? How will this change trading choices and divert volumes to ICE?
 - 8.29 "influence the way new products were brought to market in ways that would provide an advantage to ICE" – What type of influence? In what ways would this assist ICE? How does this override market fundamentals? How does this advantage balance against likelihood of having a material impact and risks/disincentives? How does ICE's regulatory approval lead-in time affect this?
- With regard to upgrades specifically, Trayport regularly finds that clients often prefer to continue with existing software for as long as possible and can be slow to upgrade. This is because the software works and upgrades can involve a significant cost/inconvenience to the customers. For example:
 - [CONFIDENTIAL]
 - [CONFIDENTIAL]
- It is not explained how delays in upgrades would divert trading/clearing decisions notwithstanding that this would not affect the market fundamentals (liquidity etc) which determine trading and clearing choices.
- Even if Trayport attempted to withhold upgrades, which would be known and difficult to implement (they are standardised products) this would have little or no impact on ICE's rivals since it is possible to continue operating as normal on existing older versions of Trayport software for an extended period of time.

PFs do not establish that the theoretical partial foreclosure actions of concern are capable of impacting ICE's rivals' ability to compete (III)

Lowering the service level and hindering new product development (8.24-29)

- Some evidence describes overt actions which self-evidently amount to total, rather than partial, foreclosure given that they damage Trayport's core service proposition (venue aggregation and price dissemination) – and which can accordingly be discounted on the basis of the CMA's reasoning in 11.5.
 - This would encompass actions that restricted the supply of Gold Mapping Service such that the products were unavailable on TGW at all; or cutting off the STP links to clearinghouses for brokers.
 - e.g. 8.27 "blocking or disrupting the connection for brokers to register at exchanges or... slowing down the feedback from clearing".
- Other evidence describes actions which, insofar as they are capable (on the PFs logic) of being effective (in terms of having an impact on ICE's rivals), would necessarily be detectable and thus cause harm to Trayport's core service proposition – i.e. having the same result as total foreclosure – such that they can also be discounted.
 - This would encompass actions such as systematically and radically reducing the speed of connectivity, failing to fix critical software glitches in a timely fashion or otherwise preventing rivals' products (new or existing) from being available on traders' screens at the time expected by the market.
 - e.g. 8.24 "significant changes in the way exchanges connected or how trades would be reported or orders routed".
- Evidence on credit API (8.26) is specific to Griffin (which has a lower headcount compared to other brokers) and is not relevant to other brokers who use a manual solution (2-3 people). The alleged importance of the feature to Griffin is erroneously conflated with its importance to "the OTC market" as a whole. As an alternative to this potential new feature, Griffin could simply increase its support team's headcount by a few people.

PFs do not establish that the theoretical partial foreclosure actions of concern are capable of impacting ICE's rivals' ability to compete (IV)

Raising rivals' costs (8.23)

- PFs assert (without evidence) that raising the cost of Trayport software would harm ICE's rivals.
 - Evidence on reduction of logins (8.51) is not evidence of any impact of the Trayport fees on brokers' competitiveness.
- By contrast, the Parties have provided a case study of a situation where there was a specific additional charge for traders using a particular venue (ICE Endex) via Trayport.* This involved a significant increase in fees (around 20%) so would not have been hard to detect. The evidence shows that even this increase did not affect traders' decisions of whether to trade on ICE Endex. This evidence has not been addressed by the PFs.
- Therefore the PFs do not set out any evidence that there is an ability for ICE to divert trading or clearing to itself through increasing Trayport fees to its rivals, and have ignored compelling evidence to the contrary.

Use of confidential information – both detailed transaction data and 'soft' information on new products (8.30-37)

- This has been addressed in the Parties' submission on data protection at Trayport (29 June 2016) and the comments on the additional third party evidence (26 July 2016).
- The PFs fail to take this evidence into account.
 - See further slides 27 and 28.
- See also Annex 3 describing Trayport's role in new product development.

Incentives analysis in the PFs is wholly inadequate – it would be irrational to rely on it (I)

Qualitative incentive analysis is incoherent and lacks supporting evidence

- Of itself, the number of third parties who submitted views (without explaining them) is not evidence of an incentive to foreclose (8.76). The PFs should scrutinise the views of self-interested commercial operators more forensically rather than place undue weight on highly speculative and unfounded assertions.
- Incentive to foreclose is essentially being assumed on the basis of (unproven) ability.
 - The qualitative incentives analysis (8.85-90) is couched entirely in terms of ability: "would likely be able to", "would help to", "could help ICE to", "could likely help it gain control of", etc.
- Similar to the discussion of ability (see slides 10-13), the incentives discussion is highly speculative, illogical and unevidenced:
 - Trayport has no traction or network in oil trading, so it is inconceivable that it could be used to foreclose would-be rivals to ICE in oil (see further slide 30 and para 47 of Appendix D).
 - Reference is made to "pre-existing industry trends" but it is unclear what trends are being referred to and no evidence is provided as to how ICE could "use its control of Trayport to accelerate these and direct them in its favour". The key industry trend is away from ICE/on exchange
 - Similarly, vague references are made to "new market and segments" but no evidence is provided as to their significance or how Trayport could be used to "gain control of" them – understandably, given that they are completely speculative and/or unrelated to Trayport's core areas of activity.
 - It is implausible and inconsistent with the provisional findings on drivers of trader choice of execution venue/clearinghouse to suggest that ICE could foreclose, for example, EEX in German power. The PFs argue that, as a result of hard to detect changes to Trayport functionality, traders would switch to ICE despite the fact that there could be significant direct costs of switching in terms of higher bid-ask spreads and additional clearing costs. There is no basis for this conclusion – in fact, the evidence should lead to the opposite conclusion being drawn.
- PFs quote two precedents where the decision was based on qualitative assessment that did not attempt to make a firm prediction of the precise impact of foreclosure on the merged firms' profits (fn 136) – but these precedents should be distinguished and the approach taken in the PFs is not appropriate to the ICE/Trayport case (see Annex 1).

Incentives analysis in the PFs is wholly inadequate – it would be irrational to rely on it (II)

Possibility of retaliation is discounted without good reason and in a manner which is inconsistent with the assessment in the PFs of possible gains

- Costs of foreclosure via retaliation are dismissed entirely on grounds of being "speculative and unlikely to emerge in practice" (8.91).
- However, the alleged gains of foreclosure set out by the CMA are themselves highly speculative and yet no discount is applied to reflect their implausibility. This clearly demonstrates an intention to reverse-engineer a quantitative analysis that supports the speculative and unproven qualitative analysis in the PFs which relies on vague and substantiated third party claims (slide [14]).
- PFs discount the possibility of retaliation on the basis that the CMA would have expected to see evidence of such retaliation occurring pre-merger (8.92).
- The Parties have in fact provided evidence of retaliation (coal case study) which is explicitly cited in the PFs.
 - This shows that partial foreclosure would not be costless, contrary to the PFs assumption, as traders switched away from clearing with ICE and could do so in the future in respect of ICE's remaining share of coal clearing (without coordinating).
 - Indeed, this case study is used to inform the CMA's own calculation of likely gains in Appendix F, para 8(b).
 - Albeit the CMA's use of this case study is erroneous – it is based on the misunderstanding that Trayport's STP Link made the difference whereas the relevant distinguishing feature was CME's use of STP compared to ICE's more manual process at the time – CME could equally have used another STP solution, it needn't have been Trayport's STP Link specifically.
- Even if there were no actual pre-merger examples of retaliation, this would not of itself be sufficient to discount the realistic possibility of market participants retaliating against ICE if it attempted to engage in a foreclosure strategy using Trayport. Doing so would be inconsistent with PFs finding that there is a constraint from potential competition between exchanges.
- The logic displayed in the PFs is fundamentally flawed.

Incentives analysis in the PFs is wholly inadequate – it would be irrational to rely on it (III)

The risk of lost Trayport revenues/profits is significantly understated

- PFs acknowledge that the costs of foreclosure include lost Trayport revenues (8.93).
- As explained on slides 10-13, the partial foreclosure actions of concern would be noticeable and thus cause harm to Trayport's core service proposition given that they would effectively prevent traders from accessing their execution venues and clearinghouses of choice.
- Therefore, whilst the PFs are correct to recognise that the alleged partial foreclosure gives rise to a risk of jeopardising Trayport's entire business model, it is incorrect to assume this risk is low (Appendix F, 51-54).
- In any event, given the nature of the risk (jeopardising Trayport's business model) even a low risk is sufficient to eliminate any incentive to pursue the strategy
 - It is illogical for this type of risk for the PFs to assume (without analysis/evidence) a 10% likelihood and so quantify this as a cost equivalent to 10% of Trayport's profits – the only question is whether the chances of the risk coming to pass is material - which the PFs acknowledge is the case (Appendix F, 51-54).
- Further detailed critique of the quantitative analysis is contained in the accompanying Oxera note (Annex 4).
- It will be seen that since the foreclosure actions would in fact be detected, there are costs/the risk of retaliation to consider and the quantitative analysis in PFs is flawed and wholly inadequate – it is no basis for a proper cost/benefit assessment
- By contrast, the Oxera economic evidence addresses this on a coherent and evidenced basis which demonstrates there is no financial incentive
 - Even ignoring the major reputational risks to ICE, which are significant given that it is a highly regulated company whose core business is operating and overseeing critical market infrastructure

Incentives analysis in the PFs is wholly inadequate – it would be irrational to rely on it (IV)

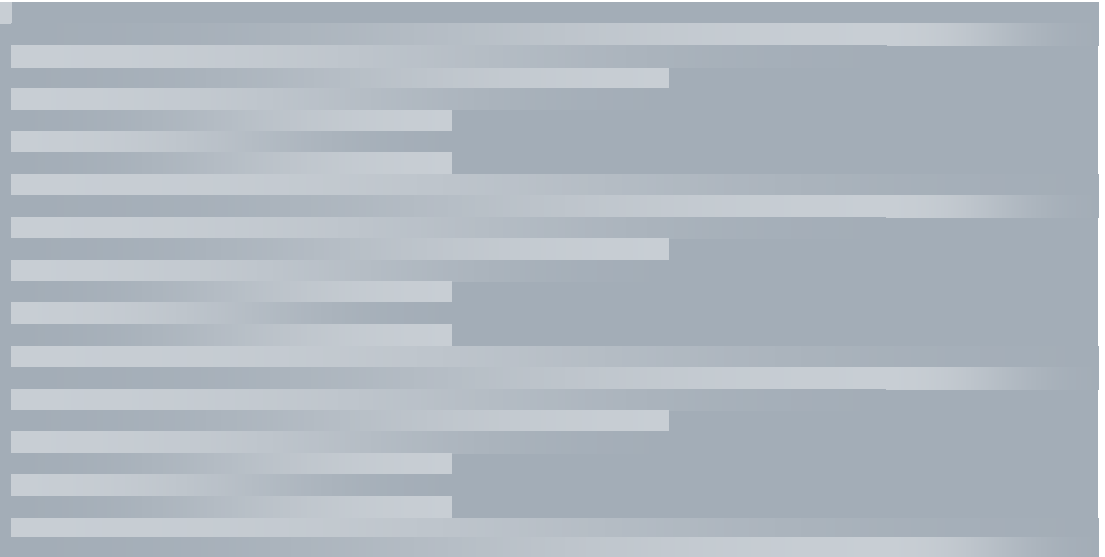
Read-across of GFI ownership to incentives analysis in the PFs is incorrectly disregarded

- PFs dismiss the Parties' evidence that GFI's ownership of Trayport suggests no incentive to foreclose (8.80).
- This stance is misguided and illogical – in particular given the SLC allegation that the foreclosure actions would be hard to detect (if so, why wouldn't GFI have taken advantage given the material revenues it could capture from other brokers?).
- The similarities between the two ownership scenarios are striking:
 - GFI is a trading venue (similar to ICE) and is one of the major OTC brokers active in the European utility markets.
 - GFI had strong incumbent positions (similar to ICE) in power, coal, freight and emissions at the time of its ownership of Trayport.
 - GFI had its own front-end technology (similar to ICE), EnergyMatch, which is active in US gas and power.
 - GFI's main venue rivals all use Trayport's BTS (whereas ICE's key rivals (Pownext aside) do not use ETS).
- To conclude that ICE's incentives are different because it is a larger group is equally incorrect. ICE is a highly regulated, more diverse company than GFI so the risks to ICE's wider businesses from reputational damage, and retaliatory action, are therefore considerably higher than for GFI.
- It is also incorrect to conclude that ICE has greater incentive because "ICE's revenue breakdown, the greater portion of its European utilities revenues are made from the provision of clearing services and it does not just rely on execution fees". This is because:
 - ICE's clearing revenues relate mainly to trades executed on its central limit order book (i.e. the clearing is derived from exchange execution not the other way around) so it is artificial (and irrelevant to the analysis) to separate it from execution.
- The fact that GFI and BGC (after it acquired GFI in Feb 2015) did not attempt to use Trayport strategically against other brokers (and indeed exchanges) is compelling evidence that ICE likewise will not attempt to undermine its competitors using Trayport. Indeed, if the PFs hard to detect partial foreclosure TOH is accurate, why did GFI/BGC not take such actions safe in the knowledge they would not suffer any retaliation?

Conclusion

- Partial foreclosure allegation in the PFs is inconsistent with the findings on key drivers of trader choice and total foreclosure.
- It is based on an unsubstantiated and incorrect assumption that hard to detect mechanisms exist which could substantially affect rivals' ability to compete.
- The reality is that any effective mechanism would be readily apparent to market participants – and, since this would be inherently inconsistent with the core Trayport service proposition (venue aggregation and price dissemination) and business model, can be discounted on the same basis as total foreclosure.
 - In this case, "total vs partial" is not so much the key question as "overt vs undetectable" – as is apparent from the PFs.
- PFs fail to take the foundations of the analysis to its logical conclusion: the suspicions which underpinned theories of harm which have now been discounted nonetheless continue to influence and undermine the robustness of the analysis in the PFs and lead to inappropriate reliance on speculative and unproven partial foreclosure theories of harm.
 - For example, certain vertical issues are still analysed in the PFs through a horizontal lens leading to flawed conclusions (e.g. EEX 'dependency').
- The result is that the SLC allegation in the PFs is fatally undermined by numerous material factual and analytical errors. The most significant examples (not already highlighted) are set out in the following section.
- The Parties urge the Inquiry Group to look forensically at the evidence to guard against inadvertent confirmation bias prompted by intuitions fuelled by self-motivated complaints from ICE's competitors who are gaming the regulatory process.
- As noted, it is striking that only three traders out of some 250 firms that license Trayport's software, appear to have expressed any concern to the CMA.

Part C:
Other manifest errors of
assessment;
procedural unfairness



Fundamentally flawed analysis (I)

The PFs do not establish that trading venues are dependent on Trayport

- Usage of Trayport software (however widespread) does not of itself prove dependency.
- Given the concerns are vertical (not horizontal) it is less relevant that currently Trayport may have high shares in terms of current usage for accessing certain venues – the relevant question is whether there are plausible alternative access routes. The evidence provided clearly shows that there are such alternatives and they are being used extensively today in particular for trading on EEX, ICE's closest rival and a necessary target of any foreclosure attempt.
- PFs find that voice trading is not a significant or effective alternative – despite the Parties' estimate that voice accounts for around half of trading on broker venues (table 4). On slide 88 of the CMA's economic putback, voice is identified as the most likely access route to switch to in the event of a rise in the price of TGW. In addition, important evidence on brokers' ability to switch away from Trayport (e.g. via Project Trafalgar) has effectively been ignored (see further slide 25).
- The PFs observe that current usage of Trayport by exchanges varies significantly by asset class (tables 5 and 6), proving that there are alternatives which are already being used extensively – but then draws the opposite conclusion.
 - ICE is not dependent on Trayport (7.152, 8.43).
 - NASDAQ is not dependent on Trayport:
 - "NASDAQ has many traders also using other systems due to its history where it mainly focuses on Nordic power and for which it has been active for many years" (7.120); nearly half its German power trading is initiated on non-Trayport screens (8.41).
 - EEX is not dependent on Trayport:
 - Nearly half of its power trading is initiated on non-Trayport screens (8.41); Non-Trayport STP links are used in around half of EEX's overall clearing volumes (Appendix D, 50 and 54).
 - Powernext's ability to switch away from ETS to EEX's own matching engine is dismissed (8.43) but the reasoning in the PFs is not sound:
 - EEX has a non-Trayport front-end (provided by Trading Technologies), connections with numerous other ISVs and is strong in several European utility asset classes.
 - [✂]

Fundamentally flawed analysis (II)

New ICE/Trayport agreement

- PF analysis does not take into account the fact that the key commercial terms were:
 - 1) essentially agreed via the exchange of emails between ICE and Trayport on 15 May 2015, and
 - 2) virtually identical to those contained in the final agreement.
- Contemporaneous evidence has therefore been provided to show that the final agreement closely resembles the commercial understanding reached just before BGC suspended the negotiations.
- As such, it is unreasonable for the PFs to baldly assert that it is "not sufficiently likely" (6.27) that the Parties would have successfully entered into the new agreement absent the merger – no evidence is presented to substantiate that assertion.
- Historical tensions between ICE and Trayport does not provide evidence to the contrary as this is no longer relevant in the more settled regulatory environment – a situation which pre-dates the acquisition. This is especially so given ICE's changed commercial stance towards Trayport resulting in a desire to distribute products via Trayport, illustrated by their attempts to secure the new contract before the acquisition.

Fundamentally flawed analysis (III)

Trayport customer contracts

- Analysis in 8.59-61 implies that [CONFIDENTIAL]
 - [CONFIDENTIAL] and the OTC broker foreclosure TOH is ill conceived as any other broker's lost volume would be most likely to switch to [CONFIDENTIAL] and not ICE in the event a foreclosure strategy is attempted.

Diverting OTC cleared volumes onto ICE's exchange

- CMA appears to have accepted the Parties' criticisms of evidence relied on for the Annotated Issues Statement:
 - 7.97: Wrong question asked of traders ("We also recognised that these questions concerned traders switching from executing on an exchange to executing OTC, and as a result of any asymmetry traders' willingness to switch from OTC to exchange trading may have been different").
 - 7.98: Tables do not necessarily demonstrate switching from OTC towards exchange ("We found that it was not always possible to be entirely clear if actual switching between venues had taken place on the basis of this data, as observed trends were also driven by changes in aggregate trading volumes").
 - Fn 138: ICE is typically revenue neutral as between OTC volumes and exchange volumes ("We accepted the Parties' point that ICE would have less of an incentive to switch OTC volumes that it currently clears onto its exchanges, as this would not necessarily directly result in any additional revenue.")
- However, the PFs have not been adjusted accordingly and no new evidence has been introduced in support.

Inconsistencies between PFs and quantitative incentives analysis (I)

Diverting OTC bilateral volumes onto ICE's exchange

- The PFs state that the CMA has found mixed evidence on the extent to which ICE and bilateral trading compete and that it considers that 'there is a degree of competitive interaction' between the two but less than compared to exchange/exchange and exchange/OTC cleared competition; and conclude that competition in this segment has not been considered in detail for the purposes of the assessment (7.37).
- However, in two of the three scenarios in the quantitative incentives analysis (Appendix F), the PFs do then include OTC bilateral volumes as volumes that ICE could potentially gain through foreclosure. This is on the basis that ICE could use Trayport "to accelerate" the increase in the proportion of cleared volumes.
- However, the PFs do not provide any explanation about the mechanism through which such acceleration could occur or any evidence on how Trayport would give ICE such an ability.
- Indeed, the PFs recognise that due to financial regulatory changes, there are pressures away from cleared trades, particularly for European gas (see para 2.2 of Oxera note on financial incentives to foreclose submitted to the CMA on 20 July 2016).

Inconsistencies between PFs and quantitative incentives analysis (II)

Clearinghouse volumes

- In relation to clearinghouses' dependence on Trayport, the PFs find that the "degree of dependency is not as strong as for traders and venues" (8.47).
- However, when quantifying the incentives to foreclose, the PFs apply the same assumption about the proportion of OTC cleared volumes that could switch to clearing on ICE as for the volumes executed on other exchanges.

OTC German and Nordic power volumes

- The PFs find that NASDAQ "is not dependent on Trayport for execution of Nordic Power trades" (we infer that 7.143 refers to NASDAQ).
- In line with this, the PFs seem to exclude NASDAQ volumes from the gains from on-exchange volumes switching, but does not exclude Nordic and German power from the gains from OTC cleared volumes switching to ICE.
- This is inconsistent with the provisional finding that NASDAQ cannot be foreclosed and as a result will remain an alternative venue with more liquidity than ICE to which OTC cleared volumes could divert.

Evidence is ignored or mischaracterised, leading to incorrect conclusions being drawn

Alternatives to Trayport; barriers to entry

- PFs mischaracterise the previous Trafalgar discussions:
 - 8.95: "to the extent that brokers have historically considered an alternative to the Trayport platform, in several instances this appears to have been through cooperation with ICE to use its WebICE screen"
 - 7.155: "We considered it noteworthy that since that time, seven years' later, there had been very few concrete steps taken to proceed with any such shift away from Trayport even though market rumours persist."
- In fact, other exchanges have been involved in previous Trafalgar discussions – CME for instance (we infer CME is the exchange quoted in Appendix D, para 84) – demonstrating that ICE is not the only potential partner. There is nothing unique in what ICE was proposing to offer in these discussions and there are a wide range of parties (exchanges, brokers, ISVs etc. – see MQ response to Q28, 30, 38 and 39) who are capable of providing equivalent technology to any future move away from Trayport.
- The PFs fail to take into account the evidence of ongoing discussions regarding Project Trafalgar which do not involve ICE. Brokers have held Project Trafalgar discussions as recently as April 2016 and commissioned an external consultant to assist in designing a Trayport alternative, "particularly in light of the proposed ICE/Trayport transaction" (Appendix D, para 82).
- The PFs also ignore the Parties' submission on 8 August 2016 which provides market intelligence on more recent Trafalgar-related discussions (now understood to involve Markit as well as the main brokers); and other relevant market developments (e.g. Tullett Prebon's long-term licence from CME in respect of trading technology).
- The fact that the broker community has not yet moved away from using Trayport merely demonstrates that the Trayport offering is appropriately priced and meets the needs of users. It does not provide evidence that Trayport is not constrained by the threat from these alternatives. In some asset classes, only very few brokers would be required to shift the bulk of liquidity. In the same way potential competitors are a threat to exchange liquidity, the possibility of competing technology being developed is a constraint on Trayport.
- If ICE were to misuse Trayport (e.g. via an attempted foreclosure strategy), this would provide the trading community with the necessary incentive to implement an alternative such as Trafalgar.

Vague and unsubstantiated third party evidence does not support partial foreclosure theory (I)

- Third party evidence on partial foreclosure mechanisms is self-serving, vague and lack supporting evidence; and overwhelmingly concerns overt (i.e. detectable) mechanisms impacting the core Trayport service proposition (venue aggregation and price dissemination) rather than the hard to detect yet effective mechanisms that the PFs SLC finding is based on – these can accordingly be dismissed on the same basis as total foreclosure.
- The available evidence therefore does not support a partial foreclosure theory and there can be no basis for such actions to have a substantial effect on rival venues/clearinghouses. The theoretical concept of undetected partial foreclosure which is nonetheless capable of foreclosing rival venues/clearinghouses is inconsistent with the PFs on 1) total foreclosure and 2) the key drivers of traders' choice of execution venue and clearinghouse (see Annex 6 for more detail).

Raising Trayport fees

- 8.23: Fears regarding increased Trayport fees are misplaced. PFs agree that Trayport costs are very small component of broker revenues (8.53). The only evidence the PFs produce on this shows that brokers reduce the number of screens as a result of price increases but the number of trades executed through brokers is not affected. Therefore there is simply no evidence presented that higher fees would increase the costs of trading and therefore shift liquidity. By contrast, the evidence submitted by the Parties shows that an increase in Trayport's fees would have an insignificant effect on the underlying costs of trading so would therefore not affect a Trader's decision in where to trade, including a natural experiment related to ICE Endex.

De-prioritising the development of Trayport

- 8.25: if ICE "mothballed" technology development of Trayport "effectively forcing traders to use WebICE" then by its very nature this must be detectable and not a plausible partial foreclosure theory as it will have changed user behaviour. In any event, this is factually incorrect as the PFs economic evidence shows WebICE would be the least likely access route to switch to in the event of a TGW price rise; in fact the most likely alternative access route would be voice (see CMA Financial analysis putback slide 88).
- 8.26: the credit API issue is specific to Griffin (which has a lower headcount) and not relevant to other brokers. Griffin is being conflated with "the OTC market" as a whole – which is clearly erroneous and overstates the importance of the credit API feature. This could easily be resolved if Griffin were to employ 2-3 additional employees in the same way other brokers do (which they are clearly capable of doing).

Vague and unsubstantiated third party evidence does not support partial foreclosure theory (II)

Delaying listing of rivals' products on TGW to give ICE first mover advantage

- 8.26 / 8.29: this is a very broadly formulated concern and cannot be relied on without specific details. Any delay in listing products would immediately be detectable by those affected venues and thus damaging to core service proposition (venue aggregation and price dissemination).
- The "first mover advantage" is not established in the PFs at all and certainly not in respect of European utilities which is the extent of the dependency alleged in the PFs. For example, 1) Nasdaq was the first exchange to list emissions contracts yet liquidity has shifted to ICE (see para 18 of Nasdaq's hearing summary); and 2) Griffin was the number one broker in the trading off TTF front month derivatives on its first day on Trayport (para 7.123).
- The evolution of exchange trading from already established OTC markets means that first mover advantage vs brokers is illogical.
- Further, the regulatory lead time for an exchange like ICE and advance discussions with customers to establish demand before investing the resources to complete regulatory approvals means the PFs' focus on first mover advantage is misguided and overstated.

Using rivals' hard trading data to put them at a competitive disadvantage

- 8.32: There is no basis for claiming that "*the nature of information going through Trayport would provide ICE with the ability and incentive, that was not there pre-Merger*". Firstly, just because the data exists, this does not mean that ability or incentive to use it has been established. There is no evidence to support this statement. Secondly, as a competing venue GFI would have been equally interested in this data but Trayport has stringent confidentiality procedures in place (evidence which has effectively been ignored in the PFs) as well as the fact that legally, Trayport, and therefore ICE, does not have the right to use the trading data in this way.
- 8.36: this statement is not merger specific as the risk of a confidentiality breach existed pre-acquisition. Trayport has contractual and procedural measures in place to stop this from happening. ICE risks tarnishing its reputation with customers and regulators for breaching confidentiality protocols which it can ill afford to do.

Vague and unsubstantiated third party evidence does not support partial foreclosure theory (III)

Using soft confidential information to gain first mover advantage where rivals launch new products

- 8.37: This suggestion is incorrect. It is common for exchanges to discuss new product plans with a wide range of market participants before they launch. In para 40 of Appendix D, CME's evidence states that traders and brokers are the first participants to be made aware of new product launches. As such, this then results in informal sharing of information between other market participants about a particular venue's new products. This means this is never a discreet process and as such ICE is frequently made aware of new product launches before so called "public announcements". Trayport's involvement in new product launches typically starts once market participants have already been made aware of the proposed launch (para 41 of Appendix D).
- This independent third party evidence corroborates Trayport's own description of how it becomes involved with new product launches – see Annex 3 describing Trayport's role in new product development.
- As ICE intends to run Trayport as a standalone business Trayport would still be available to discuss future product launches and this would be in the best interests of Trayport.

Restricting the functionalities of the software

- 8.24: Trayport is contractually required to provide updated software versions when they are available. In any event, it is possible to continue, and users often elect to continue, on older versions of the software even when updates are available (see slide 11).
- 8.34: In order for the partial foreclosure theory to work, ICE would have to engage in "*softer, incremental methods of foreclosure*" which are not "*readily identifiable*". In such a scenario, contractual protections are largely irrelevant as the user cannot detect any change in service. If the users are able to detect deterioration in their service, then this is akin to a total foreclosure strategy and can be dismissed accordingly. A disruption of supply caused by technical issues will immediately be detected by Trayport users and is not a subtle mechanism.

Vague and unsubstantiated third party evidence does not support partial foreclosure theory (IV)

Reducing the general service level of the offering to venues and clearinghouses

- 8.27: the third party statement that the Clearing Link is "*critical*" is contradicted by the PFs elsewhere (e.g. 7.130 and 7.133). In 7.23 the PFs state there are a number of factors that affect a trader's choice of where to clear (primarily margin and fees). The criteria for selecting a clearing house therefore depends predominantly on other factors. As such, there is no basis to say that brokers would be able to get traders to maintain the Clearing Link but switch clearing house in order that the brokers can make use of the Trayport clearing link rather than an alternative STP Link. Additionally, any deterioration in the quality of, or disruption to, the clearing link would frustrate the user experience and immediately be detected. This would also not be possible under the partial foreclosure theory as currently framed.
- 8.28: it is not clear in what way the Trayport Clearing Link could be "tweaked" in order to have the necessary effect relied upon. In any event, the PFs state that there is less dependency on Trayport by clearing houses due to the availability of alternatives to clearing link (88) so, even if true, this would be inconsequential. (The Parties maintain that nobody is "dependent" on Trayport's Clearing Link).
- 8.35: statements about concerns over the service level obligations of Trayport are very broad, which makes a specific rebuttal difficult. Trayport's existing contractual terms have provided sufficient protection to date. It would not be practical for Trayport to contractually require itself to provide each and every software amendment proposed by any individual customer. This would be a never ending task and result in a multitude of differing software offerings which would be prohibitively complicated for which to provide universal updates. Trayport will always listen to its users and produce software developments where there is sufficient demand; that is exactly how the Trayport software has evolved to date. Neither Powernext (nor the PFs) articulate how Trayport's actions could cause liquidity to shift permanently to ICE (and it should be noted that a shift could never be said to be "permanent" anyway).

Internal documents do not support PFs theory that Trayport has ability to influence market outcomes (I)

- Trayport's role in facilitating competition / influencing market outcomes is significantly overstated – the internal documents do not support the PFs (see Annex 5 for more detail).
 - 7.165: Trayport itself does not (and is not able to) dictate market outcomes; it provides software to assist customers in achieving their aims. This is reflected in the statement relied upon – **[CONFIDENTIAL]** .
 - 7.166 / 7.168: these excerpts are **[CONFIDENTIAL]** Trayport does not dictate to its clients; it listens to its customers. Failure to do so would lead to Trayport becoming irrelevant – the same is true for any business.
 - 7.74 / 7.167 misrepresent the Parties' evidence: The excerpt clearly states that **[CONFIDENTIAL]**. At that time ICE did not offer any STP means to clear coal directly (instructions to clear at ICE were communicated manually, for example by email) and this allowed CME to take market share by introducing STP and also having a direct link for this STP communication. It was not determinative that CME used Trayport's link to achieve this, they could have done so with any non-manual STP clearing link. ICE then introduced ICE Block for coal to ensure it was offering the same service to brokers as the CME STP offering.
 - 7.169: **[CONFIDENTIAL]**.
 - 7.170 / 7.171: **[CONFIDENTIAL]** . In para 47 of Appendix D, ICAP state that Trayport is an unattractive proposition for new software where Trayport does not already have traction and connectivity. This directly contradicts the PFs.
 - 7.174: **[CONFIDENTIAL]**.
 - 7.175: **[CONFIDENTIAL]**.

Internal documents do not support PFs theory that Trayport has ability to influence market outcomes (II)

- Internal documents do not identify mechanisms by which Trayport could be used to adversely impact ICE's rivals without those mechanisms being readily apparent to market participants:
 - 8.50: **[CONFIDENTIAL]**.
 - **[CONFIDENTIAL]**
 - **[CONFIDENTIAL]**
 - **[CONFIDENTIAL]**
 - **[CONFIDENTIAL]**
 - **[CONFIDENTIAL]**
 - **[CONFIDENTIAL]**
 - 8.51: **[Confidential]**.

Erroneous assertions / Assertions without adequate reasoning or supporting evidence (I)

- The following is a non-exhaustive list of other instances where the PFs make erroneous assertions or seek to rely on assertions without sound reasoning or sufficient evidence:
 - 2.41 / 2.55: The choice of clearinghouse is not always designated from the outset and the clearinghouse is not always named in the description of the trade.
 - 7.29: It is brokers who submit OTC trades for clearing. Therefore evidence from brokers is the only relevant evidence to consider here. However, it appears the PFs are relying on evidence from a wider range of market participants. In addition, it is suggested *"there is an operational advantage to those who are in the first rows."* If this is referring to the stack then the only possible way to get to the top of the stack is to post the best bid or offer. It would immediately be detectable if Trayport were to interfere with this practice in any way.
 - 7.42: PFs are highly selective in the findings that even a small presence is sufficient to maintain competition in these dynamic markets. For example, in 7.42 PFs ignore CME and NASDAQ being present in gas and CME in emissions, yet elsewhere rely on the fact competition would be lost between ICE and other venues (8.104(a)).
 - 7.48: *"This means that a trader that has an existing position with [i] will be able to offset its collateral payments across contracts traded with [i] in other asset classes such as [i]."* Cross-margin benefits are not a given; this only works if the trader has an opposite position.
 - 7.55: it is incorrect to say that exchanges compete for a "first-mover" advantage. As the PFs correctly identify, the transition is from illiquid (voice) to liquid (screen) and since exchanges do not offer voice they can never compete for a first-mover advantage. Exchange contracts are almost always OTC look-a-like contracts with no innovation and no first-mover advantage. The innovation and first-mover advantage is important in the OTC space, less so for exchanges.
 - 7.56: this is not a new venue type and therefore there is no basis to say that exchanges were competing with one another to get first mover advantage in relation to non-MTF venues. The majority of European utility market has traded on non-MTF venues since 2014 (and effectively before this date too) therefore it is only new to EEX. The majority of traders will continue to trade on them based on price, not necessarily what sort of venue it is. Other exchange venues assessed the need to launch one and made their commercial decision accordingly.

Erroneous assertions / Assertions without adequate reasoning or supporting evidence (II)

- 7.72: it is factually incorrect to say that ICE and CME's coal products are not 100% fungible. They are 100% fungible and this is how they appear on Trayport. Just because the market volumes increased does not mean the products are not fungible (other than emissions, almost all asset classes have seen increased volumes).
- 7.78: "An example of this dynamic competition is represented by the past strategic partnership between ICE and ICAP in the oil asset class." **[CONFIDENTIAL]**.
- 7.81: "Finally, we also found that ICE and its rivals will seek innovative solutions as part of a dynamic form of competition in order to generate clearing volumes." What examples of innovative solutions? The PFs only produce one example (non-MTF platform) which is in fact not innovative at all.
- 7.85: The PFs conclude that many participants are short of the 3% limit and therefore satisfied there is scope for volumes to shift to ICE but does not produce any evidence whatsoever to confirm how it reaches this conclusion (this is repeated in 7.100).
- 7.123: the comparison of Griffin taking 12 months to launch its offering with ICE versus one month with Trayport is not a fair comparison as during this 12 months much of that time will have been taken up by getting documentation in place with clients before launching, which would already have been in place prior to the Trayport launch.
- 7.126: this paragraph does not show Trayport's role in developing new products; it merely shows the value of Trayport's core aggregation service for disseminating those new products. Users prefer to be aggregated than not.

Erroneous assertions / Assertions without adequate reasoning or supporting evidence (III)

- 7.132: it is incorrect to say that alternative clearing links are weak alternatives. It would not be "inconvenient for a trader" as a trader would have no way of realising this since it is a broker that submits trades for clearing. Also, alternatives are not dependent on Trayport as these can be programmed from their own back office (Griffin does this, see para 57 of Appendix D). Finally, manual entry could still be an alternative irrespective of volumes (Spectron entered all trades via manual entry).
- 7.133: "However, it believes that the connectivity of the EFET platform occurs post-trade which is too late in the trade process and trade work flow." This statement cannot be relied upon; all clearing link connectivity happens post-trade.
- 7.137: Table 4 shows the Parties' best estimate that approximately 50% of trades are executed by voice. Yet the PFs refuse to recognise voice as a credible alternative.
- 7.148: it is incorrect to say that Trayport's network effects apply to STP. Clearinghouses pay for the STP link so that is the driver for their use, not any network effects.
- 7.153(b): RWE is conflating the decision to move away from Trayport with the decision to switch CCP. Whilst there would be duplicated costs associated with any switch of technology, there is no requirement to wind down any existing trades or open interests which are all placed elsewhere.
- 7.157: the PFs incorrectly state that the analysis supports dependency. Tables 5 and 6 do actual provide evidence on current usage of Trayport that indicates that there are plausible alternatives which are being used by both brokers and exchanges. Therefore is no basis for concluding that trading venues are dependent on Trayport.
- 7.163: STP links have no dependency on the rest of the value chain. Network effects do not apply; therefore the fact that they are available in isolation does not mean they are weak alternatives.

Erroneous assertions / Assertions without adequate reasoning or supporting evidence (IV)

- 8.21: NASDAQ suggests ICE could "instruct Trayport to terminate the arrangements it has with other clearinghouses and exchanges". In reality, ICE would not be able to do this without being sued for each contract it terminates early and would be severely reprimanded by the FCA for disrupting the markets.
- 8.41: "more than half of EEX's trading in power and of NASDAQ's trading in German power is currently initiated on Trading Gateway". Tables 5 and 6 is evidence that this does not illustrate dependency on Trayport. Nearly 50% of EEX's trading in power is currently initiated via competing ISVs and approximately 50% of NASDAQ's trading in German power is currently initiated via competing ISVs.
- 8.43: EEX has a non-Trayport front-end (TT), connectivity to numerous other ISVs, is strong in several European utility asset classes and [✂]. As such, the PFs are wrong to suggest Powernext could not successfully move away from Trayport.
- 8.46: the PFs state that: "We noted that some traders indicated that modification to Trayport's software would affect their choice of clearinghouse" but fail to produce any evidence to support this conclusion.
- 8.80: the PFs disregard evidence that GFI did not strategically use Trayport from its incentives analysis. This is fundamentally flawed. GFI knew that attempts to foreclose would frustrate Trayport users which would compromise Trayport's entire business model. Therefore GFI chose to run Trayport independently (as ICE intends to). RWE submitted corroborating evidence to the CMA that it had the same concerns when GFI bought Trayport but GFI then operated Trayport on an independent basis. See slide 17 for more details.
- 8.91-96: the risk of retaliation is discounted as speculative and unlikely to emerge in practice. This is contradicted by the coal case study submitted. The PFs fail to submit any evidence to disregard the coal example put forward or any other reason why retaliatory action would not happen. A partial foreclosure strategy in this context would be detectable and trigger a realistic risk of retaliation.
- 9.17(c): it is incorrect to say this would require "all brokers". It would require a sufficient number per asset class, which depending on the asset class may not be that many (arguably only 1 or 2 in some asset classes based on broker market shares).

Failure to grant adequate/timely access to third party evidence needed to respond to PFs

- The Parties' advisors initially raised the possibility of having access to the data underlying the CMA's analysis (i.e. a data room) on 20 June.
 - Given the complexities of the case (noting the case team's acknowledgement of difficulty getting to grips with the substantive content), the Parties were concerned this would impact their ability to adequately verify the factual understanding and methodology adopted in the PFs and to raise any such issues with the Inquiry Group before the hearings. CMA asked for this request to be delayed until after the issuance of the PFs and to be revisited if still required.
- The Parties' advisors again raised this subject in early August with the aim of agreeing the relevant arrangements of any data room before issuance of the PFs.
 - The aim was to make better use of the limited time before the hearing on 7 September in responding to the PFs and notice of possible remedies.
- Disappointingly, the CMA indicated that it would only discuss such arrangements post-issuance of the PFs.
- A detailed request was submitted on 17 August, which was rejected on 18 August for reasons which the Parties and their advisors considered inadequate.
- Further representations were made on 19 August explaining the clear identifiable benefits of receiving this access. The CMA rejected virtually all of the second request on 23 August. The Parties made further representations on 25 August, which the CMA again rejected – though not until 1 September.
- The CMA's rejection is manifestly unfair and disproportionate as it causes material harm to the Parties' rights of defence by limiting access to evidence and therefore the arguments the Parties can potentially make in response to the PFs; and has wasted the Parties' valuable time and resources during the limited window of opportunity to respond to the substance of the PFs.

Part D: Conclusions

The provisional SLC finding is highly speculative, illogical and based on unfounded assertion

- The Parties have been consistent in their core propositions regarding:
 - The drivers of traders' trading and clearing choices being liquidity and open interest, which are factors outside Trayport's influence.
 - Trayport's core features and service proposition being venue aggregation and price dissemination.
 - The fundamental adverse impact on Trayport of any interference in the provision of those core features.
- Those propositions are confirmed by the PFs.
- The focus and analysis of TOH allegations have shifted considerably over the course of the inquiry.
- The PFs SLC finding is based on a new assertion that partial foreclosure can be hard to detect, yet still effective and not trigger retaliation
 - This proposition has not been tested with the Parties and is inherently implausible.
 - It is not substantiated in the PFs – the third party evidence and Parties internal documents cited in the PFs simply do not address this type of partial foreclosure.
- The PFs incentives analysis does little more than assume incentive because there is (alleged) ability.
 - The PFs fail to carry out an appropriate quantitative cost/benefit analysis.
 - The incentives analysis is undermined by the assumption that effective partial foreclosure can be achieved without detection.
- By contrast, the Parties have articulated a coherent and reasoned clearance case based on market fundamentals which have been endorsed in the PFs and is supported by rigorous quantitative evidence on the lack of incentive.
- The Parties urge the CMA to revisit the analysis set out in the PFs on ability and incentive in view of its findings on 1) total foreclosure being discounted and 2) key drivers of traders' choice of execution venue and clearinghouse.

List of Supporting Annexes

- Annex 1 – Precedents cited for Qualitative Incentives Analysis
- Annex 2 – Critique of PFs Appendix C (Financial Regulation)
- Annex 3 – Trayport's Role in Product Development
- Annex 4 – Oxera Economic Critique of PFs
- Annex 5 – Critique of PFs' Reliance on Internal Documents
- Annex 6 – Critique of PFs' Reliance on Third Party Evidence

BBC Worldwide Limited, Channel Four Television Corporation and ITV plc

- In this case, the main theory of harm discussed throughout the decision is a horizontal theory of harm arising from the loss of competition from the two closest competitors on the retail and wholesale supply of UK TV video-on-demand content.
- In particular, the CC found that:
 - the parties were each other's closest competitors for the supply of UK video-on-demand (VOD) content and that third-party retailers offer a weak competitive constraint (paragraph 4.90)
 - the parties were each other's closest competitors in the provision of UK VOD content rights to the wholesale market (paragraph 4.107)
- The assessment of the horizontal theory of harm was supported by both quantitative evidence and empirical analysis, including consumer surveys and analysis of viewing data (paragraph 4.8).
- In addition to this main mechanism, the CC also finds an SLC arising from the potential partial or total foreclosure at the wholesale level. This theory of harm is not thoroughly assessed and it is included as an additional potential concern rather than as the main reason for the referral:
 - "We could not form an expectation that the parties would choose to engage in this type of strategy for all customers but thought it possible that, at some point in the future and at least for some customers, they would choose to do so. It would, for example, depend on the extent to which this might lead to a reduced competitive constraint from third-party VOD retailers on the parties' retail offer. (paragraph 4.134)"
- As such, this precedent does not provide adequate support for the CMA taking a similar approach in the current case, where partial foreclosure is the only theory of harm and as such should be properly supported by a full quantitative analysis, as is the norm in virtually all vertical cases.

Deutsche Börse AG, Euronext NV and London Stock Exchange plc

- There are a number of important elements that distinguish this precedent from the current case such that it cannot provide adequate support for the CMA taking a similar approach:
 1. CCP services were identified by the CC to be of critical importance for on-book trading (which is anonymous) and the CC considered there would be no alternative to the CCP selected by LSE for the provision of clearing services for UK equity trading. In the current case, the Parties have demonstrated that there are a number of alternatives to the Trayport functions that might be foreclosed that are already in use.
 2. Trayport's fees are only a small fraction of total trading fees (including clearing), when considered on a per lot basis (see slide 21 of Oxera's "Supporting economic analysis: detailed pack" submitted to the CMA on 20 July 2016). Clearing services, which were at issue in DB/Euronext/LSE, comprise a larger proportion of the total cost of execution.
- Overall, these two important differences suggest that ICE's alleged ability to alter Trayport's functionalities in order to foreclose traders active in European utilities is much less than the ability alleged by the CC in DB/Euronext/LSE to foreclose the entry of a rival exchange in UK equities through price or quality changes.
- In DB/Euronext/LSE, the CC considered that because there were no alternative clearinghouses available, there was no cost to the merged entity as a result of foreclosure as there was no extant diversion option. Hence the CC did not do a quantitative analysis. (In fact, BATS has since entered and with the successful introduction of a new CCP (EuroCCP). The CC perhaps should have looked in more detail at the risks to the merged entity of foreclosing.)
- Here the CMA has accepted that there are costs to ICE/Trayport in terms of the risk to Trayport's business model and the Parties have provided strong evidence that there is a significant risk of retaliation in other asset classes / business areas.
- A full quantitative analysis should be carried out in this case, as is the norm in virtually all vertical cases.

Annex 2 - Inaccuracies in Appendix C of CMA PFs

Appendix C of the Provisional Findings Report published by the CMA (the "**Appendix**") examines relevant financial regulator legislation. The CMA's analysis contains a number of material inaccuracies, a summary of which is set out below.

- The Appendix provides inaccurate descriptions of certain requirements under the first Markets in Financial Instruments Directive¹ ("**MiFID I**") and the revised Markets in Financial Instruments Directive² ("**MiFID II Directive**") and Markets in Financial Instruments Regulation³ ("**MiFIR**" and together with the MiFID II Directive, "**MiFID II**") throughout, which has led to the overstatement of the regulatory burden imposed by MiFID II.
 - Contrary to what is said throughout the Appendix (see for example paragraphs 6, 12 and 16), commodity derivative contracts were never outside the scope of MiFID I.
 - The following are listed as financial instruments under MiFID I: *"[o]ptions, futures, swaps, forward rate agreements and any other derivative contracts relating to commodities that must be settled in cash or may be settled in cash at the option of one of the parties (otherwise than by reason of a default or other termination event)"* and *"[o]ptions, futures, swaps, and any other derivative contract relating to commodities that can be physically settled provided that they are traded on a regulated market and/or an MTF"*⁴. This is overlooked in a number of instances throughout the Appendix, including paragraphs 12 and 16. As a consequence, the Appendix argues that each requirement of MiFID II imposes an additional requirement and regulatory burden on commodity derivatives (paragraph 12), and argues that this would amount to significant change (paragraph 16). Both are overstatements of the regulatory burden imposed by MiFID II, as commodity derivatives were already within the scope of MiFID I.
 - The Appendix also fails to mention that the definition of "derivatives" is vague and subject to a wide array of differing national definitions, due to the lack of harmonisation in this field. For example, Article 84 of the Regulated Activities Order⁵ defines "futures" as *"rights under a contract for the sale of a commodity or property of any other description under which delivery is to be made at a future date and at a price agreed on which the contract is made"*, and exempts certain shorter dated instruments under Article 84(4) of the Regulated Activities Order. However, standards and time periods for this exemption are not harmonised under MiFID I or MiFID II, and vary between Member State national laws.⁶ In light of such uncertainty, the Commission has aimed to align the definition of FX derivatives,⁷ but such attempts have not been made in relation to commodity derivatives.

¹ Directive 2004/39/EC on markets in financial instruments.

² Directive 2014/65/EU on markets in financial instruments.

³ Regulation (EU) No 600/2014 on markets in financial instruments.

⁴ MiFID I, Annex 1, Section C(5) and (6).

⁵ Article 84, Financial Services and Markets Act 2000 (Regulated Activities) Order 2001.

⁶ See also the definition of "options" in Article 83 of the Regulated Activities Order.

⁷ Letter from the Commission to the European Securities and Markets Authority regarding the definition of a financial instrument relating to foreign currency (FX contract) (23 July 2014).

- The Appendix provides an inaccurate description of the "ancillary exemption" to be available to commercial traders under MiFID II.
 - Paragraph 25 states that the first element of the ancillary services exemption, otherwise known as the "main business" test, is based on a comparison of capital. However, the current draft RTS does not apply a capital-based test for this element.⁸ While the Commission has advocated a capital-based test, ESMA took the view that a capital test could not be satisfactorily implemented.⁹ It therefore remains to be seen whether the draft RTS will be amended to introduce a capital-based test for the main business test.
 - In addition, the Appendix fails to mention that under MiFID I, commodity firms dealing on their own account in financial instruments were also able to rely on the "dealing on own account" exemption under Article 2(1)(d) of MiFID I, without having to satisfy the "ancillary" test. In its comparison between the "ancillary exemption" in MiFID I and MiFID II, the Appendix also does not mention that the scope of the exemption has become narrower due to the imposition of the two elements discussed in paragraph 25 of the Appendix, and that the "dealing on own account" exemption in MiFID II is not available to firms dealing in commodity derivatives.
- Descriptions of the scope and application of the trading obligation under MiFID II are inaccurate. Contrary to paragraph 9 of the Appendix, MiFID I does not impose an obligation to trade certain financial instruments on regulated venues – this trading obligation was first introduced under Article 28 of MiFIR. In describing the consequences of being classified as a financial counterparty, paragraph 32 states that financial counterparties will be required to trade derivatives subject to the clearing obligation on regulated marketplaces. This is an inaccurate statement as the application of the trading obligation under Article 28 of MiFIR involves the assessment of a number of other conditions which differ from and add to the conditions for the clearing obligation under EMIR. Most importantly, only those transactions in derivatives pertaining to a class of derivatives that has been declared subject to the trading obligation will be required to be traded on regulated markets, multilateral trading facilities or organised trading facilities. To date, no classes of derivatives have been declared subject to the trading obligation, which means that the scope of the obligation is not as extensive as described in the Appendix.
- The Appendix understates the regulatory burdens imposed by EMIR, particularly in relation to reporting requirements, to which virtually no exemptions are available. The description of the overlap between EMIR¹⁰ and REMIT¹¹ reporting requirements is inaccurate and overlooks the practical difficulties that reporting parties face in determining the contracts to be reported under each regime.

⁸ ESMA, "Opinion (Annex) – Amended draft Regulatory Technical Standard on criteria for establishing when an activity is to be considered ancillary to the main business", Article 3.

⁹ ESMA, "Opinion – Draft Regulatory Technical Standard on criteria for establishing when an activity is to be considered ancillary to the main business", Section 4.

¹⁰ Regulation (EU) No 648/2012 on OTC derivatives, central counterparties and trade repositories.

¹¹ Regulation (EU) No 1227/2011 on wholesale energy market integrity and transparency.

- Paragraph 37 of the Appendix states that the regulatory technical standards under EMIR have led to no additional steps being required under EMIR, which would help to avoid duplication and ensures that the reporting obligation under EMIR does not constitute an additional burden. This is an inaccurate description of the overlap between the EMIR and REMIT reporting requirements for a number of reasons.
- First, there is a considerable amount of confusion over which derivative contracts should be reported under EMIR and which should be reported under REMIT, mainly due to the fact that the definition of "derivative" for these purposes, which refers to MiFID (and, once in place, MiFID II), has not been aligned (as discussed above).
- In addition, while Article 6(5) of the REMIT Implementing Regulation¹² states that a report made under EMIR will be sufficient to satisfy the reporting obligation under REMIT, nowhere in EMIR or REMIT does it state that reporting under REMIT is sufficient to satisfy the reporting obligation under EMIR. Whilst we note that the EMIR Reporting RTS¹³ states that information should be reported according to REMIT for energy and commodity derivatives to which REMIT applies, this does not mean that reporting under REMIT does not discharge the EMIR reporting obligation.
- As a result, some firms have been forced to adopt a defensive approach to reporting transactions under EMIR, some of which are arguably out-of-scope.
- There are number of instances of misuse and confusion over the terms "MiFID", "MiFID II" and "MiFIR". The main source of confusion comes from the fact that the MiFID II Directive is defined as "MiFID" in the Appendix. In addition, rather than providing for a separate definition of MiFID I, the Appendix simply refers to this as "the first MiFID" which has led to inaccurate statements in a number of instances. Some examples are set out below.
 - In relation to paragraph 24, the ancillary services exemption is provided in Article 2 of "MiFID" (*i.e.* the MiFID II Directive), rather than MiFID II (*i.e.* the MiFID II Directive and MiFIR).
 - In relation to the first sentences of both paragraphs 27 and 28, references should be made to firms that are currently outside MiFID I, rather than "MiFID" (as "MiFID" refers to the MiFID II Directive in the Appendix).
 - In relation to the second sentence of paragraph 28, firms will need to become authorised to carry out the relevant MiFID II business when a firm is no longer able to rely on an exemption under MiFID I, rather than MiFID II.
 - In relation to the third sentence of paragraph 37, the reporting obligation is contained in MiFIR, not MiFID (*i.e.* the MiFID II Directive).

¹² Commission Implementing Regulation (EU) No 1348/2014.

¹³ Commission Delegated Regulation (EU) No 148/2013.

Annex 3: Launch of new cleared products

Trayport is one provider of straight-through processing (STP) connectivity for clearing; there are alternatives available to market participants who want their trades to be cleared.

The following describes Trayport's process to make available new products via its STP link. If an alternative STP provider is used then only the product needs to be configured on Trading Gateway (TGW) (this is described in the following section).

It will be seen that Trayport's involvement typically starts once market participants have already been made aware of the proposed launch.

[Confidential].

- i. Launch of new products on Trayport's STP link

[Confidential].

In cases where Trayport does not anticipate development effort,

[Confidential].

In cases where Trayport anticipates potential development effort,

[Confidential].

- ii. Launch of new products into TGW

[Confidential].

For broker products

[Confidential].

For broker cleared products

[Confidential].

For non-Trayport technology exchanges:

GV Portal

[Confidential].



Annex 4 - Economic critique of the CMA's provisional findings

Prepared for
the Competition and Markets
Authority

5 September 2016

www.oxera.com

Contents

Executive summary	1
1 Introduction	6
2 No evidence that Trayport provides ICE with an ability to foreclose	8
2A The CMA misunderstands the critical features of Trayport	8
2B Costs associated with switching to alternative back-end or front-end providers are not insurmountable	11
2C The mechanisms presented in the PFs for foreclosure are not feasible means of foreclosing ICE's rivals	12
3 No evidence that ICE has an incentive to use Trayport to foreclose rivals	16
3A Overview of the CMA's assessment of incentives to foreclose	16
3B Key deficiencies in the CMA's approach to its incentive analysis	17
3C High-level assumptions in the CMA's analysis of plausible gains are inconsistent with evidence	22
4 Evidence-based quantitative analysis	25
4A No ability or incentive to foreclose rivals through altering the price of Trayport software or actions that degrade Trayport's ancillary functions	26
4B No incentive to foreclose rivals through actions that degrade Trayport's primary function of price aggregation and dissemination	26
4C No incentive to foreclose rivals through attempts to constrain their ability to innovate	27
4D Lessons from GFI's ownership of Trayport	28
A1 Review of materials provided in the ICE/Trayport merger provisional findings confidentiality ring	29
A1A Introduction	29
A1B Analysis of disclosed materials	29
A2 Summary of Oxera's methodology to assess ICE's incentives to foreclose	30

Oxera Consulting LLP is a limited liability partnership registered in England No. OC392464, registered office: Park Central, 40/41 Park End Street, Oxford, OX1 1JD, UK. The Brussels office, trading as Oxera Brussels, is registered in Belgium, SETR Oxera Consulting LLP 0651 990 151, registered office: Avenue Louise 81, Box 11, 1050 Brussels, Belgium. Oxera Consulting GmbH is registered in Germany, no. HRB 148781 B (Local Court of Charlottenburg), registered office: Rahel-Hirsch-Straße 10, Berlin 10557, Germany.

Although every effort has been made to ensure the accuracy of the material and the integrity of the analysis presented herein, the Company accepts no liability for any actions taken on the basis of its contents.

No Oxera entity is either authorised or regulated by the Financial Conduct Authority or the Prudential Regulation Authority. Anyone considering a specific investment should consult their own broker or other investment adviser. We accept no liability for any specific investment decision, which must be at the investor's own risk.

© Oxera 2016. All rights reserved. Except for the quotation of short passages for the purposes of criticism or review, no part may be used or reproduced without permission.

Figures and tables

Box 2.1	Evidence that alternatives to Trayport are in use	10
Box 2.2	ICE-Endex case study	15
Figure 2.1	TTF on-exchange traded volumes by exchange, MWh m	15
Table 3.1	Annual revenues generated from European utilities	21
Table 4.1	Summary of ICE's incentives to foreclose	26
Table 4.2	Annual European utility revenues for selected brokers	28
Table A1.1	[Table title added once non-confidential version approved by CMA]	29

Executive summary

The CMA has set out in its Provisional Findings (PFs) that ICE's acquisition of Trayport may be expected to result in a substantial lessening of competition (SLC) is not robust. Critical to this central provisional finding are two incorrect and unfounded conclusions. First, that all of ICE's rivals are highly dependent on Trayport, including exchanges and clearing houses:

Moreover, we also placed weight on the fact that all of the brokers, and most exchanges, are highly dependent on Trayport, with no effective current alternatives to its services, and that the barriers to entry for an alternative system are very high¹;

Second, that ICE could use Trayport to its benefit by altering choices about where to trade and/or clear, with such actions being hard for market participants to detect and, therefore, possible for ICE to pursue without imposing material costs on the merged entity.

On the basis that foreclosure would take the form of incremental changes that would not fundamentally undermine the Trayport platform and would 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.²

On the incorrect finding that the likely costs associated with foreclosure would be low, the CMA did not consider that a full quantitative assessment of the incentives of the merged entity was necessary and used only a simple scenario analysis as a cross-check to its qualitative assessment.³

The PFs present no evidence that there are foreclosure mechanisms that are hard to detect and yet would have a significant impact on ICE's rivals' choice of trading and/or clearing venues. These assertions are incorrect on both grounds: the proposed mechanisms would not be hard to detect, nor would they generally be expected to alter market participants' preferred choice of trading and clearing venues. Even if certain mechanisms could divert a material volume of trading and/or clearing, the second argument—that such actions would be hard to detect—is illogical. If market participants are prevented from completing their preferred trades, they will be dissatisfied with the Trayport service and would be likely to switch away and/or retaliate against ICE.

This report explains why the evidence contradicts the CMA's provisional conclusions. It has the following structure:

- section 1 explains the implications of the vertical nature of the merger for the competition assessment, and how this affects the provisional findings;
- section 2 critiques the CMA's assessment of ICE's ability to foreclose, and demonstrates that ICE's rivals are not dependent on Trayport;
- section 3 critiques the CMA's assessment of ICE's incentives to foreclose;

¹ CMA Provisional Findings Report, p. 124, para. 8.95.

² CMA Provisional Findings Report, p.12, para 41 and p. 138, para. 11.9.

³ CMA Provisional Findings Report, p.13, para 42 and p.138, para. 11.10.

- section 4 draws on the previously submitted Oxera incentive analysis⁴ to present an evidence-based assessment of the incentives to pursue each of the partial foreclosure actions set out in the PFs.

The main findings of this critique can be summarised as follows.

The CMA has not consistently applied the conclusions that flow from its correct finding that ICE will not have an incentive to fully foreclose market participants. In the PFs, the CMA has acknowledged that there is no SLC relating to total foreclosure, recognising that, if Trayport does not provide effective price aggregation, its market value will be reduced significantly, if not to zero. The corollary of that is that ICE will not have an incentive to cut off its rivals' access to Trayport.⁵

An important consequence of this finding is that, when assessing partial foreclosure actions, the CMA cannot include mechanisms that significantly deteriorate the price aggregation function of Trayport, as these will be both obvious and easily detectable, and will have a similar impact on the market (and therefore Trayport) as full foreclosure. This means that ICE's rivals will continue to be displayed on the Trayport platform, at least for the core products that each one offers. For example, it is important to recognise that, in order for the CMA to be consistent with its reasoning on total foreclosure (as set out in the PFs), it should conclude that ICE would not have an incentive to damage the display of EEX's power prices on Trayport.

Trayport does not provide ICE with an ability to foreclose exchanges and clearing houses. There is good evidence that exchanges and clearing houses are not dependent on Trayport in the round. This evidence has not been given appropriate weight in the PFs (see section 2 for a detailed critique).

- In particular, the CMA has not adequately reflected its conclusion that ICE will not have the incentive to undermine the price aggregation function of Trayport, in its assessment of dependence. Absent an incentive to damage Trayport's price aggregation function, ICE's rivals would need to be dependent on the other aspects of Trayport's services (e.g. order routing, clearing connectivity) for ICE to have an ability to foreclose. The CMA has not established such dependence. Moreover, there is good evidence that, particularly for exchanges and clearing houses, viable alternative front-ends, clearing links and back-ends are available and currently in use.

The risk of an alternative platform to Trayport is credible. Alternative aggregators of exchanges and clearing houses already exist (e.g. Trading Technologies and eXRP). In the case of broker aggregation, as set out in Table 3.1 of this report, the costs of replacing Trayport from scratch would be less than two weeks of the combined revenues of the major European utility brokers, and several brokers appear to have technology already that could be built upon (e.g. GFI's EnergyMatch).

Furthermore, as noted by the CMA, the core group of brokers active in the European utility space are already positioning themselves to be able to coordinate a move away from Trayport—for example, by commissioning a study setting out the required functionality for an alternative to Trayport.⁶ In this context, the CMA should not underplay the risks to Trayport that would be

⁴ Oxera (2016), 'Financial incentives to foreclose', 20 July.

⁵ CMA Provisional Findings Report, p. 11, para. 36.

⁶ CMA Provisional findings, Appendix D, para. 82.

associated with any foreclosure action that is sufficiently strong to have an influence on trading/clearing decisions.

- The CMA's analysis of the likelihood of a successful competitor to Trayport entering and establishing itself is predicated on the wrong market scenario. The CMA has assessed these entry costs on the scenario where Trayport is functioning well for market participants. In the correct scenario of detectable mechanisms that damage the functionality of Trayport sufficiently to prevent market participants from completing preferred trades, the entry costs would be lower. The CMA has not assessed this scenario in the PFs.

Contrary to the CMA's provisional findings, ICE does not have an incentive to use partial foreclosure strategies to undermine rival exchanges, brokers or clearing houses. The provisional findings are based on a number of flawed conclusions, most critically that:

- foreclosure actions that are sufficiently subtle as to go unnoticed (despite potentially being against all of ICE's rivals simultaneously) could alter trading and/or clearing decisions.⁷ This is inconsistent with the CMA's correct finding that liquidity is sticky and that traders will not easily switch away from a venue and/or clearing house with significant trading liquidity or open interest;⁸
- a combined partial foreclosure strategy would have substantial effects in the market but would impose only limited costs on ICE/Trayport.⁹ This is implausible and inconsistent with the correct finding in the PFs that full foreclosure generates sufficient risk to Trayport's business model/financials such that ICE has no incentive to pursue such a strategy.¹⁰ If these strategies have substantial effects (i.e. traders are forced away from their preferred trading or clearing venue), the most plausible assumption is that market participants would be dissatisfied with Trayport's offering;
- in addition to the risks to Trayport's financials, it is necessary to take account of the risks to existing ICE revenues that any foreclosure action would bring. Market participants have a number of low-cost retaliation strategies that they could invoke that do not require co-ordination—for example, brokers could encourage traders to shift clearing away from ICE without incurring substantial financial costs. Similarly, posting NBP trades on broker platforms rather than on ICE's CLOB would result in limited additional costs to traders. Neither action would require co-ordination to have a negative effect on ICE. These retaliatory actions would not be reflected in pre-merger conditions as, although small, some costs are involved, including the intended effect of damaging relations with ICE;

⁷ 'We also considered that these softer, incremental methods of foreclosure may not be readily identifiable to market participants, and so would be less likely to prompt any form of retaliation or cause significant damage to Trayport's business, but could, nonetheless, have a substantial impact on the ability of ICE's rivals to compete over time', CMA Provisional Findings Report, p. 105, para. 8.57.

⁸ 'As a result of network effects, the value of the services offered by trading venues increases with the number of market participants that use that venue. To some extent, this can make liquidity "sticky" and it prevents traders from easily switching between venues and/or clearinghouses because doing so will risk losing access to the highest liquidity and, therefore, best prices available', CMA Provisional Findings Report, p. 27, para. 2.59.

⁹ In its provisional findings report, the CMA sets out its frame of reference as a market-wide or 'combined' partial foreclosure scenario—CMA Provisional findings p. 111, para. 8.79 and Appendix F, p. F5, para. 27. 'Our provisional view is therefore that the merged firm would likely experience only limited costs as a result of a foreclosure strategy', CMA Provisional Findings Report, p. 115, para. 8.96.

¹⁰ 'Our provisional view is that a total foreclosure strategy is less likely because of the risks to the underlying Trayport business model', CMA Provisional Findings Report, p. 11, para. 36.

ICE could not use Trayport to steal the clearing of OTC Nordic power volumes away from Nasdaq or the trading away from brokers.¹¹¹² The CMA draws a conclusion to the contrary despite recognising that Nasdaq is not dependent on Trayport for the execution of Nordic power exchange trades.¹³ This is clearly inconsistent. If Nasdaq remains the preferred venue for exchange trading of Nordic power, then it will remain the preferred venue for clearing of OTC trades. Even on the (unlikely) assumption that ICE could use Trayport to divert trading of Nordic power away from brokers, any diversion is likely to go to Nasdaq (which the CMA has recognised is not dependent on Trayport) and not ICE, where there is no liquidity or open interest in Nordic power.

The assessment of ICE's incentives to foreclose in the PFs is not robust.

The CMA's analysis of incentives as set out in the PFs is predominantly qualitative. The CMA's confidence in this approach is driven by its conclusion that 'the merged firm would likely experience only limited costs.'¹⁴ In the absence of material costs, the CMA concludes that limited potential upside is required to provide ICE with an incentive to foreclose. This conclusion is not established, because the PFs do not show that there are actions that will be undetected (and therefore will not result in costs to the merged entity) and which will also be effective at diverting trading and/or clearing to ICE. Furthermore, to the extent that the PFs consider the effect of any action, this consideration is limited to whether the action may damage the attractiveness of the offering of ICE's rivals, and does not consider the important next step—namely, whether this damage would result in diversion to ICE.

- Overall, the CMA has not properly assessed the incentives to foreclose in its PFs and (rightly) places little weight on its own quantitative assessment of this incentive.
- A proper analysis will require the CMA to consider carefully the trade-off between the potential benefits and costs of any potential foreclosure strategy, as is necessary in any non-horizontal merger assessment. Such a thorough assessment of the incentive to foreclose would recognise that the likelihood that ICE could attract trading and/or clearing through subtle foreclosure actions will differ according to ICE's prevailing attractiveness in that product (e.g. ICE's existing liquidity in the product). Thus it is not appropriate to assume that ICE would attract the same proportion of trading and clearing in each asset class (also described as the probability of ICE's success—as the CMA previously suggested its proportions could also be interpreted), as the CMA has done in the provisional findings.

¹¹ The CMA does not refer to Nasdaq directly in CMA Provisional Findings Report 7.140–7.144 or in Appendix F, paras 19–38. However, it does state, in para. 7.143, that '[Nasdaq] is not dependent on Trayport for the execution of Nordic Power trades. We understand that this is related to [Nasdaq's] legacy position in this product, where it has historically enjoyed a strong position. However, the analysis also showed that in German power, which [ICE] has [Nasdaq], more than half of its execution business was initiated on Joule/Trading Gateway.' From the summary of the hearing with Nasdaq, 1 June 2016, para. 9: 'NASDAQ said that the proportion of trades it received through Trayport in its continental power offering (consisting mainly of German power market for the time being) was a bit lower than one would see on other trading venues, as NASDAQ has many traders also using other systems due to its history where they mainly focus on Nordic power. However, for other continental exchanges and brokers connected to Trayport, NASDAQ believed their volume of trades received through Trayport to be substantially higher.' On this basis we infer that the CMA is referring to Nasdaq in both of the above instances.

¹² In the benefits of foreclosure, the CMA assumes that ICE could attract Nordic power [OTC] volumes but not exchange volumes (see CMA Provisional Findings report, Appendix F, pp. F3–F7, paras 19–38). The CMA does not explicitly mention Nordic power, but, as shown in the above footnote, we have inferred that the CMA is referring to Nasdaq, whose main product is Nordic power.

¹³ CMA Provisional Findings Report (Parties confidential version), p. 118, para. 7.143.

¹⁴ CMA Provisional Findings Report, p. 115, para. 8.96.

Furthermore, if any such strategy is successful at altering traders' choices in any asset class, it will be detectable, and hence will raise the risk of the costs of retaliation. The CMA has not adequately assessed the size of the potential costs.¹⁵

Overall, we conclude that, to the extent that Trayport provides ICE with an ability to partially foreclose its rivals—which has not been established in the PFs—this ability is limited to actions that would involve serious degradation to the price aggregation function provided by Trayport. Degradation to other features of Trayport's service, and changes to its price, would not prevent ICE's rivals from competing effectively.

Actions that damage the price aggregation function of Trayport would certainly not go undetected. Therefore, as the CMA recognises in its assessment of full foreclosure, such actions would undermine the value of Trayport. In addition to the loss of Trayport revenues, the risk to ICE from low-cost retaliation that such action could prompt would more than compensate for the plausible gains, such that ICE would not have an incentive to operate/damage Trayport in this way. Given that ICE has no incentive to pursue the types of foreclosure action that could plausibly harm its rivals, the merger should not be expected to result in an SLC.

¹⁵ 'In terms of retaliation, as discussed in Section 8, our view is that these costs are speculative and are unlikely to emerge in practice. For this reason we did not incorporate any costs related to retaliation in our quantitative assessment of the merged firm's incentives to foreclose.' CMA Provisional Findings Report, p. F10, para. 49, Appendix F.

1 Introduction

- 1.1 The CMA has provisionally concluded that the acquisition of Trayport by ICE does not raise any significant horizontal concerns, but that the vertical nature of the transaction may raise issues. This has important implications for the competition assessment.
- 1.2 As set out by the CMA in its merger guidelines, non-horizontal mergers do not involve a direct loss of competition between firms in the same market.¹⁶ On the contrary, many lead to efficiency and do not raise competition concerns. Only where the merged entity has a significant degree of market power might a non-horizontal merger pose a threat to effective competition.¹⁷
- 1.3 As described in the European Commission's guidelines, the existence of significant market power is a necessary but non-sufficient condition for finding competitive harm in a non-horizontal merger.¹⁸ While it is necessary for the merged entity to have a significant degree of market power in the supply of inputs to its rivals, competition concerns arise only if the merged entity is able to harm the ability of rival firms to compete effectively.
- 1.4 In practice, despite the presence of market power, competitive harm will arise only if rival firms are not in a position to deploy timely and effective counterstrategies to changes in the conditions of supply of the input. Such counterstrategies include the possibility of being less reliant on the input concerned or sponsoring the entry of new suppliers for the services provided by the merging parties.¹⁹
- 1.5 Therefore, the establishment of market power is a necessary first step, but it is not sufficient in itself to prove competitive harm. Hence, the merger guidelines outline a framework for the assessment of non-horizontal mergers which includes three questions.²⁰
 - a) ability: would the merged firm have the ability to harm rivals—for example, by raising prices or refusing to supply rivals?
 - b) incentive: would the merged firm find it profitable to do so?
 - c) effect: would the effect of any action by the merged firm be sufficient to reduce competition in the affected market to the extent that, in the context of the market in question, it gives rise to an SLC?
- 1.6 In order for the CMA to reach an SLC finding as a result of a vertical concern, all these questions should return an affirmative answer and be supported by robust evidence. As discussed in the following sections, the evidence collected in the PFs does not support such findings in response to one or more of the questions outlined above.
 - Section 2 demonstrates that the PFs do not establish that Trayport provides ICE with an ability to foreclose its rivals.

¹⁶ See Merger assessment guidelines, CC2/OFT1254, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284449/OFT1254.pdf, para. 5.6.1.

¹⁷ See 'Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings', [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008XC1018\(03\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008XC1018(03)&from=EN), para. 23.

¹⁸ Ibid., para. 35.

¹⁹ Ibid., paras 35–39.

²⁰ See CMA Provisional Findings Report, p. 94, para. 8.5.

- Section 3 demonstrates that the PFs do not establish that ICE has an incentive to foreclose its rivals.
 - Section 4 summarises the results of Oxera's evidence-based financial incentive analysis.
-

2 No evidence that Trayport provides ICE with an ability to foreclose

- 2.1 For Trayport to provide ICE with an ability to foreclose its rivals, Trayport must have a significant degree of market power in the supply of inputs to ICE's rivals, and ICE's rivals must be dependent on these inputs to be able to compete effectively. At least in relation to the partial foreclosure actions that the CMA considers ICE to have an incentive to pursue (e.g. restricting the functionalities of the software offered to ICE's rivals),²¹ this is not the case.
- 2.2 The CMA's provisional conclusion to the contrary is based on a misunderstanding of the critical features of Trayport, and therefore an overstatement of the impact that 'softer, incremental methods of foreclosure'²² would have on ICE's rivals.
- 2.3 The evidence presented in this section demonstrates that the partial foreclosure actions about which the CMA has expressed concern would not provide ICE with an ability to foreclose its rivals:
- section 2A explains the critical features of Trayport, and presents evidence that alternatives to at least some of Trayport's functions are already in use;
 - section 2B presents evidence that the costs of replacing Trayport are not insurmountable;
 - section 2C explains why the partial foreclosure strategies that the CMA is concerned about would not prevent ICE's rivals from competing effectively.
- 2.4 Not considered here, but previously submitted to the CMA, is the point that the parties do not accept that the prevailing Trayport contracts, in particular the BGC Framework Agreement, provide ICE with an ability to implement the various degradations of service that the CMA is concerned about.²³

2A The CMA misunderstands the critical features of Trayport

- 2.5 The CMA frequently refers to views expressed by third parties that Trayport is very important for anyone wishing to trade European utilities.²⁴ From this, the CMA infers that ICE's rivals are highly dependent on Trayport, without unpicking which particular features of Trayport are of importance. Without this assessment, the CMA has not adequately analysed the effectiveness of the alleged mechanisms through which Trayport could potentially provide ICE with an ability to foreclose its rivals.
- 2.6 As explained by traders and competitors to ICE, Trayport's key feature is its price display aggregation and dissemination function. The fact that it provides a single screen that displays all the main pools of liquidity (for both brokers and exchanges), such that the venue offering the best price can be easily identified, underpins Trayport's attractiveness to traders and therefore venues.

EEX said that the use of Trayport's front-end screen was widespread due to its price aggregation on a single screen²⁵

²¹ CMA Provisional Findings Report (Parties confidential version), p. 112, para. 8.56.

²² CMA Provisional Findings Report (Parties confidential version), p. 112, para. 8.57.

²³ ICE/Trayport initial submission to the CMA, 16 May 2016, pp. 10–13, paras 7.2–7.4, 9.1 and 10.6; and p. 22, Annex 2.

²⁴ CMA Provisional Findings Report, p. 81, para. 7.136.

²⁵ Summary of hearing with European Energy Exchange AG (EEX) on 9 June 2016, para 3.

Financial Institution A said it used Trayport predominantly as a price-discovery tool as its key advantage was that it seamlessly combined prices from exchange and broker markets.²⁶

- 2.7 The other functions that Trayport provides, including routing of trades and a link to support the straight-through processing (STP) of clearing instructions, are not critical to the completion of trades. However, the CMA's assessment, as set out in the PFs, does not distinguish between Trayport's key function and these additional functions, such that it overstates the ability of changes to certain features of Trayport to harm ICE's rivals.
- 2.8 The following two sub-sections outline the dependency of ICE's rivals on Trayport for each of these two functions separately.

2A.1 Trayport's display aggregation and price dissemination function

- 2.9 The CMA provisionally concludes that:
- all of ICE's rival trading venues and clearinghouses are dependent, to some extent, on Trayport to disseminate their prices and offerings to traders.²⁷
- 2.10 This finding is consistent with a view that brokers are highly dependent on Trayport, because Trayport is necessary in order to see aggregated broker prices. This conclusion does not clearly differentiate the dependency of exchanges and clearing houses on Trayport's display aggregation and price dissemination functions, although the CMA's use of the phrase 'to some extent' indicates that it recognises that this dependency is not uniform across ICE's rivals.
- 2.11 In fact, there is substantial additional evidence, including some presented by the CMA itself (see section 2A.2 below), of the numerous alternatives to Trayport's price display aggregation and dissemination function already in use by exchanges and clearing houses.
- 2.12 Although such independent software vendors (ISVs) and technology providers currently require access to Trayport to also display broker prices, the CMA has not established that exchanges and clearing houses need to have their prices displayed on the same screen as broker prices in order to be able to compete effectively. The fact that Nasdaq and ICE manage to establish liquidity in their incumbent markets outside of the Trayport ecosystem indicates that this may not be the case.²⁸

2A.2 Trayport's trade routing and clearing functionality

- 2.13 As well as its key display function, Trayport provides additional functionalities that include the routing of trades and a link to support STP clearing instructions. The evidence available, and summarised in the box below, shows that none of ICE's rivals is dependent on these additional functionalities of Trayport, particularly not exchanges and clearing houses.

²⁶ Summary of hearing with Financial Institution A on 6 June 2016, para. 2.

²⁷ CMA Provisional Findings Report, p. 88, para. 7.162.

²⁸ Analysis of Nasdaq's member list available on its website, <http://www.nasdaqomx.com/commodities/Marketaccess/memberlist>, accessed 31/08/2016, shows that 76 out of 117 (65%) trading companies are not Trayport customers, one of the five (20%) market makers is not a Trayport customer and five of the 11 (45%) broker members are not Trayport customers. This suggests that Nasdaq customers do not rely on Trayport more generally when accessing trading venues.

Box 2.1 Evidence that alternatives to Trayport are in use

A number of alternatives to Trayport products are identified in the provisional findings. These include alternative ISVs as well as alternative clearing links and alternative methods for clearing trades.

Use of other ISVs

Other ISVs are available, and are used for a sizeable proportion of trades in some markets. RWE identifies X-Trader, TT and EXETA as alternative ISVs in oil (although these still use Trayport's Trading Gateway to access UK power).¹ In addition, Financial Institution A states that 'the main execution platform it used was Trading Technologies' X_Trader to trade products across ICE, CME, NYMEX, CBOT and EEX exchanges' and that 'X_Trader was not reliant on Trayport technology.'²⁹ At (we infer) EEX, 40–50% of German power trades are via a non-Trayport ISV; and more than 90% of Nordic power trades at (we infer) Nasdaq are routed through non-Trayport ISVs.

Use of other clearing links and methods of clearing

Alternative clearing links to Trayport's link are also available for brokers to submit trades for clearing, as explained by the CME.³ For instance, Broker A mentions EFET.net as providing 'a platform with similar functionality to the hosted clearing link provided by Trayport'.⁴ In addition to existing alternative clearing links, an exchange (we infer CME) states that the cost of building an STP link would be only £0.2m per broker.⁵ Another option for clearing trades is manual registration of trades.⁶

However, several parties identify possible weaknesses with clearing links other than Trayport's, as well as with manual registration. Broker A explains that, where connectivity occurs post-trade, as in the case of EFET.net, this may not meet a broker's trade registration requirements.⁷ An exchange also makes the point that using Trayport's systems makes it more convenient to use Trayport's Clearing Link.⁸ As concerns manual registration, one respondent identified that this is not a feasible alternative if high volumes are registered, and that there is a higher risk of human error with manual registration.⁹

Despite these stated differences in functionality, the quantitative evidence collected by the CMA indicates that alternatives to Trayport are currently widely used. For example, one exchange reported:

[X] is also a heavy user of the Trayport platform: the majority [50–60]% of OTC futures volumes cleared in [X] came through Trayport's Clearing Link.¹⁰ The other trades were sent to the clearinghouse via [an alternative front-end] [20–30]% and manual registration [20–30]%.¹¹

This shows that, in total, 40–50% of the OTC volumes registered on this exchange do not come via Trayport's clearing link, and hence even where Trayport's clearing link is available, volumes will not necessarily go through it despite the possible differences in functionality. In some cases, functionality differences between Trayport and other routes are to Trayport's disadvantage, as identified by Griffin:

Griffin stated that it preferred not to use Trayport's hosted clearing link because it had more control over trades coming through its back-office system. Instead, Griffin preferred to use its own direct links to clearinghouses.¹²

Note: ¹ CMA Provisional Findings Report, p. 77, para. 7.117. ² CMA Provisional Findings Report, p. 83, Tables 5 and 6. ³ CMA Provisional Findings Report, p. 80, para. 7.130. ⁴ CMA Provisional Findings Report, p. 80, para. 7.133. ⁵ CMA Provisional Findings Report, p. 127, para. 9.30. ⁶ CMA Provisional Findings Report, p. 80, para. 7.132. ⁷ CMA Provisional Findings Report, p. 80, para. 7.133. ⁸ CMA Provisional Findings Report, p. 80, para. 7.132. ⁹ CMA Provisional Findings Report, p. 80, para. 7.132. ¹⁰ Data provided by [X] is for 2015, as stated in footnote 103 of CMA Provisional Findings Report. ¹¹ CMA Provisional Findings Report, p. 87, para. 7.146. ¹² CMA Provisional Findings Report, p. 80, para. 7.133.

Source: Oxera summary of CMA analysis.

²⁹ Summary of hearing with Financial Institution A on 6 June 2016, para. 12.

- 2.14 Overall, the evidence set out in the PFs (and summarised in the box above) indicates that viable alternatives to Trayport's front-end and clearing routes are available and are being used.
- 2.15 Nevertheless, in order to support the conclusion that alternatives to Trayport do not exist, the CMA present evidence on penetration rates of alternative screens to Trayport in the PFs.³⁰ The reliance placed by the CMA on this penetration evidence (that other ISVs are not important) seems at odds with the statistics on the use of ISVs reported in Tables 5 and 6 in the PFs, where a large number of volumes are traded on alternative screens, at least for emissions and power.³¹
- 2.16 We note that we cannot assess this discrepancy as we have not been given access to the underlying data. As a result, this discrepancy could reflect an issue with the CMA survey sample or with the accuracy of responses. Alternatively, it could show that a few UK traders account for a large proportion of total trading in a single exchange; hence, while penetration looks lower, it is consistent with the principle that anyone who makes extensive use of an exchange has an alternative route. Either way, the penetration rate presented in Table 7 of the PFs does not provide evidence of exchanges' dependency on Trayport for the provision of trade routing and clearing services.
- 2.17 Furthermore, the fact that currently a substantial proportion of trades are routed to venues for trading and clearing through Trayport does not mean that these functions are sufficiently important to underpin an ability to foreclose. Given that traders are already using the Trayport screen to identify where to trade and/or clear, if it is also convenient to submit trading and/or clearing instructions through Trayport, it is not surprising that they are currently well-used functions. The CMA has not established that, if it is no longer convenient for a trader to submit instructions in this way (having identified a preferred trade), the trader will alter their decision on the preferred trade rather than use an alternative means of submission.
- 2.18 Given the available alternatives for these services, changes to features of Trayport that are not critical will have a much more limited effect (if any) on ICE's rivals. For example, suppose that trade routing or the ability to submit clearing instructions through Trayport deteriorated. This would be unlikely to result in trading and/or clearing diverting to ICE. A trader could continue to use the price display aggregation and dissemination function of Trayport to identify where they wished to trade. This might also determine the clearing venue, or the trader would specify the clearing venue if they chose to complete an OTC-cleared trade. They could then submit their instructions through a direct screen (as many traders currently already do) which venues generally make available at no additional cost to traders.

2B Costs associated with switching to alternative back-end or front-end providers are not insurmountable

- 2.19 In the PFs, the CMA concludes that switching from Trayport will be difficult:
- 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.³²

³⁰ See CMA Provisional Findings Report, p. 86, Table 7.

³¹ See CMA Provisional Findings Report, p. 83, Tables 5 and 6.

³² CMA Provisional Findings Report, p. 10, para. 31.

- 2.20 The CMA dismisses the evidence provided on the success of the transition of ICE Endex away from ETS to its own matching engine as an example of switching. However, the PFs do not present any alternative evidence to support the view that there are significant challenges that venues might face when switching the back end.
- 2.21 In addition, the CMA considers the fact that ICE is reliant on Trayport for only a limited number of products as evidence that ICE's situation at the time of the switch cannot be replicated. On the contrary, the fact that ICE was able to grow successfully in many products without Trayport could be considered as evidence that the success of exchanges and clearing houses does not depend on the use of Trayport.
- 2.22 The CMA draws strong conclusions from the survey evidence that many traders do not have separate screens to access EEX, but they do have an ICE screen. Given that EEX can currently be fully accessed through Trayport and ICE cannot, this can be seen as evidence that a trader chooses its preferred venue (in this case, ICE). If the product that the trader wishes to trade at ICE is not available on Trayport, they can easily get an additional screen. This is relevant to the CMA's partial foreclosure theory of harm with respect to EEX. Even if the availability of EEX's products on Trayport may be of a lower quality, as long as traders are able to view EEX's prices on the Trayport screen, the effect of the lower quality on EEX will be minimal. If the quality differentials were marked, traders could easily use an alternative ISV at minimal cost, as compared with the significant cost of switching away from the extant liquidity pool.
- 2.23 Furthermore, exchanges and clearing houses do currently use alternatives to Trayport products for a substantial proportion of executions and clearing, as the CMA's own evidence as presented in the PFs demonstrates (see the box above). It follows from this that traders use alternatives to Trayport-reliant front ends or Trayport's clearing link for their trades, since exchanges and clearing houses report volumes coming in via these non-Trayport-reliant channels.
- 2.24 Exchanges have higher volumes trading on non-Trayport front ends than brokers do,³³ which suggests that switching away from a Trayport front end may be easier for an exchange than for a broker. That said, even brokers are considering alternatives to Trayport, as some brokers have commissioned a consultant to assess what functionality would be needed for a new alternative to Trayport.³⁴ This demonstrates that there is a threat of brokers creating a new competitor to Trayport, as discussed in paragraph 82, Appendix D to the CMA's Provisional Findings Report. In the event that Trayport were to provide a significantly lower quality of service, or no longer offer a full display aggregation service, the incentive for brokers to switch away would increase.

2C The mechanisms presented in the PFs for foreclosure are not feasible means of foreclosing ICE's rivals

- 2.25 The PFs set out a list of actions that ICE could undertake to potentially foreclose its rivals via Trayport.³⁵ These actions can be grouped into four categories:

1. changes to Trayport's pricing;

³³ CMA Provisional Findings Report, pp. 82–3, Tables 4, 5 and 6.

³⁴ CMA Provisional findings, Appendix D, p. D17, para. 82.

³⁵ For a list of specific mechanisms considered by the CMA, see CMA Provisional Findings Report, p. 103, para. 8.56.

2. actions that damage the critical price aggregation and dissemination function of Trayport;
 3. actions that damage other (ancillary) functions of Trayport;
 4. misuse of commercially sensitive confidential information relating to ICE's rivals.
- 2.26 The CMA has not established that such types of foreclosure attempt would be effective at shifting trading or clearing away from ICE's rivals, yet it draws the provisional conclusion that:
- these softer, incremental methods of foreclosure may not be readily identifiable by market participants, and so are less likely to prompt any form of retaliation or cause significant damage to Trayport's business model, but could...**have a substantial impact on the ability of ICE's rivals to compete over time.**³⁶
[emphasis added]
- 2.27 We discuss below why partial foreclosure through increasing the price of Trayport would not prevent ICE's rivals from competing. Actions in category 2 could potentially harm ICE's rivals, but, as set out in section 3 (and recognised by the CMA in the case of full foreclosure), ICE would have no incentive to pursue these. In the case of category 4, as previously submitted to the CMA, being trusted with confidential information is important to both Trayport and ICE's business models and strong procedures and effective safeguards are already in place.³⁷
- 2.28 With regard to actions that damage other (ancillary) functions of Trayport (category 3 above), these include:
- de-prioritising the development and improvement of their software...while continuing to improve ICE supporting technology;
 - restricting the functionalities of the software offered to ICE's rivals;
 - reducing the general service level of the offering to venues and clearinghouses.³⁸
- 2.29 In the PFs, the CMA argues that these are softer incremental methods of foreclosure, and as such 'may not be readily identifiable to market participants'.³⁹ This statement is not supported by evidence. More importantly, there is no evidence that 'softer methods of foreclosure' could have a substantial effect on trading and/or clearing choices.
- 2.30 In fact, it is unlikely that a mechanism for attempted foreclosure that would damage the functionality of Trayport in such a way as to alter trading and clearing choices could remain undetected, especially by sophisticated market participants. While any change to Trayport's products that compromises the intrinsic benefit of the display aggregation service—the neutral view of all market prices which, as the CMA has found, is highly valued by traders—will be detected, this would also be the case for changes to the additional functionality of Trayport.
- 2.31 If such softer changes were hardly detectable, they would be highly unlikely to have an effect on ICE's rivals' competitiveness. This is because factors other than Trayport's functionality are key to determining traders' choice of trading location—in particular, liquidity and open interest. Thus softer changes to this

³⁶ CMA Provisional Findings Report, p. 115, para. 8.66.

³⁷ ICE / Trayport, (2016), 'Submission to CMA regarding customer data protection at Trayport', 29 June.

³⁸ CMA Provisional Findings Report (Parties confidential version), p. 112, para. 8.56.

³⁹ CMA Provisional Findings Report (Parties confidential version), p. 112, para. 8.57.

additional functionality provided by Trayport will either have no impact on traders' choices, or (as set out in the box above) the traders will use an alternative route to Trayport to access their desired pool of liquidity.

No evidence that changes to Trayport's pricing would foreclose ICE's rivals

- 2.32 In terms of the impact on competitors of a hypothetical increase in Trayport's prices, the CMA guidance sets out that, particularly in the context of partial foreclosure via price, ability relates to:

The cost of the input relative to all costs of the final product. All else being equal, if the input accounts for only a small part of the total costs incurred, the merged firm will be less able to harm its rival manufacturers' ability to compete than if the input accounts for a greater part of the total costs.⁴⁰

- 2.33 The CMA has accepted (in paragraph 8.53 of its Provisional Findings Report) that a 20% increase in Trayport fees would account for only a small proportion (0.2–3%) of brokers' operating costs. The PFs do not present any evidence to support a concern that exchanges could be foreclosed through an increase in Trayport's costs. Based on analysis of data provided in the CMA's confidentiality ring, we find [add conclusion once non-confidential version is approved by CMA] as detailed in 4DA1.
- 2.34 The PFs do not provide any evidence that traders would respond to a change in Trayport's pricing so as to shift volumes towards ICE. In fact, consistent with Trayport's costs being so small, there is nothing that indicates that ICE would be able to shift volumes from brokers or other exchanges to execution or clearing at ICE. If any change were to occur, the CMA's own survey suggests that trading would be more likely to shift to direct screen trading or voice brokerage—bypassing ICE and Trayport altogether—and clearing could shift to alternative clearing links.⁴¹
- 2.35 Furthermore, if the liquidity pool that a trader intends to access is sufficiently important, traders will continue to trade there—even if the costs associated with connecting to the venue via Trayport increase. This is because implicit costs are reported by market participants as being the most substantial costs of trading and cost differences across venues. This is consistent with Oxera's analysis of the costs of trading.
- 2.36 The PFs do not address the evidence provided in Oxera's 'Supporting economic analysis: detailed pack' submitted to the CMA. This demonstrates that, in the past, substantial increases in the cost of using Trayport to see the prices of, or route trades to, a specific venue (ICE-Endex) did not lead to a shift in trading volumes (see Box 2.2 below). Thus, the CMA appears to have ignored both its own survey evidence and evidence from a market change. Both indicate that traders' choice of venue would be little affected by changes to Trayport's costs, and hence that this theory of partial foreclosure can be dismissed.

³⁸ See Merger assessment guidelines, CC2/OFT1254, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/284449/OFT1254.pdf, para. 5.6.10(a).

⁴¹ For a discussion of clearing options, see CMA Provisional Findings Report, p. 80, paras 7.130–7.133.

Box 2.2 ICE-Endex case study

In February 2013, two events occurred that were relevant for TTF trading: ICE acquired Endex from APX-Endex; and Pownext started offering execution in TTF. Prior to the acquisition, APX-Endex used ETS as its matching technology and then after the acquisition Endex migrated to ICE's technology. Following migration from ETS to ICE technology in October 2013, traders using TGW/Joule to route trades to Endex markets had to pay an additional £500 per month to Trayport (plus £150 per month per additional trader beyond the two trader licences included in the £500 monthly fee). For a firm paying for two read-write licences to Trayport, which is understood to be typical, the additional applicable fees represented a 23% cost increase (£500 relative to £2,276 per month) for its use of Trayport. As demonstrated in the figure below, this cost increase did not lead to a shift of TTF trading from ICE-Endex to Pownext (later PEGAS).

Figure 2.1 TTF on-exchange traded volumes by exchange, MWh m

[Confidential]

Source: Oxera using ICE data.

3 No evidence that ICE has an incentive to use Trayport to foreclose rivals

- 3.1 The CMA has considered the incentives of ICE and Trayport to foreclose ICE's rivals using subtle incremental foreclosure mechanisms, and concluded that, because the costs from partial foreclosure are likely to be limited, they would be easily offset by the potential gains.
- 3.2 This section explains, in the following three steps, why this conclusion is not robust:
- section 3A summarises the CMA's approach to assessing the incentives to foreclose;
 - section 3B outlines the main deficiencies in the CMA's approach to its incentives analysis;
 - section 3C sets out why the CMA's high-level scenarios used to estimate the plausible gains are inconsistent with the evidence, including, in many cases, the CMA's own assessments.
- 3.3 We go on in section 4 to present an alternative, more thorough, quantitative assessment of the merged entity's incentives to foreclose.

3A Overview of the CMA's assessment of incentives to foreclose

- 3.4 In its incentives analysis, the CMA has predominantly relied on a qualitative assessment of the gains and costs to ICE/Trayport. The CMA explains that it relies on the results of its quantitative scenario analysis only as a 'cross-check', and that none of the individual scenarios that it has modelled can be given particular weight, 'given the number of assumptions'.⁴²
- 3.5 In the PFs, the CMA considers the following types of benefit from partial foreclosure as likely to be substantial:⁴³
- diverting rival volumes in products where ICE has a strong position (e.g. TTF, coal), as well as rival volumes in products where it has limited or no liquidity (e.g. German power);
 - diverting OTC uncleared volumes to ICE by using Trayport to accelerate industry trends, which leads to OTC uncleared switching on exchange. These gains are quantified in the scenario analysis;
 - protecting existing OTC-cleared and on-exchange volumes at ICE (including for oil), while being able to offer less competitive fees and service levels;
 - gaining control of new markets and segments—for example, as additional products transition from being voice-brokered to electronic trading.
- 3.6 In terms of the costs of foreclosure in the form of losses to ICE and Trayport, the CMA finds these to be limited.⁴⁴ According to the CMA's assessment, the loss of Trayport's revenues is likely to be small, as partial foreclosure would not undermine Trayport's business. The possibility of retaliation is also discounted on the following grounds:

⁴² CMA Provisional Findings Report, p. 115, paras 8.97–8.98.

⁴³ CMA Provisional Findings Report, pp. 112–4, paras 8.82–8.9.

⁴⁴ CMA Provisional Findings Report, pp. 114–5, paras 8.91–8.96.

- the incremental partial foreclosure measures considered in the CMA's Provisional Findings will be difficult to detect by market participants and are therefore not likely to cause retaliatory action;
- trading firms will incur costs of switching away from ICE, and any scope for market participants to use the threat of switching away would likely to have been fully reflected in pre-merger conditions;
- there are no alternatives to Trayport for brokers and for most of the exchanges, and there are high barriers to entry for an alternative system.

3.7 Overall, given that the CMA considers the gains to be substantial and the likelihood of costs to be limited, it concludes that an incentive to foreclose is likely to be present, and considers that a full quantitative assessment of the incentives to foreclose is not necessary.⁴⁵

3B Key deficiencies in the CMA's approach to its incentive analysis

3.8 The CMA's assessment of ICE's incentive to foreclose rivals through partial foreclosure suffers from several important inadequacies. First, it is not sufficient for the CMA to set out an alleged ability to foreclose and not undertake any robust quantitative assessment of the incentive for this foreclosure. This is equivalent to not undertaking the requisite incentives or effects analysis.

3.9 There are several inconsistencies and caveats in the reasoning and assumptions made in the PFs, which are discussed in turn below:

- the CMA's gains from foreclosure are overstated because Trayport functionality is not an important driver of traders' venue choices (section 3B1);
- the CMA's gains are overstated and costs are understated because it has not recognised that damaging the price display is akin to full foreclosure (section 3B2);
- the CMA has overstated gains through its inconsistent treatment of Nasdaq's dependency on Trayport (section 3B3);
- the CMA has understated the costs of partial foreclosure, by asserting that there are hard-to-detect, but effective, foreclosure mechanisms. Effective mechanisms (if they exist) would trigger costs through retaliation and the threat to Trayport's business model (section 3B4).

3B.1 Partial foreclosure actions will not lead to material diversion of volumes to ICE due to liquidity being the key factor affecting traders' choices

3.10 In its provisional findings, the CMA recognises that traders select an execution venue on the basis of liquidity, and a clearing venue on the basis of open interest and margin offsets:

Our provisional view is that the primary factors affecting traders' choice of execution venue are liquidity and contract price which are inextricably linked... For clearing, there was a consistent view from all parties that margin and open interest were the key drivers for traders' decisions about where to clear.⁴⁶

3.11 However, the CMA does not appear to have given weight to this finding in its assessment of the effect of partial foreclosure, nor has it explained why it

⁴⁵ CMA Provisional Findings Report, p. 112, para. 8.81 and footnote 129.

⁴⁶ CMA Provisional Findings Report, pp. 58–9, paras 7.31 and 7.33.

expects that the actions that damage Trayport's functionality will affect competition for execution and clearing. Given that the criteria for selecting a venue or clearing house depend predominantly on other factors—i.e. liquidity and open interest—rather than Trayport's functionality, there is no basis for expecting partial foreclosure actions to have the substantial effects on downstream competition that the CMA alleges.

- 3.12 In a partial foreclosure scenario where Trayport's display aggregation functionality is not affected, traders can see where the best available price is across all venues by looking at the TGW screen. This means that this strategy will not prevent a trader from using Trayport to determine where the desired pool of liquidity resides for that trader. It is therefore implausible to conclude that foreclosure strategies that only reduce the ease of completing a trade via Trayport (but in a way that is hard to detect) could lead a trader to divert from the preferred execution venue in terms of liquidity or from the preferred clearing venue where a trader has existing open interest, given the relative importance of liquidity and margining.
- 3.13 Even when partial foreclosure affects Trayport's display aggregation functionality, the impact on trader choice would be at most limited to product areas where there is head-to-head competition, such as TTF. For products where exchange volumes are concentrated in one venue, this venue tends not to be dependent on Trayport for price dissemination, as alternatives (in particular, direct screens) are used by a significant proportion of traders (see section 2A). Broker venues may be more dependent on Trayport; however, as set out in section 4, the plausible gains are more than offset by the likely costs.
- 3.14 The parties' incentives analysis is consistent with this logic, in that the potential gains assessment quantifies gains from products where ICE is strong or competes head-to-head with another venue (e.g. TTF or OTC coal), but differentiates the likely success for products such as German Power where ICE has no existing position. In contrast, the CMA has quantified the same likely benefit to ICE from partial foreclosure strategies regardless of the competitive dynamics specific to each product. This significantly overstates the potential benefit from foreclosure that the CMA quantifies.

3B.2 Actions that damage Trayport's price aggregation and dissemination function will undermine Trayport's business

- 3.15 In the PFs, the CMA has not identified an SLC in respect of full foreclosure because it recognises the risks that such actions would have for Trayport's business model.⁴⁷ The PFs do not give any detail on the logic behind this finding, but we can infer that the CMA has recognised that a refusal to supply services to ICE's rivals will undermine the critical value of Trayport to traders as a price aggregator (as ICE's rivals' prices will not be displayed) and therefore risk the loss of substantial revenues.
- 3.16 The CMA has not set out its views on how the market would react if Trayport ceased to provide the key display aggregation function. However, given the importance of the aggregation screen highlighted by market participants, the most plausible hypothesis is that a rival platform would enter and replace Trayport's aggregation function. As demonstrated in the following section, the expenditure costs of establishing an alternative platform to Trayport are not high, and appear to be particularly low when compared against the annual revenues earned by European utility exchanges and brokers.

⁴⁷ CMA Provisional Findings Report, p. 11, para. 36.

- 3.17 The real cost identified by the CMA is the difficulty in getting market participants to coordinate to switch away from Trayport's display aggregation screen. While coordinating market support for an alternative to Trayport may be challenging in the ordinary course of business, should Trayport be degraded in such a way that traders' choices over where to trade and clear were affected, this would not be the case. In particular, if Trayport were no longer providing the display aggregation service, this need for coordination would be removed. Market participants would be looking for an alternative platform to replace the no-longer-fit-for-purpose Trayport. In concluding that it is unlikely that an alternative to Trayport could enter, the CMA has relied on industry responses in the context of current market conditions (i.e. in which Trayport is functioning well). This is not the correct scenario to consider in this assessment.
- 3.18 The conclusion from this, as agreed by the CMA, is that Trayport cannot fully foreclose venues without undermining its business model. This is because, by withdrawing access to some or all of ICE's rivals, it would undermine the critical function of Trayport—namely, price display aggregation.
- 3.19 An important consequence of this conclusion is that, when assessing partial foreclosure actions, it is not correct to assume that the price display aggregation function of Trayport will deteriorate, or if it does, accept that such an action will also undermine Trayport's business model, and hence raise the prospect of significant costs to the merged entity. This is not what the CMA has done. Instead, it argues that partial foreclosure can affect all of ICE's rivals and impair customer outcomes, but somehow go undetected and therefore not result in any threat to Trayport's revenue.

3B.3 The incentives analysis is inconsistent with the finding that Nasdaq remains a viable alternative

- 3.20 In the PFs, the CMA finds that (we infer) Nasdaq is 'not dependent on Trayport for execution of Nordic power trades'.⁴⁸ In line with this, the CMA seems to exclude Nasdaq volumes from the gains from on-exchange volumes switching, but does not exclude Nordic power from the gains from OTC-cleared volumes switching to ICE.⁴⁹ This is inconsistent with the CMA's finding of limited ability to foreclose Nasdaq and the fact that Nasdaq will remain an alternative venue.
- 3.21 As Nasdaq has more liquidity than ICE in Nordic power and is not dependent on Trayport, in the event that brokers were foreclosed, it is much more likely that OTC volumes in Nordic power would divert to execution on Nasdaq rather than ICE. This means that the benefits of foreclosure quantified by the CMA in the PFs are overstated in all its scenarios.

3B.4 Costs from foreclosure are not immaterial

- 3.22 As explained in section 3B.2, if foreclosure were to lead to traders switching trading or clearing away from the venues that they would otherwise have chosen, the CMA is incorrect to conclude that the costs in the form of losses to Trayport would be limited.
- 3.23 The CMA has not recognised that any action that is effective at shifting trading and clearing choices away from a trader's preferred location would involve serious degradation to Trayport and would not go undetected by market participants. As a result, Trayport's attractiveness to traders, brokers and

⁴⁸ CMA Provisional Findings Report, p. 8, para. 7.143.

⁴⁹ CMA Provisional Findings Report, Appendix F, p. F4, paras 19, 20 and 27.

clearing houses alike would be at risk, and therefore so would the associated revenues.

- 3.24 In addition, the CMA has also given too little weight to the risk of retaliation against ICE, and the risk that an alternative platform will displace Trayport.

Retaliation against ICE is credible

- 3.25 The availability of retaliatory actions that would require limited co-ordination and impose limited costs to traders and brokers has been set out in Oxera, 'Financial incentives to foreclose', 20 July 2016.
- 3.26 An example of such a retaliatory action by brokers would be one where brokers encourage traders to shift clearing away from ICE. This would not require brokers to coordinate for there to be an effect on ICE's revenues and, because brokers do not pay clearing fees or post margin, would involve limited costs to brokers to pursue.
- 3.27 In the PFs, the CMA dismisses brokers' ability to steer clearing away from ICE, arguing that, although brokers are involved in the process of submitting trades to clearing houses, traders are ultimately responsible for the choice. This is correct, and, ultimately, any choice will be made by the trader; however, this conclusion fails to take into account the material incentive programmes that clearing houses offer brokers. These programmes are rational only if brokers can have an influence in directing clearing flow.
- 3.28 The CMA's dismissal of brokers' ability to shift clearing also ignores the evidence of the role brokers took in shifting coal clearing from ICE to CME in 2012. As brokers are (generally) responsible for submitting clearing instructions on behalf of their trading clients, it is brokers that benefit most when STP is introduced, and, therefore, it is brokers that had the greatest incentive to encourage traders to shift clearing to CME.
- 3.29 The CMA also dismisses the risk of retaliation, on the assertion that any threat of retaliation would already be reflected in pre-merger conditions. This fails to take into account the substantial increase in coal rebates and discounts ICE had to offer traders and brokers to slow the shift to CME, which reduced the effective net revenue per contract from [Confidential] in 2011 to [Confidential] in 2015.⁵⁰ By the CMA's own logic, ICE should have already been offering this level of discount in 2011 (or be offering an STP link), given the threat CME might enter, as it indeed did.
- 3.30 Trading companies could also retaliate without the need for co-ordination—for example, by posting prices for NBP and TTF on other exchanges or with brokers rather than ICE, or by shifting some of the clearing volumes. This would harm ICE since it would lose the execution and could lose the clearing fees associated with the shifted volumes. In addition, the resulting reduction in liquidity and open interest on ICE could lead to further volumes shifting away due to network effects.
- 3.31 Where liquidity and open interest are split between ICE and another exchange/clearing house (e.g. coal), the switching costs associated with the forgone benefits from trading where the best price is, and from margin efficiencies, are likely to be relatively low. This would imply that retaliation is credible. Nonetheless, to the extent that some switching costs would be

⁵⁰ The net revenues per contract apply to the Richard's Bay (API4) futures contracts—contracts in which both ICE and CME are active. The net revenues per contract are based on Oxera's analysis of ICE's financial data.

incurred, market participants would not have an incentive to pursue such action until given reason to do so (e.g. should ICE attempt to foreclose its rivals). Thus, the CMA is incorrect to assume that the threat of such switching would be expected to be reflected in pre-merger conditions.

- 3.32 The existence of switching costs does not mean that retaliation is not credible. As the CMA acknowledges in the PFs, liquidity has shifted in the past.⁵¹ Examples where venues have successfully attracted liquidity away from incumbent venues are i) Griffin's success despite entering European utility markets several years after other brokers and exchanges did so; ii) CME's success in attracting coal clearing away from ICE; and iii) ICE's success in attracting EUA trading away from Nasdaq.⁵²
- 3.33 These types of shift appear to be triggered/motivated where there are material benefits to traders and/or brokers from switching. For example, as described above, in the coal example, the shift to CME was prompted largely by the fact that ICE's clearing processes were considered inadequate and ICE did not respond to requests for improvement.
- 3.34 Switching away from ICE to discipline against any attempt to foreclose and reduce reliance on a now untrustworthy exchange group would be highly likely to provide sufficient benefits to traders and/or brokers to compensate for any costs involved. This does not mean that, as argued by the CMA, small, incremental and hard-to detect foreclosure actions (should they exist) would provide sufficient reason for market participants to change their behaviour, such that ICE's rivals could be foreclosed.

The risk of an alternative platform to Trayport is credible

- 3.35 As explained in section 2, alternative aggregators of exchanges and clearing routes to clearing houses already exist (e.g. Trading Technologies and eXRP).
- 3.36 In the case of broker aggregation, as set out in Table 3.1, the costs of replacing Trayport from scratch would be less than two weeks of the combined revenues from European utilities sales by the top four brokers and the EEX Group.⁵³

Table 3.1 Annual revenues generated from European utilities

[Confidential]

- 3.37 Furthermore, several brokers appear to already have technology that could be built upon (e.g. GFI's EnergyMatch). In addition, as noted in the PFs, the core group of brokers active in the European utility space are already positioning themselves to be able to coordinate a move away from Trayport. A tangible first step is that they have commissioned a study setting out the required functionality for an alternative to Trayport.⁵⁴
- 3.38 The potential to develop an alternative to Trayport is supported by third parties:
- Financial Institution A said that it did not consider the technological barriers for a rival to develop an alternative to Trayport to be too complex for exchange markets. If contractual arrangements made OTC brokers unlikely or impossible to

⁵¹ CMA Provisional Findings Report, p. 113, para. 8.88.

⁵² CMA Summary of hearing with Nasdaq, 1 June 2016, p. 3, para.18.

⁵³ [Confidential] % of 365 is [Confidential]; this indicates that, if the revenues generated by EEX and considered brokers were spread evenly across the year, it would take less than 14 days (2 weeks) to cover the costs of replacing Trayport.

⁵⁴ CMA Provisional Findings Report, Appendix D, p. D17, para. 82.

switch to an alternative platform this would constitute a significant barrier to the emergence of an alternative trading platform⁵⁵

Financial Institution A said it did not know the details of Trayport's closed API business model but considered any technological barrier not as damaging to competition, provided its users' length of contracts were short enough not to prevent switching to an alternative model.⁵⁶

- 3.39 This evidence suggests that the costs to build an alternative platform are not likely to present a hurdle if ICE attempted to foreclose all of its rivals from Trayport and that spurred a retaliation.
- 3.40 Overall, the PFs do not place sufficient weight on the evidence that the risk of broker and/or trader retaliatory actions imposes a credible constraint on ICE's incentive to try to foreclose its rivals.

3C High-level assumptions in the CMA's analysis of plausible gains are inconsistent with evidence

- 3.41 The CMA considers that the overall magnitude of its estimate of the gains of partial foreclosure is robust because its estimates are not heavily dependent on a single element of its assessment:

We also found that the overall magnitude of the gains of partial foreclosure were not largely driven by a single benefit, but rather that all six of the potential benefits we identified contributed substantially to the overall foreclosure incentives. Our view is that this means the overall magnitude of **our estimates are likely to be robust, as these are not heavily dependent on only a single element of our assessment, but rather emerge from the consistent picture we observe across all potential benefits.** (Emphasis added.)⁵⁷

- 3.42 This statement is not correct. The CMA applies the same set of high-level assumptions as to the revenue gains that foreclosure would bring in five of the six types of potential benefit it alleges could arise (5% gain in the low scenario, 10% in the medium scenario, and 20% in the high scenario). The CMA has not evidenced its reasoning for why the same proportion of revenue gains would apply to each of the five types of benefit.
- 3.43 Furthermore, the CMA's estimates of the plausible gains do differ markedly between the three scenarios considered, ranging from £[Confidential] in the low scenario to £[Confidential] in the high scenario. This means that the CMA's estimates of the plausible gains are indeed heavily dependent on its assessment of the likely proportion of revenues that ICE could gain from foreclosure.
- 3.44 The CMA's comment that 'all six of the potential benefits we identified contributed substantially to the overall foreclosure incentives' is also not correct. For example, in the low scenario, 56% of the CMA's estimate of plausible gains comes from one source—namely, volumes switching from OTC rival-cleared to ICE's exchange/clearing house. This is despite the CMA's assessment that clearing houses are less dependent on Trayport than traders or venues.⁵⁸
- 3.45 We consider the assumptions underlying the CMA's analysis of plausible gains as set out in the PFs to be unsubstantiated, for the following reasons.

⁵⁵ Summary of hearing with Financial Institution A on 6 June 2016, para 8.

⁵⁶ Summary of hearing with Financial Institution A on 6 June 2016, para 11.

⁵⁷ CMA Provisional Findings Report, Appendix F, p. F10, para. 46.

⁵⁸ CMA Provisional Findings Report, p. 103, para. 8.47.

- **Scenarios on potential gains**—for any given scenario, the CMA applies the *same* assumptions about the proportion of competitor volumes switching to ICE across all asset classes. In doing so, the CMA implicitly assumes that ICE's ability to affect the volumes is the same across different European energy products—effectively ignoring its own observation that liquidity can be sticky, and is not very easy to move.⁵⁹
- The CMA seems to consider the example of Nasdaq's success in German power as sufficient evidence for this crucial assumption. However, this is not consistent with CMA's overall finding that liquidity is hard to move, and therefore ICE's ability to affect volumes across different energy products would be different. Furthermore, as of 2015, Nasdaq had managed to attract only approximately 2% of German power volumes, which is lower than the proportions of volume-shifting that the CMA assumes in even its low scenario.
- The CMA also ignores its own observation that there is variation in the role of regulation and the ancillary services exemption across different products. The CMA recognised that 'for trading in gas products, this may to some extent constrain the level of competition and the amount of trading which would shift from OTC to exchanges' and noted that 'the constraint did not apply to other asset classes in the same way'. However, the CMA fails to reflect these differences by applying the same probabilities of OTC volumes shifting to ICE in the event of foreclosure across all asset classes.
- **Clearing volumes**—as noted above, despite finding that clearing houses are less dependent on Trayport than traders and venues,⁶⁰ the CMA applies the same assumptions about the proportion of OTC-cleared volumes that could switch to clearing on ICE as for the volumes executed on other exchanges.
- Indeed, the assumptions in relation to the volumes of OTC clearing that would switch to ICE are more aggressive than they are portrayed to be. In the PFs, the CMA sets out two potential benefits from foreclosure of OTC clearing:
i) volumes could switch from OTC rival-cleared to ICE's exchanges; and
ii) volumes could switch from OTC rival-cleared to OTC ICE-cleared. Both of these proposed benefits arise from the same set of products under OTC rival clearing. Therefore, the low scenario in the PFs actually implies that ICE could affect 10% of OTC rival-cleared volumes (the CMA assumes that 5% of OTC rival clearing moves to ICE's exchanges *and* 5% of OTC rival clearing moves to OTC ICE-cleared). This is double the proportion of rival exchange volumes that the CMA assumes would switch in the same scenario, despite having found rival exchange volumes to be closer substitutes to ICE than OTC-cleared volumes. Similar logic applies to the medium and high scenarios.
- **Bilateral volumes**—the CMA states that it has found mixed evidence on the extent to which ICE and bilateral trading compete, and that it considers that 'there is a degree of competitive interaction'⁶¹ between the two, but that this is smaller than exchange/exchange- and exchange/OTC-cleared. The CMA concludes that it has not considered competition in this segment in detail for the purposes of its assessment.⁶²

However, under two of the three scenarios in its quantitative incentives analysis, the CMA includes bilateral volumes as volumes that ICE could gain

⁵⁹ CMA Provisional Findings Report, p. 27, paras 2.58–2.59.

⁶⁰ CMA Provisional Findings Report, p. 103, para. 8.47.

⁶¹ CMA Provisional Findings Report, p. 60, para. 7.37.

⁶² CMA Provisional Findings Report, p. 60, para. 7.37.

through foreclosure. This is on the basis that ICE could use Trayport 'to accelerate' the increase in the proportion of cleared volumes.⁶³ However, the CMA does not provide any explanation about the mechanism through which such acceleration could occur, or evidence on how Trayport would give ICE such an ability to switch bilateral trading volumes to ICE. Indeed, the CMA recognises that, due to financial regulatory changes, there are pressures not to trade on exchange and/or clear bilateral trades, particularly for gas.

- It is also worth highlighting that, despite having found only mixed evidence on the extent to which ICE and bilateral trading compete, potential gains from these volumes form the largest component of the CMA's total potential gains of partial foreclosure under the medium and high scenarios.⁶⁴ By including these volumes—which we consider to be unsubstantiated—the CMA has therefore significantly overstated the potential gains of partial foreclosure under the medium and high scenarios.
- **Revenue net of rebates**—the CMA does not exclude the value of the rebates from ICE's unit revenues, on the basis that 'on balance it is unlikely that ICE would have to offer the same level of discounts and rebates to customers if it was to obtain substantial additional volumes as a result of partial foreclosure, as opposed to competing aggressively to win these in the ordinary course of business.'⁶⁵ By doing so, the CMA is implicitly assuming that, in addition to attracting liquidity away from its rivals, ICE can increase its prices compared with the established venues. This is not in line with the CMA's partial foreclosure theory of harm, wherein ICE can make almost undetectable changes to Trayport to switch volumes away from its rivals. If ICE were to partially foreclose its rivals through Trayport in an attempt to attract liquidity, and if it were to withdraw its rebate offers at the same time as this change, this would be easily detectable by market participants.

Furthermore, if the CMA is implying that ICE might withdraw such rebates after establishing liquidity then it is ignoring evidence that suggests that such rebate offers by ICE are not restricted to the early years of a contract launch or where ICE has a limited share of volumes.⁶⁶ Therefore, ICE's revenue net of revenue-sharing arrangements and rebate programmes is the appropriate measure to assess the potential gains and losses from foreclosure, as it better represents the incremental profits that ICE stands to gain or lose from a change in volumes.

For the reasons set out above, we do not agree with the CMA's conclusion that 'all six of the potential benefits we identified contributed substantially to the overall foreclosure incentives' and therefore 'this means the overall magnitude of our estimates are likely to be robust'.⁶⁷

⁶³ CMA Provisional Findings Report, p. 113, para. 8.87.

⁶⁴ [Confidential] -CMA Provisional Findings Report (Parties confidential version), Appendix F, p. F9, Table 2.

⁶⁵ CMA Provisional Findings Report, Appendix F, p. F4, para. 21.

⁶⁶ CMA (2016), 'Venue foreclosure—incentives analysis working paper', pp. 9–10.

⁶⁷ CMA Provisional Findings Report, Appendix F, p. F9, para. 46.

4 Evidence-based quantitative analysis

- 4.1 Even if ICE has an ability to foreclose other trading venues, it does not have an incentive to do so. We have previously presented a thorough, evidence-based quantitative assessment showing ICE's lack of incentive to foreclose its rivals. This assessment is still valid and remains relevant with respect to ICE's incentive to partially foreclosure via mechanisms that would damage Trayport's price aggregation/dissemination functions. As such actions would be clearly detectable and affect the core benefit that traders gain from Trayport, any potential gain needs to be offset by a realistic assessment of the costs that ICE would be likely to incur. Taken together, there is no incentive for ICE to engage in such practices.
- 4.2 We have now also assessed the incentive for ICE to engage in the additional partial foreclosure mechanisms raised by the CMA in its provisional findings. Table 4.1 summarises our conclusions, which are explained in more detail below.
- 4.3 Our assessment confirms that there would be no incentive for ICE to initiate the practices that the CMA has proposed in the PFs. Each practice is eminently detectable and therefore carries the risk that market participants would find an alternative to Trayport and/or retaliate against ICE. These costs must be given appropriate weight. The CMA assumes that only 10–20% of Trayport's revenue would be at risk, but this is predicated on the assumption that the foreclosure action would be hard to detect. Given that these actions would, in practice, be obvious to market participants, the analysis of the revenue at risk needs to place adequate weight on the true costs associated with foreclosure, as the CMA has done in concluding that there is no SLC with respect to full foreclosure.
- 4.4 Furthermore, for a number of the mechanisms, as set out in section 2, there is no evidence that they would have any effect on traders' choices of trading and/or clearing venues; hence, there is no potential gain.

Table 4.1 Summary of ICE's incentives to foreclose

Type of foreclosure	Plausible gain (£m)	Revenues at risk (£m)	Conclusion
Price of Trayport software	0	£[Confidential] ¹ retaliation against ICE	No plausible ability
Damage to Trayport's ancillary functions Includes: order routing, STP clearing link, tweaking interface, outages, order latency,	0	£[Confidential] damage to Trayport	No plausible ability and significant risk to Trayport's business model since detectable
Damage to Trayport's primary function—price aggregation/dissemination Includes: serious delay to updating of rivals' prices, delays/refusal to launch new contracts	£7.7m ²	£[Confidential] damage to Trayport and retaliation against ICE	No plausible incentive given significant risks to Trayport and ICE revenues
Attempts to constrain rivals' ability to innovate	limited	material	No plausible incentive given limited gains and material risks, particularly to Trayport

Note: ¹ The estimate of the risks of retaliation considers the risk to ICE's coal, NBP, TTF and emissions revenues only. ² The estimate of plausible gains reflects a plausible gain of £4.4m from the foreclosure of brokers and a plausible gain of £3.2m from the foreclosure of exchanges. See Appendix 2 for a summary of the calculations.

Source: Oxera analysis of ICE and Trayport data

4A No ability or incentive to foreclose rivals through altering the price of Trayport software or actions that degrade Trayport's ancillary functions

4.5 As set out in detail in section 2C, ICE does not have an ability to foreclose rivals through increasing the price of using Trayport's software or incremental changes to Trayport's ancillary functions. Neither would be sufficient to divert material volumes of trading and/or clearing to ICE; thus, neither is associated with a plausible revenue gain.⁶⁸

4.6 Particularly in the case of degradation to Trayport's ancillary functions, pursuing such actions would place Trayport's revenues at serious risk. As set out in section 2B, the costs of replacing the Trayport platform (including the back-office systems) are not insurmountable. Furthermore, the CMA's assessment of the likelihood of a successful competitor to Trayport is based on prevailing market conditions, in which Trayport is functioning well for market participants. This would not be the situation in the event of a foreclosure attempt. Should ICE damage Trayport's functionality in such a way that prevents market participants from completing their preferred trades, the ability for a competitor to Trayport to establish market support would be substantially higher. The CMA has not taken this into account.

4B No incentive to foreclose rivals through actions that degrade Trayport's primary function of price aggregation and dissemination

4.7 As explained in section 3B.2, the CMA has not identified an SLC in respect of full foreclosure because it recognises the risks that such actions would have on

⁶⁸ Trayport can be assumed to be optimally pricing such that, absent volume diverting to ICE, further increases in Trayport's prices would not be expected to deliver a profitable gain.

Trayport's business model.⁶⁹ Although the provisional findings do not explain the CMA's logic behind this premise, we can infer that the CMA has recognised that a refusal to supply services to ICE's rivals would undermine the critical value of Trayport to traders as a price aggregator.

- 4.8 For the same reason, ICE will not have an incentive to pursue partial foreclosure actions that also involve degradation to Trayport's price aggregation function. As set out in section 3B.3, retaliation against ICE is credible, as is the risk that an alternative platform displaces Trayport, and such risks more than offset the plausible gains (as shown in Table 4.1).

4C No incentive to foreclose rivals through attempts to constrain their ability to innovate

- 4.9 The CMA has not quantified the incentives associated with attempts to foreclose rivals through constraining their ability to innovate. However, it does consider that such benefits would be 'particularly important given that dynamic competition is important in this industry, and that there are important first-mover advantages'.⁷⁰ This conclusion has not been substantiated. The PFs do not establish how Trayport could constrain the ability of ICE's rivals to innovate; nor has the CMA presented a fair assessment of the likely costs and benefits associated with such actions. As set out below:

- Trayport is not the driver of innovation in European utility markets and any attempt to restrict innovation by ICE's rivals would be detected,
- any attempt by ICE/Trayport to restrict innovation would be likely to incur costs;
- even if effective at delaying innovation, short periods of delay are unlikely to confer a material first-mover advantage.

- 4.10 There have been few examples of innovation in European utility markets in recent years, and none was led by Trayport. Even the introduction of the aggregator screen, TGW, was at the demand of traders, rather than a suggestion by Trayport. The more recent examples of innovations—e.g. the introduction of the hourly contract by PEGAS and the launch of the non-MTF platform by EEX—were not initiated by Trayport.

- 4.11 To the extent that market participants wish for their innovations to be available on the Trayport platform, Trayport can play a role in assisting the delivery of this. However, its role may not be as substantial as some third parties have suggested; nor are third parties generally dependent on Trayport assistance. Several brokers (e.g. Spectron) choose to configure new contracts themselves using standard templates, limiting Trayport's role to the gold mapping to allow for the contract to be displayed on the aggregated screen.

- 4.12 If Trayport were to delay an initiative from a customer, this would generally be quickly detected. If the innovation is valued by market participants, such action would create a risk of retaliation against ICE and would potentially open an opportunity for other technology providers and ISVs to displace Trayport.

- 4.13 It is highly unlikely that ICE could use Trayport to completely stop one of its rivals innovating in response to customer demands. At best, all ICE could hope to achieve is to establish a short period with a first-mover advantage (and to achieve that, it would need to breach its confidentiality undertakings). Even if it

⁶⁹ CMA Provisional Findings Report, p. 11, para. 36.

⁷⁰ CMA Provisional Findings Report, p. 121, para. 8.89.

did this, given the regulatory requirements facing ICE, it would be unlikely that ICE could leapfrog brokers in bringing an innovation to market. ICE estimates that obtaining the necessary regulatory approval to launch a new contract takes around four months; in comparison, it estimates that a broker could launch a new contract in a matter of days.

- 4.14 Moreover, there is limited (if any) advantage of bringing a product to market 6-12 months ahead of a rival exchange. In the PFs, the CMA confuses first-mover advantage with market incumbency, and even this can be overcome, as shown in section 3 (para 3.32).⁷¹

4D Lessons from GFI's ownership of Trayport

- 4.15 If, as the CMA provisionally concludes, it were possible to foreclose rivals through incremental, hard-to-detect actions, GFI would have done so.
- 4.16 According to the CMA's logic, the costs of pursuing such actions would be low, and any material potential gain would therefore be sufficient to provide Trayport's owner with the incentive to foreclose its rivals. Indeed, as set out in Table 4.2, the revenues earned by other brokers active in the European utility market are substantial. Therefore, GFI—as recognised by the CMA, a closer substitute to other brokers than ICE⁷²—would have had a substantial incentive to use Trayport to foreclose its rivals.

Table 4.2 Annual European utility revenues for selected brokers

	Oxera's estimate of European utility revenues
GFI Group	£52.9m
Tullett Prebon	£57.7m
Spectron International	£51.3m
ICAP Energy Ltd	£46.6m

Source: Oxera analysis of Trayport revenues, and broker annual reports.

⁷¹ CMA Summary of hearing with Nasdaq, 1 June 2016, p. 3, para.18.

⁷² CMA Provisional Findings Report, p. 76, para. 7.99.

A1 Review of materials provided in the ICE/Trayport merger provisional findings confidentiality ring

A1A Introduction

[add once complete/non-confidential version approved by CMA]

A1B Analysis of disclosed materials

[add once complete/non-confidential version approved by CMA]

A1B.1 EBITDA is an uninformative comparison for Trayport fees

[add once complete/non-confidential version approved by CMA]

A1B.2 Revenues and operating costs are more suitable comparisons for Trayport fees

[add once complete/non-confidential version approved by CMA]

A1B.3 [Headline added once non-confidential version approved by CMA]

[add once complete/non-confidential version approved by CMA]

Table A1.1 [Table title added once non-confidential version approved by CMA]

[add once complete/non-confidential version approved by CMA]

A2 Summary of Oxera's methodology to assess ICE's incentives to foreclose

A detailed explanation of the analysis underpinning the table above is provided in Oxera, 'Financial Incentives to foreclose', 20 July 2016. The following text summarises the main steps and assumptions.

- A2.1 Potential gains and revenues at risk to ICE have been estimated on a net, rather than gross, revenue basis.
- A2.2 Net revenues better reflect the incremental profits that ICE stands to gain or lose from providing execution and/or clearing services for each trade. Gross revenues do not take into account the revenue-sharing arrangements for coal and the rebates and discounts that ICE offers on its execution and clearing services.
- A2.3 The CMA has accepted that it is appropriate to deduct revenue-sharing arrangements, as these are well established and imply a mechanistic link between additional revenues received by ICE and the 'costs' it must face in compensating partners.⁷³ For the same reasons, it is appropriate to deduct rebates and discounts, which are also well-established market conventions that create a mechanistic link between the revenues received by ICE and the 'costs' that it must face in compensating market makers and liquidity providers—essential partners necessary to attract liquidity away from rival platforms.
- A2.4 The plausible potential gains from foreclosing brokers are calculated by making the conservative assumptions that the following OTC volumes currently cleared at ECC/CME are moved to ICE: 40% coal; and 100% of UK power, TTF, NBP and emissions.
- A2.5 These assumptions can be considered conservative because:
- in the case of coal, CME already has around half of the open interest. Therefore, in the event of broker foreclosure, the majority, if not all, of the OTC volumes would be likely to divert to CME rather than ICE. Our assumption that 40% diverts to ICE is based on ICE's current share of clearing flow;
 - in the case of the other products, it is likely that: i) at least some trades originally executed OTC no longer occur—for example, trades that would have involved a degree of price negotiation; ii) at least some trades remain OTC and are voice-brokered; and iii) at least some trades divert to other exchanges.
- A2.6 The plausible potential gains from foreclosing exchanges are calculated by assuming that ICE gains the trading of the following exchange volumes: 100% of TTF, NBP and emissions; 4% of power and other gas products; and 0% of Nordic power—as accepted by the CMA, Nasdaq is not dependent on Trayport for Nordic power.
- A2.7 These assumptions can be considered conservative because:
- in the case of power and other gas products, 4% is double the share of volumes that Nasdaq has managed to attract in German power in the three years since re-launching its contract in 2012, yet ICE would need to face

⁷³ CMA Provisional Findings Report, Appendix F, p. F4, para. 21.

stronger market participant resistance if it were to engage in foreclosure practices;

- in the case of TTF, NBP and emissions, given the availability of alternative front ends at rival exchanges, ICE is unlikely to be able to attract all liquidity away from its rivals.

A2.8 When the foreclosure of exchanges and brokers are considered separately, the conservative estimates of the revenues at risk, as presented in the table, are calculated as follows:

- in the case of the foreclosure of brokers, the revenues at risk are based on Trayport's 2015 annual profits;
- in the case of the foreclosure of exchanges, the revenues at risk are based on Trayport's 2015 revenues from GV Portal and ETS.

A2.9 In the scenario where ICE forecloses exchanges and brokers simultaneously, the revenues at risk are based on Trayport's 2015 annual profits, and the plausible gains reflect the sum of the potential gains from the broker-foreclosure scenario and the exchange-foreclosure scenarios described above.

A2.10 The estimates of the costs to ICE associated with foreclosure are conservative, in that they do not take into account the risk of retaliation against other parts of ICE's business. As explained in section 3B, an attempt by ICE to misuse its ownership of Trayport to foreclose its rivals puts at risk various existing revenue streams at ICE. For example, traders may shift trading of TTF to PEGAS, switch clearing of coal to CME, or shift trading of NBP elsewhere. The annual revenues at risk from retaliation amount to £[Confidential],⁷⁴ bringing the net effect of a combined foreclosure strategy to £[Confidential]m per year.

⁷⁴ This assumes that ICE loses all its coal revenues and the revenues from its top five traders in NBP, TTF and emissions.

www.oxera.com

Annex 5: Critique of Provisional Findings' Reliance on Parties' Internal Documents

The Provisional Findings (PFs) assert that users are dependent on Trayport, that Trayport is an important facilitator of competition between venues and that there are a number of mechanisms by which Trayport could weaken ICE's trading/clearing competitors in order to reduce competition amongst venues as part of a partial foreclosure strategy. The PFs rely on the Parties' internal documents in this regard (see paras 7.162, 7.163, 7.178 and 8.56).

However, with the benefit of more forensic scrutiny (set out in the table below), it will be seen that the evidence cited does not in fact support these conclusions.

Widespread use of Trayport does not equate to dependency. This is because there are a wide range of other ISVs capable of providing such software and Trayport users could invest in developing alternative connectivity if their current service supplied by Trayport deteriorates in any way.

Trayport is not a facilitator or a key driver of competition amongst venues. Trayport does facilitate trading by providing software to market participants but Trayport does not drive competition and market outcomes by doing this. This is driven by the trading venues and Trayport provides software to these trading venues.

Finally, the partial foreclosure theory involves ICE engaging in 'softer, incremental methods of foreclosure' which are not 'readily identifiable'. The internal document referenced in the PFs to support this assertion (see para 8.50) has been taken wholly out of context. [CONFIDENTIAL]. When taken out of this context the measures described within could not sensibly be applied to a discreet, incremental foreclosure strategy. [CONFIDENTIAL].

Para	Document	Reliance placed on this evidence in the PFs	Critique
ICE competition with exchanges – PFs provisionally conclude there is head to head competition between ICE and other exchanges even where only one incumbent is present in the market.			
7.50	ICE – Conti Power Sales & Marketing Plan (page 2)	ICE has broad ambition to gain additional liquidity, which is important for the potential head-to-head competition. [CONFIDENTIAL]	This is factual and relates only to the competition ICE faces with other exchange venues. It is to be expected that ICE should wish to increase volumes and launch new products. The same would apply to each of ICE's exchange rivals (one such reference can be found in para 7.53). However, in no way does this suggest ICE could use Trayport strategically to achieve these aims against the will of traders or in any way contrary to fair and open competition.
7.57	ICE – SB 14-019 strategic objectives summary (page 7)	In the context of launching new products, [CONFIDENTIAL].	Again this relates only to the competition ICE faces with other exchange venues. In no way does this suggest ICE could use Trayport strategically to achieve these aims against the will of traders or in any

Para	Document	Reliance placed on this evidence in the PFs	Critique
			way contrary to fair and open competition.
ICE competition with brokers – CMA provisionally concludes there is a certain amount of competition between exchange and broker venues.			
7.89 / 7.91	ICE – ICE Endex Business Plan 2015 – 2017 (page 5 and 6)	[CONFIDENTIAL]	[CONFIDENTIAL] Again, however, in no way does this suggest that ICE could use Trayport strategically to achieve these aims against the will of traders or in any way contrary to fair and open competition.
Dependency on Trayport / Why the parties have historically not cooperated¹ - PFs view is that all of ICE's rival trading venues and clearinghouses in the European utilities trading markets are dependent, to some extent, on Trayport to disseminate their prices and offerings to traders.			
7.158	ICE - SB 14-023 Strategic Objectives Annex B (page 10)	Trayport has a strong position in the market and that venues, clearinghouses and traders are dependent on it. Trayport [CONFIDENTIAL]	[CONFIDENTIAL] Venues, clearinghouses and traders all currently use Trayport software to support their respective trading/clearing venues and trading habits but this does not mean that Trayport is the only software provider that could perform this role. The Parties have submitted evidence detailing the number of alternative ISV providers that could potentially perform this role. ² Whilst it does say that Trayport [CONFIDENTIAL] this does not mean that all users are therefore dependent on Trayport. [CONFIDENTIAL] [CONFIDENTIAL]. This does not suggest dependency in the sense of

¹ N.B. paragraphs 6.18 and 6.27 refer to these documents as showing why the parties have historically not cooperated. However, the documents referenced do not in any way show this. Some of them illustrate the fact Trayport viewed ICE as a competitive threat but the explanation underpinning why (regulatory uncertainty etc.) are not well covered here. PFs use this as justification for dismissing the new agreement but they fail to link this to the regulatory environment which explains why historically they have not cooperated but now wish to cooperate, and therefore why it is likely the agreement would have been reached but for the transaction.

²

Para	Document	Reliance placed on this evidence in the PFs	Critique
			there being no competitive threat to, or potential to displace Trayport. Criticism of Trayport's API is not merger specific and any purchaser under the PFs counterfactual scenario would not contemplate opening up Trayport's API. [CONFIDENTIAL]
7.159	ICE - SB 14-019 strategic objectives summary (page 7)	The importance of Trayport when launching a new product, especially since ICE relied less on Trayport to disseminate its products than many of its rivals [CONFIDENTIAL] longer-term objective to [CONFIDENTIAL]	The reference to [CONFIDENTIAL] describes the fact that Trayport is the incumbent software provider for market participants active in certain asset classes. The nature of the aggregated front-end service, and the value to brokers that this represents, drives the usage of Trayport's software. As the current provider, Trayport's cooperation is obviously required to launch new products using its connectivity. But this does not mean Trayport is the only possible provider of such connectivity. [CONFIDENTIAL]
7.160	TRAYPORT – 2014 IR Day Trayport (page 4)	[CONFIDENTIAL]	This is an internal document promoting Trayport's strengths and it is natural for any company to talk up its own business in such a way as this when analysing its own product range. It does not provide any evidence of Trayport's actual ability to drive market outcomes or affect competition in any way.
7.160	TRAYPORT – Business Overview May 2014 (slide 20)	[CONFIDENTIAL]	[CONFIDENTIAL]
7.161	TRAYPORT – ICE Discussion Master Version (page 54)	[CONFIDENTIAL]	[CONFIDENTIAL]. Trayport is providing software which facilitates trading. Trayport is inevitably more attractive to brokers the more users it connects but this does not mean Trayport is able to drive competition between those users. Trayport would equally be less attractive should key

Para	Document	Reliance placed on this evidence in the PFs	Critique
			users chose to desert it. No user is ‘dependent’ on Trayport as many other ISVs can replicate the technology Trayport provides and can do so within a relatively short time frame. ³ [CONFIDENTIAL]
Trayport facilitating competition – PFs find these internal documents are consistent with third party evidence which shows that Trayport has an important role in facilitating competition between trading venues and between clearinghouses. Further, it shows that Trayport’s strength, and the reliance of traders, venues and clearinghouses on it, enabled Trayport to influence competition for execution and clearing and potentially the movement of volumes between market participants. The evidence also shows that Trayport evaluated and used various strategies to defend and support its customers’ businesses and influence competition between them.			
7.165	TRAYPORT - ICE Action Plan Cut 1 (page 5)	Trayport plays an important role in facilitating competition between venues and clearinghouses, and that it is not a passive software provider. [CONFIDENTIAL]	Trayport itself does not (and is not able to) dictate market outcomes. Trayport does not play an important role facilitating competition; rather it facilitates trading through the provision of software. Competition is still driven by the market participants (Trayport’s clients). Trayport provides software to customers to assist them in achieving their aims. [CONFIDENTIAL]
7.166	TRAYPORT – Asset Class Vision and Action Plan (page 2)	[CONFIDENTIAL]	[CONFIDENTIAL]
7.167	TRAYPORT – Asset Class Vision and Action Plan (page 2)	[CONFIDENTIAL]	[CONFIDENTIAL]
7.168	TRAYPORT – Asset Class Vision and Action Plan (page 1)	[CONFIDENTIAL]	[CONFIDENTIAL]
7.169	TRAYPORT – ICE Discussion	[CONFIDENTIAL]	[CONFIDENTIAL]

³ See information provided in response to MQ28, 30, 38 and 39.

Para	Document	Reliance placed on this evidence in the PFs	Critique
	Master Version (page 52 and 53)		
7.170	TRAYPORT - ICE Action Plan Cut 1 (page 6)	Trayport's potential role in facilitating broker trading in oil: [CONFIDENTIAL]	<p>It is difficult to see how the PFs reach this conclusion. Trayport has been trying to establish a presence in the oil market for a number of years and, by its own admission, has failed to gain much traction.</p> <p>[CONFIDENTIAL]</p> <p>Oil is a very good example of Trayport not being able to affect competition or get any material presence in a market. This directly contradicts the PFs in this respect.</p> <p>Trayport does not facilitate competition or drive market outcomes; Trayport provides software which facilitates trading but competition in those markets is very much driven by Trayport's customers.</p>
7.171	TRAYPORT – 2014 IR Day Trayport (page 16)	[CONFIDENTIAL]	<p>Trayport has been trying to establish a presence in the oil market for a number of years and, by its own admission, has failed to gain much traction.</p> <p>[CONFIDENTIAL]. Trayport has been unable to facilitate broker trading (or any trading) in oil.</p> <p>Oil is a very good example of Trayport not being able to affect competition or get any material presence in a market. This directly contradicts the PFs in this respect.</p> <p>Trayport does not facilitate competition or drive market outcomes; Trayport provides software which facilitates trading but competition in those markets is very much driven by Trayport's customers.</p>
7.173	No specific reference	We examined the internal documents relating to the long-running disagreement between	The PFs conclusion here is incorrect. The long running disagreement between ICE and Trayport (and ICE's

Para	Document	Reliance placed on this evidence in the PFs	Critique
		ICE and Trayport over whether ICE [should pay] for a Trayport Clearing Link for clearing of coal, gas, power and emissions trades. We considered this episode informative of Trayport's role in facilitating competition between venues and the mechanisms at its disposal to influence venues' relative competitiveness.	refusal to pay) indicates that Trayport was unable to affect competition and had no influence over ICE during this time. It should be noted that during this disagreement ICE's connectivity to Trayport was not disrupted. Trayport does not drive market outcomes by facilitating competition between venues. Trayport provides software to market participants who compete.
7.174	TRAYPORT – ICE Clear Overview (page 1)	[CONFIDENTIAL]	[CONFIDENTIAL]
7.175	TRAYPORT – 3 Year Biz Plan (page 12)	Some discussion within Trayport of the relevance of its role in facilitating competition between venues in relation to ICE's potential ownership. [CONFIDENTIAL]	Trayport does not drive market outcomes by facilitating competition between venues. Trayport provides software to market participants who compete. [CONFIDENTIAL]
Mechanisms that Trayport could use to adversely affect its rivals – PFs interpret these documents as an overview of a number of strategies and mechanisms that Trayport has at its disposal to affect the competitive position of trading venues and clearinghouses in the European utility space.			
8.50	TRAYPORT - ICE Action Plan Cut 1 (page 9)	[CONFIDENTIAL]	The PFs incorrectly use this as evidence to show how Trayport could adversely affect its rivals in the discreet and undetectable way they claim. [CONFIDENTIAL]
8.51	TRAYPORT - Revenue Budget Presentation 2014 (slide 5)	[CONFIDENTIAL] PFs view is that this document provides some indication of brokers' responsiveness to Trayport's software prices.	CMA agrees that Trayport costs are a very small proportion of brokers' operating costs (8.53). The only evidence in the PFs allegedly in support of Engie's statement shows that brokers reduce the number of screens as a result of price increases – but the number of trades executed through brokers is not affected. Therefore there is simply no evidence presented to demonstrate that higher fees would in fact shift liquidity. [Further, brokers are well accustomed to fee increases (see the 6% escalator) and this has not made them less

Para	Document	Reliance placed on this evidence in the PFs	Critique
			competitive versus exchanges.] Price increases are by their nature easily detectable and could not be used as part of a discreet strategy to foreclose brokers.
Benefits of foreclosure – PFs are that these benefits of foreclosure are likely to be substantial. Moreover, some of these benefits, in particular expanding its presence in existing products and protecting itself from the challenge of rivals, are likely to emerge relatively quickly. Other benefits, such as those relating to new markets and segments, may take some time to emerge, but are likely to accumulate for many years into the future.			
8.82	TRAYPORT - ICE Action Plan Cut 1 (page 8 and 9)	<p>[CONFIDENTIAL]</p> <p>PFs express the concern of the prospect that under ICE’s control Trayport’s focus will change from supporting continued competition between multiple venues, to actively trying to move liquidity towards ICE’s venues at the expense of rival exchanges and brokers, through the use of the various mechanisms discussed in our assessment of its ability to foreclose above.</p>	<p>It is incorrect to say that ICE and Trayport's intentions are directly opposed in this way. [CONFIDENTIAL]. Therefore ICE would not have the incentive (even if it had the ability, which it does not) to change Trayport’s focus to switching trades on exchange. ICE would instead compete for the clearing of OTC trades. As third parties and the PFs have recognised, there are a range of alternative clearing link providers (see para 7.150) to Trayport should ICE consider any strategy to foreclose clearing houses. As such there is no real benefit to ICE in manipulating Trayport to encourage exchange trading in this way (see Oxera's incentives analysis on this point).</p> <p>Additionally, this foreclosure strategy would immediately be detected by brokers who monitor their volumes closely (note para 7.160 where the PFs relies on a Trayport document which says brokers are ‘<i>caught up in retention and chasing volumes</i>’) so Trayport’s core service proposition (venue aggregation and price dissemination) is compromised.</p> <p>In any event, the PFs assessment that ICE will switch Trayport’s focus directly contrasts ICE’s internal documents and public statements which clearly illustrate ICE’s intention to continue to run Trayport as an independent, standalone business. Any other strategy would damage the core</p>

Para	Document	Reliance placed on this evidence in the PFs	Critique
			Trayport service proposition (venue aggregation and dissemination) and therefore the underlying business model.

Annex 6: Partial Foreclosure Mechanisms and Trayport ‘Dependency’ – Critique of Provisional Findings’ Reliance on Third Party Evidence

Summary

The Provisional Findings (PFs) assert that there are a number of mechanisms by which Trayport could weaken ICE’s trading/clearing competitors and reduce competition as part of a partial foreclosure strategy. The PFs rely primarily on third party evidence in this regard (see paras 8.49, 8.55, 8.56 and 8.64). The specific mechanisms of concern are set out in para 8.56 which refers back to a body of third party evidence summarised in paras 8.20 to 8.37.

However, with the benefit of more forensic scrutiny (set out in the table below), it will be seen that the evidence cited does not in fact support the partial foreclosure theory.

It is important to note that, in discounting total foreclosure, the PFs have effectively also discounted the concerns raised by third parties which overwhelmingly relate to overt foreclosure mechanisms which, insofar as they are capable of being effective, would necessarily damage the core Trayport service proposition (venue aggregation and price dissemination) and the underlying business model.

Furthermore, the third party evidence overstates the extent to which Trayport customers are reliant on Trayport. Evidence generally identified during the investigation incorrectly states that customers are dependent on Trayport. As explained below, a number of third party claims are inconsistent with the evidence relied on.

Partial Foreclosure

The partial foreclosure theory involves ICE engaging in ‘softer, incremental methods of foreclosure’ which are not ‘readily identifiable’. In reality, each of the foreclosure mechanisms identified in the PFs are (i) so vague/unsubstantiated as to be meaningless in practice or (ii) related to measures which will necessarily be detectable to Trayport users on the basis that they damage Trayport’s core service proposition (venue aggregation and price dissemination) and are therefore more akin to a total foreclosure strategy. The latter can therefore be discounted on the same basis that the PFs have discounted total foreclosure (para 11.5).

Para	Party	Reliance placed on this evidence in the PFs	Comment
8.20	Financial Institution A	Increasing the price or otherwise reducing the quality of the Trayport offering would diminish the value of Trayport. Therefore, the idea of increasing the pricing and/or favouring ICE products over others would intrinsically diminish the value of Trayport.	The Parties agree entirely with this position. It is also consistent with the findings on total foreclosure in paras 36 and 11.5.

Para	Party	Reliance placed on this evidence in the PFs	Comment
Raising rivals' costs			
8.23	Engie	Trayport's dominant position in the market meant it could leverage higher fees from new brokers in order to shift liquidity from OTC to exchange.	CMA agrees that Trayport costs are a very small proportion of brokers' operating costs (8.53). The only evidence in the PFs allegedly in support of Engie's statement shows that brokers reduce the number of screens as a result of price increases – but the number of trades executed through brokers is not affected. Therefore there is simply no evidence presented to demonstrate that higher fees would in fact shift liquidity. [Further, brokers are well accustomed to fee increases (see the 6% escalator) and this has not made them less competitive versus exchanges.]
	ICAP	Potential for ICE to increase the licensing fee of Trayport paid by brokers and other exchanges, so as to raise the cost of trading on Trayport compared to trading directly on WebICE. This would make executing via ICE relatively cheaper, thereby promoting ICE at the expense of brokers and traders reliant on Trayport.	See above regarding Trayport fees being a small proportion of overall costs. Assuming ICE's rivals have similar trading fees to ICE, Trayport fees would need to increase by at least [CONFIDENTIAL] to produce a [CONFIDENTIAL] increase in cost of trading at rival venues. ¹ The PFs contain no economic evidence to contradict this. In any event, trading on WebICE is free; there is no specific cost for WebICE so it would always be cheaper to go directly to WebICE than to pay separately for Trayport if a user only wanted to trade on ICE.
(a) De-prioritising the development of Trayport			
8.25	ICAP	Potential for ICE to mothball technology development of Trayport while continuing to develop WebICE, effectively forcing traders to use WebICE.	This comment does not make sense in the context of partial foreclosure. If ICE 'mothballed' technology development of Trayport to such an extent that traders would be forced to switch elsewhere then this is most definitely detectable and therefore not possible as part of the partial foreclosure theory as set out in the PFs. This statement represents total foreclosure and can be discounted as the consequences of this

¹ 'Oxera Supporting Economic Analysis: detailed slide pack', slide 21, submitted to the CMA on 20 July 2016

Para	Party	Reliance placed on this evidence in the PFs	Comment
			<p>threaten to damage the core service proposition of Trayport (venue aggregation and price dissemination) and therefore the underlying business model of Trayport.</p> <p>As a further point, there is still no evidence provided in the PFs that any withholding of development of Trayport would force traders to use WebICE as the alternative access route. Oxera's TGW/WebICE switching analysis found that WebICE would be the <u>least likely</u> alternative route to market in the event of a 10% rise in TGW subscription costs.² Therefore even in a total foreclosure scenario, it is simply incorrect to assert that degrading Trayport would effectively force traders to use WebICE. They would be more likely to switch to either voice and/or 'other' ISV access routes.</p>
8.26	Griffin	Concern that future developments currently being considered by Trayport would be halted by ICE because improving the efficiency of the OTC market could damage liquidity on ICE's futures exchanges e.g. credit API, a way of electronically importing credit onto platforms to make the underlying data for the bilateral trading process more accurate by removing manually keyed errors.	<p>ICE acknowledges that some traders will always prefer to trade OTC and the regulatory pressures are likely to mean that substantial volumes will be kept OTC (and also uncleared). However, it is not plausible to suggest that any aspect of the Trayport offering could influence this choice.</p> <p>ICE's intentions have been clearly stated: to operate Trayport independently. This requires Trayport to continue to listen to its users' preferences and produce software that meets their needs.</p> <p>This said, the specific feature mentioned by Griffin is not relevant to other brokers and could easily be resolved by a relatively small increase in headcount.</p>
(b) Delaying the listing of rivals' products on TGW to give ICE first mover advantage			
8.26	[Venues]	Concern about the merged entity's ability to influence the way new products were brought to market in	This is an extremely vague and unsubstantiated concern. The PFs claim to have identified a number of specific

² Oxera Critique of Economic Incentives 'Supporting Economic Analysis: Detailed Slide Pack' (Slide 12)

Para	Party	Reliance placed on this evidence in the PFs	Comment
		ways that would provide an advantage to ICE compared with rivals.	<p>mechanisms of partial foreclosure. However, it is not explained how these mechanisms would not be detected. The reality is they would be detected and thus be akin to full foreclosure on the basis that they damage Trayport's core service proposition (venue aggregation and price dissemination) and therefore undermining Trayport's business model.</p> <p>In launching new products, ICE's rivals will market these to traders. It will be obvious if offerings are not available on Trayport at all or at the expected time. By refusing to list new products, Trayport will be reducing/harming its core venue aggregation service and this would undermine its underlying business model.</p>
8.29	[Clearing Houses]	Concern about the merged entity's ability to influence the way new products were brought to market in ways that would provide an advantage to ICE clearinghouse compared with rivals.	See comment on 8.26.
(c) Using rivals' hard trading data to put them at a competitive disadvantage			
8.32	Engie	ICE owning Trayport would give it access to the data Trayport collected, giving it a potential advantage in the market. Engie gave an example that ICE might use data to develop a unique view of the overall market and that therefore it would hold commercial data on its main competitors which may unduly advantage the merged entity.	<p>This is simply not credible as neither ICE nor Trayport has any legal right to access the underlying trading data for non-support purposes. The data belongs to the users: Trayport/ICE would need the express permission of the user to access and use the data for any other purpose. If ICE were to use third party data in this way it would immediately lose the confidence of its customers who trust ICE to diligently protect confidential information. It would also risk harming ICE's good standing with its regulators and would be a reputational disaster for ICE's entire business.</p> <p>The PFs also effectively ignore the stringent data protection procedures that currently exist at Trayport. It is intended that these procedures would remain in place. A detailed analysis was submitted to the CMA on 29 June 2016 but this is</p>

Para	Party	Reliance placed on this evidence in the PFs	Comment
			ignored in the PFs.
	CME	The nature of information going through Trayport would provide ICE with the ability and incentive, that was not there pre-Merger, [X], or act in some other way that could be damaging for CME's plans.	<p>This is incorrect. The simple fact that the data exists does not provide the ability or the incentive to use it. Pre-merger the data was also 'there' and in principle available to GFI who would have been equally interested in this data. However, GFI did not make any actual or attempted use of this data, which is relevant to the analysis of ICE's ability and incentive.</p> <p>In any event, this statement is not credible as neither ICE nor Trayport has any legal right to access the underlying trading data for non-support purposes. The data belongs to the users: Trayport/ICE would need the express permission of the user to access and use the data for any other purpose. If ICE were to use third party data in this way it would immediately lose the confidence of its customers who trust ICE to diligently protect confidential information. It would also risk harming ICE's good standing with its regulators and would be a reputational disaster for ICE's entire business.</p>
8.36	Griffin / RWE	Contractual provisions in respect of confidentiality might not prevent disclosure of sensitive information, particularly where it would be difficult for the affected party to detect a breach.	<p>The more salient point is that Trayport has had these contractual provisions (and stringent confidentiality procedures in place) for many years: the ability to maintain the confidentiality of customer information is critical to Trayport's continued success.</p> <p>If ICE were to use third party data in this way, ICE itself would lose the confidence of its own customers who trust ICE to diligently protect confidential information. It would risk harming ICE's good standing with its regulators and would be a reputational disaster for ICE's entire business.</p>
(d) Restricting the functionalities of the software offered to ICE's rivals			
8.24	[Exchange]	ICE would diminish the ability to compete or meet regulatory requirements by delaying or	Trayport is contractually required to provide updated software versions when they are available. Trayport's users are

Para	Party	Reliance placed on this evidence in the PFs	Comment
		withholding new software features.	<p>familiar with the regularity of updates and contact they have with Trayport about such matters. They would therefore be able to detect any strategy to delay or withhold advancing Trayport software where it is clearly required. As such, this would not be a 'hard to detect' mechanism as the partial foreclosure theory requires.</p> <p>In any event, Trayport often needs to incentivise users to update its software if they are comfortable with a particular version. Users tend not to want to change the functionality without good cause, as upgrades can involve disruption/cost.</p>
	Nasdaq	Ownership of Trayport could provide ICE with a better technical solution, or, a first-mover advantage in adaptation of systems e.g. if Trayport were to make significant changes in the way exchanges connected or how trades would be reported or orders were routed, it would be very easy for Trayport to create barriers for competitors.	<p>By its very nature, this cannot be a partial foreclosure mechanism. If Trayport were to make 'significant changes in the way exchanges connected or how trades would be reported or orders were routed' then this would fundamentally change how the Trayport software currently functions and would certainly be detectable to users. If it were not possible to connect to other exchanges and/or trades were being routed elsewhere, this would fail to meet the very basics of what customers pay Trayport to provide. Users would not be able to use Trayport to route their trades and would have no alternative but to seek to replace Trayport entirely. This clearly amounts to total foreclosure which can be discounted on the same basis.</p>
8.34	Griffin	Not confident its contract would prevent Trayport from deteriorating its service and that any contractual remedies arising from breach are also of limited value in the absence of an alternative to Trayport.	<p>In order for the partial foreclosure theory to work, ICE would have to engage in 'softer, incremental methods of foreclosure' which are not 'readily identifiable'. In such a scenario, contractual protections are largely irrelevant as the user cannot detect any change in service. If the users are able to detect deterioration in their service, then this is self-evidently more akin to a total foreclosure strategy. As soon as users detect deterioration in their core</p>

Para	Party	Reliance placed on this evidence in the PFs	Comment
			service, this risks damaging the underlying Trayport business model.
	[Exchange]	Existing contractual protections do not cover the foreclosure strategies it envisaged and in any event are not defined in sufficient detail to adequately protect it against such strategies. Trayport's terms and conditions give the Parties sufficient flexibility to disrupt supply on the basis of technical issues. Further, irrespective of the interpretation of contracts, contractual remedies are insufficient to protect against the relevant harm.	<p>A disruption of supply caused by technical issues will immediately be detected by Trayport users. Service disruption is not a subtle form of foreclosure, and depending on the extent of delay, would be closer to full foreclosure which risks damaging Trayport's core service proposition (venue aggregation and price dissemination) and underlying business model.</p> <p>If these are genuine disruptions, Trayport will take all necessary measures to correct them – as currently. If not then users will immediately be able to detect this and, in such a scenario, Trayport's underlying business model is irreparably damaged.</p>
(e) Using 'soft' confidential information to gain a first-move advantage in markets where rivals are launching new products³			
8.37	Powernext	It was common for it to discuss product plans with Trayport a year in advance. It said this arrangement would not be feasible with ICE owning Trayport as the discussions might leak back to ICE, giving it the ability to foresee market changes and launch projects before its competitors.	<p>It is common for exchanges to discuss new product plans with a wide range of market participants before they launch. In para 40 of Appendix D the evidence is clear that traders and brokers are typically the first participants to be made aware of new product launches. As such, this then results in informal sharing of information between other market participants about a particular venue's new products. As such ICE is itself frequently made aware of new product launches before so called 'public announcements' (as was the case for EEX's launch of a non-MTF market).</p> <p>As ICE intends to run Trayport as a</p>
	EEX	Bringing new products to market, or entering new markets, would require telling Trayport months in advance – it suggested there was not sufficient contractual protection for parties to be confident that ICE and Trayport would not share this and	

³ Para 47 of Appendix D refers to ICAP evidence that suggests due to Trayport's closed API strategy Trayport is an unattractive proposition for ICAP to choose Trayport as a software provider for a new product or asset class. This suggests there are alternative software vendors available that venues consider when launching new products, contrary to the provisional finding that market users are dependent on Trayport. It also does not support the provisional finding that Trayport is a driver/facilitator of competition.

Para	Party	Reliance placed on this evidence in the PFs	Comment
		other critical information.	<p>standalone business Trayport would still be available to discuss future product launches and this would be in the best interests of providing venue aggregation and price dissemination.</p> <p>Trayport's involvement in new product launches typically starts once market participants have already been made aware of the proposed launch (para 41 of Appendix D). For standard product launches (i.e. those that do not require development effort on Trayport's part), there is no particular reason for Trayport to be given any information about the launch prior to the formal public announcement.</p> <p>In a more limited number of cases, where specific technical advice is sought by a customer in advance of a public announcement, the proposed launch may be disclosed confidentially to Trayport. Customers trust Trayport to keep the fact of the proposed launch and any related information confidential; as has been explained to the CMA, the ability to protect confidential customer information is core to Trayport's business model and critical for its continued success. However, even in these cases, Trayport would expect the customer also to have engaged market participants (i.e. traders) to gauge the level of likely demand for the proposed new product before taking the decision to proceed with the launch process, including obtaining the requisite regulatory approvals, etc.</p>
(f) Reducing the general service level of the offering to venues and clearinghouses			
8.27	[Exchange]	If the Clearing Link to a particular clearinghouse was disrupted, traders would not switch away from using Clearing Link. Instead, traders would maintain the Clearing Link but switch clearinghouse. The Trayport Clearing Link is therefore critical and, in its view, any disruption to the Clearing Link to a	This statement is contradicted by the PFs elsewhere. In para 7.23 the PFs state there are a number of factors that affect a traders choice of where to clear. Margin is the primary factor and 'at the forefront of a trader's mind', clearing fee is the next most important factor with ease of registering the trade a

Para	Party	Reliance placed on this evidence in the PFs	Comment
		particular clearinghouse has the potential to significantly reduce the volumes of a clearinghouse.	<p>factor, but less persuasive.</p> <p>Therefore the criteria for selecting a clearing house depend predominantly on other factors than Trayport functionality: there is no basis to conclude that users would maintain the Clearing Link but switch clearing house.</p> <p>The PFs accept that the Trayport Clearing Link is most certainly not ‘critical’ but in fact clearing houses are less dependent than brokers/exchanges on Trayport’s Clearing Link, given the availability of alternatives (para 88).</p> <p>In para 51 of Appendix D, CME explains that it is the broker’s choice as to how they wish to submit a trade for clearing on behalf of the trader and there are ‘many ways’ a broker can submit a trade for clearing. This is supported by Griffin who explains that it prefers to use its own direct links to clearing houses (para 57 Appendix D).</p>
	CME	A poor service, such as the clearing links going down much more frequently than they used to, would lead to a drop in the volume of business that would be put through CME products.	A poor service (with clearing links (and any other connectivity) going down with increased regulatory and duration) as suggested here would immediately be detectable to any user and would inevitably frustrate the user experience. This would be more akin to total foreclosure on the basis that it damages the core Trayport service proposition (venue aggregation and price dissemination). It is not possible for this to go undetected and as such can be discounted on the same basis as total foreclosure.
8.28	[Exchange]	It is possible for a service provider, such as Trayport, to bias the choice of clearing venue towards ICE by just tweaking the user interface or workflow on its platform.	This statement is contradicted by the PFs elsewhere. In para 7.23 the PFs state there are a number of factors that affect a traders choice of where to clear. Margin is the primary factor and ‘at the forefront of a trader’s mind’, clearing fee is the next most important factor with ease of registering the trade a factor, but less persuasive.

Para	Party	Reliance placed on this evidence in the PFs	Comment
			Therefore the criteria for selecting a clearing house depend predominantly on other factors than Trayport functionality and as such there is no basis for expecting such partial foreclosure actions to have the substantial effects on downstream competition that the PFs allege. If the tweaks suggested in this paragraph truly are undetectable, then they will not discernibly alter the experience of using Trayport and as such margin and fees will remain the driver of choice of clearing house.
8.35	Not named	Third parties indicated that they did not consider service level obligations in the agreements to offer sufficient protection.	In order for the partial foreclosure theory to work, ICE would have to engage in ‘softer, incremental methods of foreclosure’ which are not ‘readily identifiable’. In such a scenario, contractual protections are largely irrelevant as the user cannot detect any change in service. If the users are able to detect deterioration in their service, then this is self-evidently more akin to a total foreclosure strategy. As soon as users detect deterioration in their core service this risks damaging the underlying Trayport business model.
	Tradition	Their licence agreement only includes obligations on support services for defects/faults and Trayport’s obligation to rectify any critical issues. Any changes requested to the software by Tradition is at the sole discretion of Trayport.	<p>In order for the partial foreclosure theory to work, ICE would have to engage in ‘softer, incremental methods of foreclosure’ which are not ‘readily identifiable’. In such a scenario, contractual protections are largely irrelevant as the user cannot detect any change in service. If the users are able to detect deterioration in their service, then this is self-evidently more akin to a total foreclosure strategy. As soon as users detect deterioration in their core service this risks damaging the underlying Trayport business model.</p> <p>Further, it would not be practical for Trayport to require itself contractually to provide any software amendment proposed by any individual customer. This would be a never-ending task and result in a multitude of differing pieces</p>

Para	Party	Reliance placed on this evidence in the PFs	Comment
			of software which would no longer be easy to update en masse as currently. Trayport will always listen to its users and take on software developments where there is sufficient demand from its user base as a whole.
	Powernext	Their contract would not protect them from quality issues nor entitle them to a suitable remedy because liability was limited and would in any event be insufficient if Trayport's actions cause liquidity to permanently shift to ICE.	<p>In order for the partial foreclosure theory to work, ICE would have to engage in 'softer, incremental methods of foreclosure' which are not 'readily identifiable'. In such a scenario, contractual protections are largely irrelevant as the user cannot detect any change in service. If the users are able to detect deterioration in their service, then this is self-evidently more akin to a total foreclosure strategy. As soon as users detect deterioration in their core service this risks damaging the underlying Trayport business model.</p> <p>Neither Powernext (nor the PFs) articulate how Trayport's actions could cause liquidity to shift permanently to ICE (and the Parties note that a shift could never be said to be 'permanent' anyway).</p>

Dependency on Trayport

The PFs also assert that customers are dependent on Trayport. Again the PFs rely heavily on third party evidence in this regard, particularly evidence from ICE's competitors. The PFs rely on this evidence to support their conclusions but overlook the contradictory nature of such evidence. The examples provided below are examples where claims made by third parties are either inconsistent with the evidence provided by the same third party or inconsistent with other evidence relied on. These examples demonstrate the need for the CMA to thoroughly test third party views, particularly those expressed by competitors to ICE, before drawing inferences.

Para of Hearing Summary ⁴	Party	Reliance placed on this evidence in the PFs	Comment
--------------------------------------	-------	---	---------

⁴ For clarity, these are references to third party hearing summaries stated on the CMA case page, not the PFs

Para of Hearing Summary ⁴	Party	Reliance placed on this evidence in the PFs	Comment
24	CME	‘CME Group said that if market participants were disadvantaged as a result of the merger, traders wouldn't have had any alternative to ICE and Trayport in relation to European energy products. If traders wanted to discipline ICE by not using ICE/Trayport, they would had to go back to trading on voice, which they would be very reluctant to do.’	It is not correct to say there are no alternatives to Trayport. CME themselves admit in paras 3-5, that it has its own matching engine Globex, its own clearing interface ‘ClearPort’ and its own free front-end distribution platform ‘CME Direct’. In addition, traders could use other ISVs such as Trading Technologies to access exchanges and, as admitted by CME, book trades with brokers by telephone.
15	ICAP	It said due to the closed nature of the Trayport API this meant that any trading venue wanting to compete effectively for execution and clearing would need to connect to trader front-end systems via an agreement with Trayport -rather than directly with traders as they can do in the majority of other markets.	It is not correct that exchanges and clearinghouses are dependent on Trayport. As mentioned in Nasdaq’s own submission, Nasdaq is not reliant on Trayport and, in relation to clearing houses, as the CMA recognises in paras 7.148 of the PFs, ‘third parties indicated a number of alternative solutions that are used or could be used to connect clearinghouses to brokers’ back-ends’.