

TOBII/SMARTBOX MERGER INQUIRY

COMPLETED ACQUISITION BY TOBII AB (PUBL) OF SMARTBOX ASSISTIVE TECHNOLOGY LIMITED AND SENSORY SOFTWARE INTERNATIONAL LIMITED

RESPONSE OF TOBII AB (PUBL) TO THE CMA'S PROVISIONAL FINDINGS

A. INTRODUCTION AND EXECUTIVE SUMMARY

1. This is the response of Tobii AB (publ) (“**Tobii**”) to the CMA’s Provisional Findings dated 30 May 2019 (“**PFs**”). Tobii is disappointed with the CMA’s provisional findings. Tobii remains strongly of the view that a dispassionate assessment of the facts reveals the transaction as a merger of two largely complementary businesses in markets where there is effective competition. If allowed to proceed, the transaction would be expected to deliver considerable benefits to disabled people in the form of improved products and services.
2. The CMA has reviewed numerous Tobii Dynavox documents in reaching its provisional findings. It is clear from the record that Tobii did not acquire Smartbox with the intention of harming consumers or foreclosing rivals – Tobii’s strategy documents reveal a business that is delivering against a promise of helping disabled people. Its business is concerned with increasing quality and volume and lowering prices. Tobii’s business strategy is inherently procompetitive and has been for a number of years. As their internal documents show, both Tobii and Smartbox entered into their merger with the express intention of improving the lives of the millions of people around the world that have complex communications disabilities, but which are presently not served by AAC solutions (and so do not have a voice), by ‘giving them a voice’ through developing better and more affordable products at lower prices and increased volumes.
3. In summary, Tobii considers that the CMA’s PFs show that there is not, in fact, a substantial lessening of competition taking place as a consequence of the transaction. Certain CMA findings and observations have not been consistently and fully integrated in the PFs. The findings need to be reconsidered, both for consistency, and to more reasonably and proportionately reflect the CMA’s findings and the facts.
4. Whilst Tobii disagrees with the CMA’s overall provisional finding that the transaction has resulted, or may be expected to result, in a SLC, we agree with the CMA that the transaction will specifically not result in an SLC as a result of:
 - a. Horizontal unilateral effects in AAC software: the CMA provisionally concludes that the merger will not result in an SLC in relation to standalone sales of AAC software, since there is no evidence of any competition concerns.¹ Tobii agrees with this provisional conclusion: as Tobii has informed the CMA throughout its investigation, there many different suppliers of AAC software, the number of which continues to increase, with new apps being introduced on a regular basis.
 - b. Horizontal unilateral effects in AAC solutions based on ‘mid-range’ devices, such as Tobii Dynavox’s ‘Indi’ device: Tobii agrees that competition for solutions can be based either on wrapped tablets, tablets with wraps, or purpose built devices, and that multiple and different

¹ PFs, para. 5.8

competitive software is available whether based on Android, Microsoft's Windows 10 or Apple's iOS operating systems.

- c. Input foreclosure of eye-gaze cameras: Tobii agrees with the CMA's provisional assessment that the merged entity will not have the ability to foreclose competitors' access to Tobii's eye-gaze cameras: there are sufficient competing alternative suppliers of eye gaze cameras used in AAC applications.²
5. Tobii recognises that the relevant geographic market for the supply of AAC solutions is the UK and that the CMA's focus of assessment should be on consumers in the UK. However, it is critically important to consider the Transaction in its proper context, both when considering where there has been a *substantial* lessening of competition and, if an SLC were to be identified, when considering potential remedies. In its further analysis of the Transaction, the CMA must bear in mind the following facts:
- a. The worldwide context. The UK represents a small proportion of the global sales of all market players including Tobii Dynavox and Smartbox. In 2018, the UK accounted for [X] of Tobii Dynavox's global sales of AAC devices. None of its devices, software or peripherals are designed or manufactured in the UK and none are designed specifically for UK consumers. Whilst Smartbox is based in the UK, in 2018 [X] of its sales were in UK. There are many other players operating and providing their products and services in many different countries, meeting the growing recognition of needs, and yet more that operate in some places with the ability to enter other locations if the opportunity arises.³ As a result, innovation incentives for AAC products and also for eye gaze cameras are determined at a global level, and so are unaffected by the Transaction. This effectively removes one potential source of detriment in its entirety from the CMA's considerations.
 - b. The recent, sustained and explosive growth in software downloads to iPads or Android-based devices evidences the increasing importance of mainstream devices as the basis for solutions that meet people's needs. Every software download and every sale of a case with which a tablet may be enclosed (such as but not limited to Tobii's "Speech Case") is evidence of the increasing use of mainstream devices and a diversion from other AAC solutions.⁴
 - c. The CMA has recognised that: (i) mainstream devices have significantly impacted the relevant market for AAC solutions; (ii) that Tobii's Indi product represents [X] of its UK sales; and (iii) the Indi is designed to compete with iPad solutions and is competitively constrained by consumer devices. That recognition is welcome; but the evidence that the competitive impact of mainstream products is only on "the Indi segment" is contrary to the evidentiary record. On the CMA's approach, there is a broadly competitive market segment, which includes the Indi, and a narrower market segment, which does not. The evidence for that boundary is missing. [X].
 - d. The evidence shows that the broader market segment includes software downloaded or installed for use on all software platforms: iOS and Android and Microsoft's Windows 10. Competition exists between wrapped tablets, tablets with wraps and purpose-built devices, represented by

² PFs, para. 7.145.

³ Dialogausili, based in Italy has come to our attention only recently – they supply software and a tablet similar to those of Smartbox <http://www.dialogausili.com/en/product/dpad-tablet-communicator/>. Dialogausili operates transborder – but seem to only be focused on Italy and China at the moment but provides more evidence of how much competition exists in other countries that could easily enter the UK.

⁴ Tobii has submitted evidence to the CMA regarding volumes of Snap and Core First and other software sales.

the Indi. The CMA's position thus appears to be that hardware and software are not, on their own, determinative of the market boundary. Rather, the CMA's position is that the market boundary (between dedicated and non-dedicated AAC solutions) is further defined in relation to both the degree of hardware integration and the level of customer service/support provided with the products sold. Both factors need to be evidenced, preferably with clear evidence from end customers. This is particularly so because: (i) a wide range of different levels of integration are available to consumers adding specially designed wraps, such as Tobii Dynavox's Speech Cases through to readily available and military grade ruggedization; and (ii) tablets have a level of customer support supplied by the manufacturer. To date, the CMA's view that both of these factors sufficiently affect substitutability that they give rise to clearly delineated markets is poorly and inadequately supported by the evidence.

- e. The CMA's concerns about horizontal effects are limited to one segment ('high-end' purpose-built devices with high levels of customer service) of what it defines as the UK market for 'dedicated AAC solutions'. The nature and extent of competition needs to be considered in this high-end segment, where Tobii Dynavox's UK sales of such 'high-end' devices (the I-Series device) [§]. In 2019, Tobii's [§]. This is manifestly a small number of sales and reflects prescribers' and end users' move away from 'high end' devices to either mid-range solutions, or solutions based on consumer tablets.
 - f. When looking at the nature and extent of competition in the market segment the CMA has identified as its primary area of concern (described above), the CMA's own evidence in fact shows that PRC/Liberator, a global player, is Smartbox's closest competitor in the UK (whether measured in terms of customer feedback on expenditure, or in sales volume and value terms). The closeness of competition in the UK will not, therefore, be changed by the transaction. To suggest, therefore, that Tobii and Smartbox are each other's closest competitors ignores the critical fact that (on the CMA's evidence) competitive conditions vary materially by market segment and that, in the primary segment of concern, this is not the case. We have set out the discrepancies in the CMA's analysis and findings below in Section B.
 - g. As regards the CMA's vertical foreclosure concerns, the numbers of third party 'dedicated AAC solutions' sold in the UK that run Grid software and/or use Tobii eye-gaze cameras are equally very low, and on the CMA's case only a proportion of such sales would be lost. This is manifestly also a theoretical and very small effect, if it exists at all.
6. It is therefore clear that, when properly analysed on the basis of all evidence that the CMA has available, and giving that evidence its proper weighting, the CMA should conclude that, on the balance of probabilities, the transaction will not lead to an SLC in any relevant market, whether as a result of horizontal or vertical effects. In the alternative, it is clear that any SLC set out in the PFs – in the narrow segment of the market considered by the CMA – will be of an extremely limited nature, such that prohibition of the transaction (which would require Tobii to divest Smartbox's entire global business) would be disproportionate. In considering potential remedies, the CMA must, therefore, consider the appropriateness of [§] behavioural remedies, which would be effective and proportionate.
7. The remainder of this response is set out as follows:

- a. Section B: observations on the discrepancies in the CMA’s assessment of horizontal unilateral effects and why the transaction will not lead to an SLC in the market for ‘dedicated AAC solutions’ (as defined by the CMA) as a whole or any segment of it.
- b. Section C: observations on the CMA’s assessment of vertical foreclosure and why the Transaction will not lead to foreclosure of either competing suppliers of AAC solutions or of eye-gaze cameras.
- c. Section D: observations on the CMA’s assessment of countervailing factors, in particular efficiencies.
- d. Section E: concerns that Tobii has on the CMA’s approach to both the obtaining and assessing evidence in this case.
- e. Section F: observations on the counterfactual adopted by the CMA.
- f. Section G: conclusions.

B. OBSERVATIONS ON THE CMA’S ASSESSMENT OF HORIZONTAL UNILATERAL EFFECTS

Introductory remarks

8. The CMA provisionally finds that the merger will result in an SLC in a market that it defines as the supply of ‘dedicated AAC solutions’. The CMA acknowledges that its proposed market definition includes a range of highly differentiated products and has considered whether the conditions of competition differ across the different types of dedicated AAC solution. Specifically, the CMA finds that Tobii Dynavox’s Indi devices compete in a discrete segment of the ‘dedicated AAC solutions’ market, in which the competitive constraints from non-dedicated AAC solutions (i.e. AAC solutions based on mainstream tablets) are stronger than in the remainder of the ‘dedicated AAC solutions’ market. Therefore, the CMA considers it unlikely that horizontal unilateral effects would arise in this particular segment and that there is no SLC within the segment in which Tobii Dynavox’s Indi devices are sold.⁵
9. However, given that the CMA’s own position is that competitive conditions within the ‘dedicated AAC solutions’ market differ to such an extent that there is no SLC within a segment of it, there appears to be a material evidence gap which, if not addressed, means it is not possible to find an SLC in relation to the market for ‘dedicated AAC solutions’ as a whole. In particular, the CMA has failed to: (i) clearly define the boundaries of any segments within the market for ‘dedicated AAC solutions’ (beyond separately identifying the Indi); (ii) show how it has considered the relative ‘size’ of those segments, (which is necessary in order to determine whether horizontal concerns, which only apply to certain segments, as per the CMA’s own evidence, are material enough to reach an overall SLC finding); and (iii) consider the overall dynamic and closeness of competition between the parties in each of these segments (which, again, given the CMA’s own position, becomes essential in order to objectively determine whether there may be an SLC in the market overall). Below, we present insights from the CMA’s own analysis and the parties’ revenues and volumes data to highlight the relevant evidence available to the CMA in addressing these gaps.

⁵ PFs; para 6.56.

The CMA’s market shares evidence based on customer responses and volume and value analysis suggests that the parties are not particularly close competitors in the market segments where the CMA considers horizontal effects may arise

10. Table 6-1 in the CMA’s PFs presents the CMA’s analysis of the position of competitors in the market for dedicated AAC solutions in the UK based on data provided by customers regarding their purchases. The position recorded is that Smartbox and PRC/Liberator are, from the perspective of customer expenditure, each-others’ closest competitors, level pegging over time, each with 30-40% of the market by volume over the past 3 years (and therefore accounting for 60-80% of the market between them). Tobii is trailing in 3rd place with a much smaller share and there are a lot of other players with smaller shares. The ‘customer picture’ is, therefore, one of two leading players, in PRC/Liberator and Smartbox, and a number of others competing for 20-40% of the market. As considered by the CMA, since the NHS has a high and significant weight in purchasing decisions (representing approximately 60% of total purchases of AAC solutions in the UK), it is also clear that PRC/Liberator and Smartbox have good reputations with these key purchasers.

Table 6-1 Estimated market shares in the supply of dedicated AAC solutions in the UK based on customer responses, 2016-18, by revenue and volume

	2016		2017		2018	
	(£)	(units)	(£)	(units)	(£)	(units)
Tobii	[10-20%] [3%]	[0-10%] [3%]	[20-30%] [3%]	[10-20%] [3%]	[10-20%] [3%]	[10-20%] [3%]
Smartbox	[50-60%] [3%]	[30-40%] [3%]	[40-50%] [3%]	[30-40%] [3%]	[40-50%] [3%]	[30-40%] [3%]
Liberator	[20-30%] 30% [0-5%] [3%]	[30-40%] [3%]	[20-30%] 30% [5-10%] [3%]	[30-40%] 40% [10-20%] [3%]	[20-30%] 30% [5-10%] [3%]	[30-40%] 40% [10-20%] [3%]
Techcess		20% [0-5%] [3%]		20% [0-5%] [3%]		20% [0-5%] [3%]
Abilia	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]
Inclusive technology	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]
Others	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]	[0-5%] [3%]
Tobii + Smartbox	[60-70%] [3%]	[40-50%] [3%]	[60-70%] [3%]	[40-50%] [3%]	[60-70%] [3%]	[50-60%] [3%]

Source: CMA analysis of customer questionnaire responses

11. Table 6-2 then estimates shares based on volume and value data obtained from competitors. This tells very much the same basic story; that is - Smartbox and PRC/Liberator are each-others’ closest competitors with 60-80% of the market between them.

Table 6-2 Estimated market shares in the supply of dedicated AAC solutions in the UK based on supplier responses, 2016-18, by revenue and volume

	2016		2017		2018	
	(£)	(units)	(£)	(units)	(£)	(units)
Tobii	[0-10%][£]	[0-10%][£]	[10-20%][£]	[10-20%][£]	[10-20%][£]	[20-30%][£]
Smartbox	[50-60%][£]	[50-60%][£]	[40-50%][£]	[50-60%][£]	[40-50%][£]	[40-50%][£]
Liberator	[20-30%][£]	[20-30%][£]	[20-30%][£]	[20-30%][£]	[20-30%][£]	[20-30%][£]
Techcess	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]
Abilia	[£]	[10-20%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]
Inclusive Technology	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]
Therapy Box	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]
Microlink	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]	[0-5%][£]
Tobii and Smartbox	[60-70%][£]	[60-70%][£]	[60-70%][£]	[60-70%][£]	[60-70%][£]	[60-70%][£]

Source: CMA analysis of competitor questionnaire responses

The CMA’s analysis does not properly consider the relative proportion of the parties’ activities in the specific segments where it has raised horizontal concerns

- The CMA has used the parties’ transaction data to calculate the total number of ‘dedicated AAC solutions’ each party has sold in the last three years. However, the CMA has not correctly used the transaction data to assess the relative size of any segment, or trends in these segments. As above, on the CMA’s case, as the horizontal concern only applies to certain segments, this is an essential step in order to determine whether an SLC may arise in any one segment and thus for the market as a whole.
- The CMA asserts that with the introduction of the Indi devices the “*the absolute number of such [I-12 and I-15] devices sold in the UK has remained broadly stable*”,⁶ and presents the number of I-12 and I-15 devices sold in 2017 and 2018 to confirm this finding. However, the CMA fails to consider: (i) [£]; and (ii) the Indi device was launched in the second quarter of 2017. Therefore, a comparison of volumes in 2017 and 2018 simply cannot be used to assess the impact of the introduction of the Indi device. We are, therefore, surprised that the CMA has placed weight on this observation, whilst ignoring the more important (and objectively relevant) facts.
- To assist the CMA, Table 1 presents the absolute number of devices sold by Tobii Dynavox between 2016 and 2019 (updated from previous submissions to include 2019) and shows, [£]. In fact, the absolute number of I-12 and I-15 devices sold has [£]. In terms of volume shares, Tobii Dynavox’s sales of AAC devices accounted for by I-12 and I-15 devices in the UK [£].⁷ Furthermore, sales of Indi devices - the segment in which the CMA itself says horizontal effects do not arise - [£]. Put simply, the segment for which the CMA appears to have the greatest concern regarding horizontal unilateral effects accounts for [£] of Tobii Dynavox’s volumes [£].

Table 1: Tobii Dynavox's sales of ‘dedicated AAC solutions’ (2016-2019)

⁶ PFs; paragraph 5.58.

⁷ Excluding Eyemobile devices for consistency with Tobii Dynavox’s previous submissions (please see “Tobii Dynavox transaction data analysis-Final-STC-18-04-19.pdf” submitted 18 April 2019 for details).

Product Category ⁸	2016	2017	2018	2019 (YTD)	2019 (annualised) ⁹
AAC Devices with built in eye tracking (I-12/I-15)	[X]	[X]	[X]	[X]	[X]
AAC touch devices upper mid-range (I-110)	[X]	[X]	[X]	[X]	[X]
AAC touch devices lower mid-range (Indi/Indi 7)	[X]	[X]	[X]	[X]	[X]
EyeMobile devices when sold in a transaction alongside AAC software ¹⁰ and tablet (Eyemobile Mini/Eyemobile Plus)	[X]	[X]	[X]	[X]	[X]

Source: Economic Insight analysis of Tobii's transaction data (January 1st 2016 to 31st May 2019).

15. This further supports the facts recorded in tables 6-1 and 6-2 that the main competition taking place in the market in the UK is between the two leading players: Smartbox and PRC/ Liberator. In section 6 of the PFs the CMA summarises third parties' views on closeness of competition with reference to a long list of suppliers that were also identified in the responses.¹¹ Again when considered together the evidence shows that there is a consistent picture being presented, one of two leading competitors and a long list of much smaller players.

The CMA has materially overstated the closeness of competition between the parties (and the significance of Tobii as a competitor more broadly in the market for dedicated AAC solutions in the UK) because it has not adequately reflected the differentiated competitive constraints that apply across the key market segments

16. As noted in table 6-2 of its provisional findings the CMA has estimated market shares in the supply of dedicated AAC solutions in the UK, based on information submitted by suppliers. However, in order for the CMA to use this data to assess the closeness of competition between the parties (and thus, the impact of the merger) it is essential to take account of the fact that almost half of Tobii Dynavox's sales volumes reside in a segment of the market in which the CMA itself has determined there to be limited possibility of horizontal unilateral effects arising.

17. For reference, Table 2 presents the CMA's market share estimates by volume for 2018. In the absence of more concrete figures (which are, nevertheless, available to the CMA itself), we have used: (i) the mid-points of the estimated market shares ranges for each competitor; and (ii) the data available on the sales of Tobii Dynavox¹² and Smartbox,¹³ to estimate the underlying sales volumes for each competitor.¹⁴

⁸ Product categories also include discontinued versions of similar products.

⁹ Updated transaction data has been used to calculate the number of devices sold in the period January 1st 2019 to May 31st 2019. In order to derive an annualised figure for 2019 the numbers have been extrapolated to cover the full year.

¹⁰ As defined by the CMA in "Completed acquisition by Tobii AB of Smartbox Assistive Technologies Limited and Sensory Software International Ltd: Provisional findings report", CMA (30 May 2019); paragraph 2.7.

¹¹ P85 et seq. where at least 11 different suppliers are mentioned.

¹² The CMA's estimates of Tobii Dynavox's sales are assumed to be based on the figures presented in Table 2-2.

¹³ The estimates of Smartbox's sales are based on data provided by Smartbox on their product-level sales between 2016 and 2018 on an outside-counsel basis. These exclude the resale of Tobii Dynavox's AAC devices to avoid double-counting.

¹⁴ In particular, we: (i) assumed a market share of 25% for Tobii Dynavox and 45% for Smartbox; (ii) assumed volume sales of [X] for Tobii Dynavox and [X] for Smartbox; (iii) calculated the total market size to be [X]; and (iv) used the mid-points of the estimated market share ranges for each competitor to calculate the underlying sales volumes.

Table 2: Estimated volumes sold by competitors in the supply of ‘dedicated AAC solutions’ (2018)

	Range in Table 6-2	Midpoint	Volume sold	Estimated volume sold
Tobii	[20-30]%	[X]	[X]	[X]
Smartbox	[40-50]%	[X]	[X]	[X]
Liberator	[20-30]%	[X]	[X]	[X]
Techcess	[0-5]%	[X]	[X]	[X]
Abilia	[0-5]%	[X]	[X]	[X]
Inclusive Technology	[0-5]%	[X]	[X]	[X]
Therapy Box	[0-5]%	[X]	[X]	[X]
Microlink	[0-5]%	[X]	[X]	[X]

Source: Economic Insight analysis of the parties’ sales data, and the CMA’s provisional findings

18. Critically, Table 2 above is based on Tobii Dynavox’s total sales of AAC solutions in the UK. Therefore, these figures do not take account of the CMA’s own observation that the conditions of competition vary across different types of dedicated AAC solutions, and significantly, that there are unlikely to be horizontal unilateral effects in the market segment for the Indi. Therefore, given that a large proportion of Tobii Dynavox’s sales in 2018 related to Indi devices, as shown in Table 1 above, the CMA’s market shares severely overestimate: (i) Tobii Dynavox’s significance in the market for dedicated AAC solutions more broadly (as defined by the CMA); (ii) the significance of Smartbox (which sells mainly wrapped tablets), (iii) the closeness of competition between the parties and (iv) underestimates the significance of Jabbla (which does not sell wrapped tablets).
19. In order to highlight this issue, in Table 3, we present the suppliers’ sales volumes based on what we believe to be the relevant figures for Tobii Dynavox, specifically excluding sales where the CMA has determined there to be no horizontal unilateral effects. It is important to note here that, based on the CMA’s definition, a similar adjustment does not need to be applied to the other suppliers in the market. In particular, the CMA’s provisional views indicate that Tobii Dynavox’s Indi (specifically) competes in a discrete segment of its own.
20. The figures in the table show that, when excluding the sales of Tobii Dynavox’s devices which are either (i) Indi devices (i.e. Indi or Indi 7); or (ii) devices not sold with TD care as standard (i.e. solutions built using Indi or Eyemobile devices),¹⁵ Tobii falls from being the second to the third largest player in the market. Importantly, PRC/Liberator, not Tobii Dynavox, is in fact the closest and most significant competitor to Smartbox. This is consistent with the CMA’s other evidence from customers and volumes and value figures in tables 6-1 and 6-2.
21. Furthermore, it should be taken into account that Tobii Dynavox’s sales volumes that fall within the CMA’s market definition - and are within the segments for which it has a horizontal unilateral effects concern - [X].

Table 3: Relevant volumes of devices sold, in the supply of ‘dedicated AAC solutions’

	Total number of ‘dedicated AAC devices’ sold	Number of ‘dedicated AAC devices’ sold	Number of ‘dedicated AAC devices’ sold	Number of ‘dedicated AAC devices’ sold by

¹⁵ Which must be excluded under the CMA’s market definition for dedicated AAC solutions (i.e. because a dedicated solution includes customer support).

		excluding Tobii Dynavox's sales of Indi devices	excluding products which are not sold with TD care as standard (i.e. Indi devices and Eyemobile products)	Tobii Dynavox including built-in eye tracking
Tobii Dynavox (2018) ¹⁶	[X]	[X]	[X]	[X]
Tobii Dynavox (2019 annualised)	[X]	[X]	[X]	[X]
Smartbox	[X]	[X]	[X]	[X]
Liberator	[X]	[X]	[X]	[X]
Techcess	[X]	[X]	[X]	[X]
Abilia	[X]	[X]	[X]	[X]
Inclusive Technology	[X]	[X]	[X]	[X]
Therapy Box	[X]	[X]	[X]	[X]
Microlink	[X]	[X]	[X]	[X]

Source: Economic Insight analysis of the parties' sales data, and the CMA's provisional findings

22. Even if the CMA continues to consider the relevant market to be 'dedicated AAC solutions' as a whole, it is, therefore, unclear how it has taken into account the relative size and trends in the key segments, across which the CMA itself acknowledges that competitive conditions vary significantly in determining if the transaction results in an SLC in the market as a whole.
23. In fact, when evaluated, the evidence indicates that the parties do not compete closely, and in fact, face a more significant competitive constraint from PRC/Liberator. As such, we submit that the CMA's SLC finding for the market for 'dedicated AAC solutions' as a whole is inconsistent with its own evidence and should, therefore, be reconsidered.

The CMA has not adequately assessed the competitive constraints imposed by other manufacturers of 'high end' devices

24. As described above, the CMA understates the competitive significance of both PRC/Liberator and Jabbla/Techcess. Both have well-established product portfolios (in both hardware and software) and well established UK presences. According to the CMA's market share calculations (which are for *all* 'dedicated AAC solutions'),¹⁷ PRC/Liberator [X]. Customers regard PRC/Liberator as being "*consistently highlighted for its strong customer service*" and "*its hardware offering is perceived as strong by most customers, particularly due to its reliability and robustness.*"¹⁸ Techcess is described as having "*some good hardware characteristics and software features*".¹⁹ It is therefore difficult to understand how the CMA can consider that Tobii Dynavox and Smartbox are close competitors and that they do not face effective competition from PRC/Liberator (which has a considerably higher UK share than Tobii Dynavox) and Techcess/Jabbla.

¹⁶ Based on Economic Insight's analysis of Tobii Dynavox's sales data and may, therefore, slightly differ from the CMA's own analysis as presented in Table 2-2.

¹⁷ PFs, Tables 6-1 and 6-2.

¹⁸ PFs, para. 6.14(c).

¹⁹ PFs, para. 6.14(d).

AAC solutions: market definition

25. The CMA has defined a market for ‘dedicated AAC solutions’ which use ‘dedicated AAC hardware’,²⁰ which are either ‘purpose-built’ devices (such as Tobii’s I-Series or Smartbox’s Grid Pad 12) or ‘wrapped tablets’ (such as Tobii’s Eye-Mobile or Smartbox’s Grid Pad 10).²¹ The CMA also identifies what it defines as ‘non-dedicated AAC solutions’ (i.e. solutions based on a mainstream or consumer tablet).²² In the CMA’s view, suppliers of ‘non-dedicated’ AAC solutions exert a much weaker competitive constraint on suppliers of ‘dedicated’ AAC solutions than such suppliers do on each other, although they may impose a stronger competitive constraint on some products supplied by Tobii Dynavox, in particular the Indi.²³
26. The CMA has also referenced ‘mid-range’ devices (such as Tobii Dynavox’s Indi)²⁴ and ‘high-end’ devices (such as Tobii Dynavox’s I-Series).²⁵ It has also referred to both ‘lower mid-range’ and ‘upper mid-range’ devices.²⁶ In this regard, the CMA categorises Tobii Dynavox’s Indi devices as lower mid-range and Tobii Dynavox’s I-110 devices as upper mid-range is I-110. This is considered to reflect the “differentiated” nature of AAC solutions, which is primarily, in the CMA’s view, driven by differences in the hardware on which they are based, software (which provides the actual speech or language capability) being standard across a device operating system, i.e. iOS (Apple), Windows (Microsoft) or Android (Google).²⁷
27. Tobii strongly disagrees with the CMA’s approach to market definition. In its view mainstream devices (in particular the iPad) impose a significant competitive constraint on *all* solutions based on either a purpose-built device or a wrapped tablet or a tablet with a wrap sold separately. That competitive constraint imposed by mainstream tablets is demonstrated across the board with respect to all device types by:
- a. [redacted].
 - b. Tobii Dynavox, which decided to introduce the Indi [redacted] to respond to [redacted] end-users and prescribers choosing solutions based on the iPad, [redacted]. The CMA mischaracterises the introduction of the Indi as a business opportunity to appeal to end users that might otherwise buy a non-dedicated solution.²⁸ Before the Indi existed, Dynavox’s business, and Tobii Dynavox’s business was in supplying “high end” devices and was [redacted] affected by [redacted] sales being substituted for by iPad-based devices. [redacted].
 - c. [redacted]
28. The extent of competition between ‘non-dedicated’ (i.e. mainstream consumer) and ‘dedicated’ AAC solutions is in fact confirmed by evidence contained in the PFs. Although the PFs suggest concluding otherwise, this is also the case for users requiring switches or eye-gaze cameras, who use a wheelchair or who require environmental control functionalities. It is accepted that a

²⁰ PFs, paras 5.10 and 5.76.

²¹ PFs, paras 5.4

²² PFs, para. 5.6

²³ PFs, para. 5.78.

²⁴ PFs, para 2.34.

²⁵ PFs, para 5.60.

²⁶ PFs, para. 5.60

²⁷ Tobii agrees that AAC solutions are highly differentiated in the sense that: (i) the different combinations of hardware, software, peripherals and accessories that can comprise a solution and (ii) the range of end user communication and physical disabilities that must be addressed are very broad so multiple combinations are possible and available.

²⁸ PFs, para. 5.51.

mainstream device will not be suitable for every user.²⁹ However, that is not the correct test in assessing a relevant market, which must assess the marginal customer, not the infra-marginal customer. Specifically, the CMA has not undertaken this assessment. It has also failed to identify, let alone quantify, the “*range of circumstances where a mainstream device could not be substituted for a dedicated device.*”³⁰ It appears that this group of end users is “*relatively small*”,³¹ which would suggest that, for a considerable majority of end-users (and significantly, of the customers currently served by Tobii Dynavox), there is in fact considerable substitution.

29. In the PFs, it is stated that “*many respondents specified that a consumer tablet (used along with AAC software and any required accessories) can be a viable alternative for users who can access the device through touch*”.³² This is confirmed by the evidence of PRC/Liberator and Jabbla that is summarised in the PFs.³³ It is notable that PRC/Liberator sells both tablet-based devices (NOVAchat and Liberator 7) and a hard case for an iPad (ChatWrap), presumably to respond to competition from iPads to its more expensive purpose-built devices.

30. Accordingly, whilst the data used by the CMA to calculate diversion ratios between ‘dedicated’ and ‘non-dedicated’ solutions is unreliable it is unlikely that the extent of diversion from ‘dedicated’ to ‘non-dedicated’ solutions “is likely to be limited” as is asserted by the CMA.³⁴ This is also entirely inconsistent with Tobii Dynavox’s real market experience [§].³⁵

31. It is not surprising that both Smartbox and Tobii Dynavox internal documents would consider the competitive threat of other suppliers of ‘dedicated’ AAC solutions. These are the most visible of their competitors. Because end users can buy both hardware and software components directly from mainstream players and from internet-based suppliers: competitors using mainstream devices are to a significant extent ‘invisible’ to manufacturers of purpose-built devices. Mainstream players do not themselves easily know and cannot assess what type of end user buys their devices. This may explain why, in 2016, Smartbox (which then manufactured only wrapped tablets and not purpose built or high end devices) may have thought that the impact of tablets on high-end devices was limited,³⁶ [§].

32. As a consequence of this experience Tobii Dynavox developed the Indi. [§].³⁷

AAC solutions: competitive effects

33. The CMA has reached a provisional finding that the merger will result in a SLC in the supply of dedicated AAC solutions. It considers that there are, in the UK, only four main suppliers of dedicated AAC solutions (Tobii Dynavox, Smartbox, PRC/Liberator and Techcess/Jabbla), and that Tobii Dynavox and Smartbox were close competitors. It is notable that, on the CMA’s own data, PRC/Liberator (which does not have a comparable ‘mid-range’ product to the Indi, and in the UK sells both wrapped tablets and high-end devices) is not considered to be a close competitor to Smartbox, despite having a more comparable product line and a considerably higher market share

²⁹PFs, para. 5.18.

³⁰PFs, para. 5.18.

³¹PFs, para. 5.20.

³²PFs, para. 5.18.

³³PFs, paras. 5.33 and 5.34.

³⁴PFs, para. 5.32.

³⁵ It is not surprising that Google, Apple and Microsoft do not see themselves as directly competing in the market for AAC solutions by meeting the “specialised needs of users of dedicated AAC solutions”.³⁵ This misses the point: as the PFs recognise, all three are improving the accessibility of devices that run their software, which means that those devices can be and are used as a platform (or as Google puts it, a “framework”) for the delivery of AAC solutions.

³⁶PFs, para. 5.45(a).

³⁷ see Annex 2 letter dated 10th May 2019.

(30-40%) than Tobii Dynavox (10-20%).³⁸ The manner in which the CMA has disregarded the strong competition provided by PRC/Liberator (a major US company that is a global leader in AAC solutions) and [X], is inexplicable.

The CMA has not assessed the competitive effects of the merger on all market segments identified by it, in particular for ‘high end’ devices.

34. The CMA has identified a number of distinct segments of the ‘dedicated AAC solutions’ market, in particular for ‘mid-range’ and ‘high-end’ devices. The CMA has not, with one exception, assessed at all the effects of the merger on each segment. Indeed, it has not even obtained information on, let alone assessed, in which segments the parties’ respective products should be placed and then assessed what (if any) the competitive effects of the merger might be. In a market that (as the CMA finds and accepts) comprises *highly differentiated* products, this is a major failing.
35. The one exception is the ‘mid-range’ segment in which the Indi is positioned. The CMA finds that *“the Indi competes in a discrete segment of the dedicated AAC market in which the competitive constraints from non-dedicated AAC solutions are stronger than in the rest of the dedicated AAC market [such that] we consider it unlikely that horizontal unilateral effects would arise in this particular segment”*.³⁹ Whilst Tobii does not agree that mainstream devices (i.e. ‘non-dedicated AAC solutions’) impose a constraint only on the Indi for the reasons set out in paragraph 27 above, it is clear that the CMA’s provisional finding must be based upon it having found an SLC in another segment (or segments).
36. Although Tobii Dynavox does not endorse this distinction (as Tobii has repeatedly explained, the full range of AAC solutions based on purpose built devices, wrapped tablets and consumer tablets with wraps can meet end-user needs and compete in the same market) we note that until July 2018 (other than the short-lived, and technically and commercially unsuccessful Power Pad device, which was launched in early 2018 and withdrawn months later), Smartbox sold only wrapped tablets, such as its Grid Pad 8 and 10. The PFs record a customer as describing Smartbox’s wrapped tablets as being “really portable tablets” and not purpose-built dedicated devices.⁴⁰
37. To the extent that the CMA considers this distinction, Smartbox did not develop a ‘high end’ device that could compete with Tobii Dynavox’s I-Series devices or comparable products supplied by PRC/Liberator and Jabbla/Techcess. Only from July or August 2018 did Smartbox begin to produce a product – the Grid Pad 12 – that could be categorised as falling within the ‘high-end’ segment. Until that time, PRC/Liberator and Techcess/Jabbla were the only competitors to Tobii Dynavox in the ‘high end’ segment.
38. It would appear that Smartbox also considered that its ‘wrapped tablet’ devices did not compete with high-end purpose-built devices. According to internal documents regarding the development of the Grid Pad and Power Pad devices), it was *“essential for Smartbox to offer [these] devices to compete effectively in the market for dedicated AAC solutions”* and that these devices would occupy a *“segment”* of the AAC solutions market⁴¹ in which it presumably could not compete with its existing wrapped tablet products.⁴²

³⁸ PFs, Tables 6-1 and 6-2.

³⁹ PFs, para. 6.56.

⁴⁰ PFs, para.6.19.

⁴¹ PFs, para. 5.46

⁴² PFs, para. 5.46

39. [§<].

40. The CMA has undertaken no assessment of the size and nature of competition in the high-end segment, including since Smartbox's entry in July/August 2018, immediately prior to the announcement of the merger. This segment is small: Tobii Dynavox's sales of the I-Series in the UK are [§<]. The CMA has also not assessed whether wrapped tablets (such as the Grid Pad 8 or 10) should be categorised as 'mid-range' devices or in a separate category.
41. Wrapped tablets have a similar functionality to the Indi. It is therefore likely that they form part of the same 'mid-range' segment as the Indi. If so, no competition concerns will arise in relation to Smartbox's wrapped tablet products, as this segment is – on the basis of the CMA's PFs (with which Tobii agrees, although not for the same reasons, given its view on market definition) – subject to effective competition from 'non-dedicated AAC solutions', i.e. those based on mainstream, consumer tablets.

The CMA has not obtained market data for the distinct market segments identified by it

42. The market share data on which the CMA relies⁴³ is for *all* 'dedicated AAC solutions' sold in the UK from 2016 to 2018. It therefore includes sales of 'mid-range' devices (such as the Indi), wrapped tablets (such as the Grid Pad 8 and 10) and 'high-end' purpose-built devices (such as the I-Series). A major discrepancy here is that months passed between the CMA's gathering of information and the CMA market definition being crystallised.
43. In particular, the CMA did not (as it accepts⁴⁴) obtain during its Phase 2 investigation information from all NHS hubs on the extent to which mainstream devices are substitutes for either wrapped tablets or purpose-built devices, on the basis that it had asked for similar information in Phase 1.
44. This is a major failing. The extent to which mid-range devices (in particular the Indi) compete with mainstream devices, and that they were introduced as a response to diversion of sales from 'traditional' purpose-built devices (such as Tobii Dynavox's T-Series (which was replaced by the I-Series)) only became clear to the CMA at the hearing⁴⁵ when it considered Tobii's strategy documents and was presented with the full history of the development of the Indi during the CMA's Phase 2 investigation.
45. As a result, it has not presented any market share data for (should it exist) a segment for wrapped tablets, nor for high-end purpose-built devices. It is therefore unable to analyse whether the merger would reduce competition in either segment.

The CMA's calculations of diversion ratios and GUPPIs are unreliable

46. The CMA relies on information obtained from customers to calculate diversion ratios and a GUPPI.⁴⁶ As with the market share data that the CMA has relied upon in the PFs, this is based upon *all* 'dedicated AAC solutions', despite (i) there clearly being a number of different segments of such market, on one of which ('mid-range solutions'), the CMA has ruled out the possibility of an SLC and (ii) Smartbox only having sold wrapped tablets until July 2018, when – shortly before the merger was announced – it started to sell its first (and so far only) purpose-built device, the

⁴³ PFs, Tables 6.1 and 6.2.

⁴⁴ PFs, para. 5.30.

⁴⁵ The CMA had the strategy documents before the hearing but the hearing revealed they had not been properly considered see Panel Member comments at page 4, 18, 26, and 55 of the Transcript.

⁴⁶ PFs, paras. 6.36 to 6.49.

Grid Pad 12. The CMA therefore has not sought to obtain and does not have the data required to calculate diversion ratios, and thus a GUPPI, on either the ‘high end’ segment or a possible segment for wrapped tablets.⁴⁷

47. It is also notable that the number of customers for whom data was available to calculate diversion ratios, whether unweighted (12) or weighted (10) is very small, given the CMA sent questionnaires to 69 customers and received responses from 30,⁴⁸ notwithstanding the assertion (which Tobii is unable to verify) that these customers accounted for “roughly half” of the parties UK sales.⁴⁹ In addition, although the CMA suggests that the questionnaires that it sent to customers were “designed to limit the risk of bias”,⁵⁰ it is demonstrable that the questionnaires were, in fact, biased.
48. As a result of these factors, the CMA findings that Tobii Dynavox and Smartbox are close competitors (and that Tobii Dynavox was Smartbox’s closest competitor) and that Tobii Dynavox would have a “strong incentive to increase price post-merger”⁵¹ are accordingly unsupported by reliable evidence and they can be given no weight.

The CMA’s assessment of price trends is incorrect

49. The CMA asserts that the prices of the parties’ dedicated AAC solutions have remained broadly stable since 2016 and that the volume of ‘high-end dedicated AAC solutions’ sold by Tobii Dynavox has remained broadly stable since the introduction of the Indi.⁵² This is incorrect. Transaction prices have been declining since 2016, as shown in Tobii Dynavox’s submission to the CMA. In addition, the volume of high-end devices sold has been in decline since 2016 and this is forecast to continue, for the reasons set out above.

The CMA’s finding that a “majority” of customers object to the merger is incorrect

50. The CMA relies on a small number of customer responses to conclude that “a majority of customers raised concerns about the merger”: as is clear from Tables 6-3 and 6-4, only 18 out of 69 customers contacted by the CMA (26%) and 18 out of 30 that responded (60%) expressed concerns about the merger. The market in the UK is not large, but sales are in the low thousands. Customers responding to the CMA are not a sufficiently large number to enable the CMA to conclude with any degree of confidence that a “majority” of customers raised concerns: indeed, from the data, only a small minority can positively be described as having expressed a negative view of the merger.
51. The principal customer concerns are stated to be “deterioration of customer service”, “reduction of product range” and “lower incentives for innovation”.⁵³ Each of these is unfounded:
- a. One of the principal reasons for acquiring Smartbox was for Tobii Dynavox [X] to build upon Smartbox’s excellent reputation for customer service. [X].
 - b. [X].

⁴⁷ As Smartbox did not sell a purpose-built product that might be described as ‘high end’ until July 2018, any diversion ratio and related GUPPI can be expected to be negligible.

⁴⁸ PFs, para. 6.40.

⁴⁹ PFs, para. 6.45.

⁵⁰ PFs, para. 6.45.

⁵¹ PFs, para. 6.49.

⁵² PFs, para. 6.48.

⁵³ PFs, para. 6.17.

c. [3].

Conclusion on horizontal unilateral effects

52. Tobii does not agree that there is a distinct market for ‘dedicated AAC solutions’. Nevertheless, even on the CMA’s own case that there is such a market, its provisional finding that the merger will result in an SLC is unfounded and is not supported by credible and reliable evidence.
53. Dedicated AAC solutions are found by the CMA to be *highly differentiated* products. It may, therefore, be appropriate (as the CMA has attempted to do) to identify a number of segments that correspond to the parties’ products. However, in order to find an SLC in the market as a whole, the CMA must identify an SLC in one or more of these segments that in aggregate represent a significant proportion of the overall market. It has not done so and the evidence available to it would suggest that its finding of SLC for the market as a whole is unsubstantiated.
54. To the extent that individual segments exist, the CMA has (correctly) found that there is no likelihood of an SLC in the ‘mid-range’ segment, which represents a significant proportion of the total market for ‘dedicated AAC solutions’. However, the CMA has not undertaken any analysis of a possible SLC in the ‘high end’ segment (which would possibly not involve wrapped tablets) and, should it exist as a distinct segment, a segment for ‘wrapped tablets’. It has not even obtained the evidence necessary for it to undertake an analysis of potential horizontal unilateral effects in such a segment or segments.
55. It has also failed to recognise the very significant complementarity of the parties’ products when assessed from a segment perspective and overstated the closeness of competition between the parties on this basis.
56. For these reasons, the CMA’s provisional finding of an SLC as result of horizontal unilateral effects for AAC solutions is, regardless of the approach taken to market definition, unsupported by consistent and reliable evidence.

C. OBSERVATIONS ON THE CMA’S ASSESSMENT OF VERTICAL FORECLOSURE EFFECTS

Input foreclosure: supply of eye-gaze cameras to suppliers of AAC solutions

57. Tobii agrees with the CMA’s provisional assessment that the merged entity will not have the ability to foreclose competitors’ access to Tobii’s eye-gaze cameras: there are sufficient competing alternative suppliers of eye gaze cameras used in AAC applications.⁵⁴

Input foreclosure: supply of Grid software to suppliers of AAC solutions

58. Tobii strongly disagrees, for the reasons set out below, with the CMA’s provisional finding that it would have the ability and incentive to foreclose rival suppliers of AAC solutions by making their access to Grid 3 software more expensive or difficult. It does, however, agree that the following

⁵⁴ PFs, para. 7.145.

are not credible foreclosure strategies: (a) making Grid 3 more expensive; (b) ceasing to licence Grid 3 to rivals; or (c) making Grid 3 completely incompatible with rivals' hardware.⁵⁵

Input foreclosure is not feasible as PRC/Librator and Jabbla can use alternative software to Grid 3

59. The CMA has made no attempt to assess the extent to which other software is substitutable for Grid. It has also assumed – incorrectly – that the Grid is an indispensable input for supplying AAC solutions (whether based on wrapped tablets or purpose-built devices) in the UK. Had it undertaken a proper and objective analysis, it would have found that PRC and Jabbla both have their own proprietary AAC software: Unity, Essence and LAMP (PRC) and Mind Express (Jabbla). Accordingly, they can easily use this software in place of Grid 3 (as they already do) and can switch away from Grid 3, which, as the CMA records, is installed only on a minority of AAC solutions sold by these competitors in the UK.⁵⁶ The CMA has accordingly proceeded on a false premise that neither PRC/Librator nor Jabbla could use their own, well-regarded software as an alternative to Grid.⁵⁷
60. Whilst Grid 3 is popular with UK customers, customers clearly do purchase AAC solutions from both PRC/Librator and Jabbla that do not have Grid 3. To the extent that their software might be perceived by some customers as having certain weaknesses as compared to Grid 3, PRC/Librator and Jabbla can – and could, as experienced developers of AAC software - easily improve their software offerings to better meet end users' and customers' needs. Equally, any 'user inertia' can only be relevant to an existing user of Grid 3: this can have no relevance to the substantial number of users each year that use an AAC solution for the very first time.
61. Until the merger, Tobii Dynavox did not install Grid 3 on its devices, [§<]. Nevertheless, the CMA considers that Tobii Dynavox was an effective competitor on the UK market for 'dedicated AAC solutions'. This demonstrates that Grid 3 is not an essential input for a supplier of 'dedicated' AAC solutions.

The means by which input foreclosure could be achieved are unrealistic

62. Partial input foreclosure through selling Grid 3 on worse terms to competitors is simply not a credible foreclosure strategy. Firstly, if the retail price of Grid 3 were to be increased it would lead to an immediate reduction in retail sales of Grid 3. This directly contradicts Tobii Dynavox's public commitments to customers and shareholders and contradicts its published strategy. Given that software can be downloaded from the Internet, any increase in the retail price of Grid 3 would need to be implemented at the global level, which would risk losing considerable retail sales globally in order to potentially (on the basis of the CMA's theory of harm) win a very small number of additional sales of dedicated AAC solutions in the UK. This is simply unrealistic. The CMA does not take any account of this loss of retail sales in its analysis.
63. Secondly, the CMA does not identify what increase in the wholesale price of Grid 3 would be necessary in order for PRC/Librator and Jabbla to be forced to increase the price of their AAC solutions, other than that it would need to be 'significant', given that the unit cost of a Grid 3

⁵⁵ PFs, para. 7.12.

⁵⁶ PFs, para. 7.18.

⁵⁷ See PFs, para. 7.2, in which the CMA asked competing suppliers of dedicated AAC solutions, "Is there any other AAC software currently available in the market that you are not currently using but that could provide an alternative to Smartbox's Grid?" (emphasis applied).

software licence represents a very small proportion of the price of an AAC solution based on a purpose-built device. This in itself renders the CMA's theory of harm speculative.

64. Reducing the extent to which Grid 3 'supports' rival hardware is also not a credible foreclosure strategy. The CMA does not identify what level of 'support' is presently provided by Smartbox to other suppliers of dedicated AAC hardware. The theory seems to be that Grid 3 would work less well with competitors' hardware than it does today. However, no evidence is presented as to how this would be achieved and how it would restrict the ability of either PRC/Liberator or Jabbla to compete in the UK market for dedicated AAC solutions. It is therefore difficult to respond to this theory of input foreclosure, other than to note that it is speculative and unsubstantiated.

65. [§].

The CMA's assessment of Tobii Dynavox's incentives to foreclose is flawed

66. The CMA's assessment of Tobii Dynavox's incentive to foreclose is flawed.

67. First, it has based its assessment on a total foreclosure strategy (i.e. not licensing Grid 3 at all to rivals), despite it accepting that such a strategy would not be effective. However, a partial foreclosure strategy is based on increasing the retail *and* wholesale prices, since the difference between wholesale and retail prices is presently small. Increasing the retail price of Grid 3 would lead to lost retail sales, potentially at a significant level. However, the CMA has taken no account of this in its analysis.

68. Second, the CMA accepts that it is unable to calculate diversion ratios "on what customers would do if they could no longer combine the Grid with dedicated AAC hardware from Liberator and Techcess".⁵⁸ It asserts that the diversion ratio to the merged entity's dedicated AAC solutions which offer the Grid "would be significant".⁵⁹ This is a mere assertion. It is also based on a false premise, as customers (such as AAC hubs) can simply download the Grid themselves, from the Internet, thereby 'side-stepping' completely any foreclosure strategy. Therefore, the CMA's reliance on diversion ratios to demonstrate an incentive to foreclose is flawed, and unsubstantiated.

69. Third, the CMA discounts completely the significant reputational damage that a foreclosure strategy would cause. As the CMA observes, end users of AAC solutions are vulnerable, with a range of disabilities. Any attempt by the merged entity to exploit its ownership of Grid 3 to raise prices and deny end users choice of the combination of hardware and software that best meets their needs would receive very wide publicity in the end user community, particularly in the age of widespread social media. The reputations of both Tobii Dynavox and Smartbox that have taken years to be built up would be lost in days, causing considerable damage. The gain of a few extra sales of AAC solutions in the UK (which is what the CMA's theory of harm represents) would not be anywhere near sufficient to compensate for lasting and significant reputational damage. This cannot be easily be dismissed.

70. Fourth, Smartbox already has (according to the CMA's figures) a very significant share of the UK market for 'dedicated AAC solutions': 50-60% in 2017 and 40-50% in 2018, by volume).⁶⁰ It introduced its first purpose-built device (the Grid Pad 12) in 2018, about a month before the merger was announced. It therefore had the ability and incentive to best ensure the commercial success of

⁵⁸ PFs, footnote 166.

⁵⁹ PFs, footnote 166.

⁶⁰ PFs, Table 6-2.

those new products by limiting competition from its existing licensees in the UK (and globally), i.e. PRC/Liberator and Jabbla. It did not do so. There is no evidence that it would do so. Moreover, the CMA record the fact that Smartbox had the intention to be the world's second largest supplier of AAC devices by 2022.⁶¹ It is equally not something that Tobii Dynavox had considered and the CMA has identified no internal document or other evidence to the contrary. Accordingly, the assumption that the addition of Tobii Dynavox's limited UK sales of AAC devices (approximately 100 per year in total of the I-Series and the I-110) would significantly change Smartbox's existing incentives is unsubstantiated and speculative.

In the event of a successful input foreclosure PRC/Liberator and Jabbla would lose a very small number of sales

71. The CMA's theory of partial foreclosure is based on an increase in the price of Grid 3 and that this would cause PRC/Liberator and/or Jabbla to be less competitive, as they would have to increase the prices of their AAC solutions. The CMA has merely assumed that they would have to increase their prices, rather than absorb the relatively small price increase in the wholesale price of the Grid; this is a speculative assumption. Their evidence to the CMA is that they would lose sales if the "Grid is no longer offered as a software option on their dedicated AAC solutions",⁶² i.e. in the event of total foreclosure. There is no evidence as to what might happen in the event of partial foreclosure, particularly in a market for highly differentiated products where customers must take into account a number of possible combinations of different hardware and software options.
72. In any event, even in the case of total foreclosure, the scale of the possible lost sales of PRC/Liberator and Jabbla would, on the CMA's case, be modest: for PRC/Liberator 20-30% and for Jabbla 10-30% of total UK device sales. Whilst Tobii does not have the total number of units involved, it is likely to be negligible given the small number of sales of purpose-built devices in the UK. In the case of partial foreclosure, the number of lost sales will be lower still. This does not amount to a *substantial* lessening of competition, particularly where both companies can still compete with their own software.

Customer foreclosure of competing suppliers of eye-gaze cameras

73. Tobii disagrees strongly with the CMA's provisional finding that it will have the ability and incentive to foreclose competing suppliers of eye-gaze cameras by making Grid 3 incompatible with competing suppliers of eye-gaze cameras.
74. The CMA does not explain at all how Tobii Dynavox could limit the compatibility of Grid 3 with rival eye gaze cameras. It identifies three possible means of achieving this,⁶³ but in no case is it considered whether this is technically feasible, nor the time and cost that would be involved in doing so. This is a major failing on the CMA's part: the means by which incompatibility may be achieved are entirely theoretical and unsubstantiated. As Tobii has explained to the CMA previously, its eye gaze cameras are designed to be compatible with the Windows 10 operating system, not with specific application software, such as Grid. Cameras are not designed to work with specific applications.

⁶¹ PFs, para. 6.31(a).

⁶² PFs, para 7.21 (emphasis added).

⁶³ PFs, para. 7.67.

75. No rival supplier of eye gaze cameras can explain how this foreclosure strategy might be implemented. Their foreclosure concerns appear to be related to Smartbox no longer purchasing eye-gaze cameras. In other words, they saw Smartbox as a supplier of devices (and not as the developer of Grid) as an important route to market. As the CMA has correctly found,⁶⁴ Smartbox is not a significant purchaser of eye gaze cameras on a global basis. Indeed, in the CMA’s vertical effects working paper, the evidence of *three* competing suppliers of eye gaze cameras was that they would *not be foreclosed*, as there were satisfactory alternatives to Grid: it appears that only Eye Tech expressed such concerns, although the reasons for it doing so are unclear.⁶⁵ This is not reflected in the PFs, suggesting that the CMA has not taken an impartial approach to its assessment of the totality of the evidence before it.
76. The CMA has therefore failed to substantiate that Tobii Dynavox would have the ability to foreclose rival suppliers of eye gaze cameras by making their cameras incompatible with Grid.
77. The CMA has not identified any internal document that suggests that, as a result of the merger, Tobii Dynavox intended to foreclose competing suppliers of eye gaze cameras. The pre-existing document relied upon by the CMA⁶⁶ does not do so: [§<].
78. The CMA’s analysis of potential financial incentives to foreclose is insufficient.⁶⁷ There is no empirical assessment of either the critical loss threshold or the extent of switching in the event of competing eye gaze cameras being rendered incompatible with the Grid.
79. The CMA does not explain why Smartbox is regarded as a ‘key catalyser’ for innovation in eye gaze cameras. It seems to be more the case that, when it was no longer able to sell Tobii Dynavox and then SMI cameras, it sought a new partner (Irisbond) as its preferred partner to supply eye gaze cameras for its forthcoming Grid Pad 12 hardware.⁶⁸ In other words, Smartbox’s relationship with Irisbond was driven by Smartbox’s position as a supplier of *hardware* and not as a developer of *software*. It is notable that, notwithstanding its relationship with Irisbond, Smartbox still repeatedly requested (in 2017 and 2018) that Tobii Dynavox supply it with eye gaze cameras. It is also notable that AAC hardware suppliers, including Smartbox and Jabbla, will generally supply eye tracking devices of multiple suppliers, but do not have development relationships with them. It is noted that there is no suggestion that any eye gaze camera supplier has development relationships with other developers of AAC software, such as Jabbla or PRC/Liberator. Therefore, the suggestion that Smartbox is (in its capacity as the developer of Grid) in some way a critical development partner for suppliers of eye gaze cameras for AAC applications is unfounded.

D. OBSERVATIONS ON THE CMA’S ASSESSMENT OF COUNTERVAILING FACTORS

80. The CMA has dismissed the possibility of market entry and expansion and the exercise of countervailing buyer power, as well as the efficiency claims made by Tobii Dynavox. It was wrong to do so.
81. As regards market entry, it is clear that LC Technologies (a well-established competitor in the US, which has its own eye-tracking capability and hardware solutions) has already made plans to enter

⁶⁴ PFs, para. 7.64.

⁶⁵ Vertical effects working paper, paras 124 to 129.

⁶⁶ PFs, para. 7.99.

⁶⁷ PFs, paras. 7-93 – 7.97.

⁶⁸ PFs, para. 7.58.

the UK market through a reseller, Microlink PC.⁶⁹ Entry through resellers is a credible market entry strategy and is used by both Tobii Dynavox and Smartbox, and their competitors, in most countries worldwide. Microlink PC is an established reseller of assistive technology, including AAC solutions and was formerly a reseller of Tobii Dynavox. Whilst the statements of other non-UK suppliers of AAC solutions are noted, it is surprising that they do not see the UK as an attractive market, given its size, the limited use of AAC Solutions to date, the existence of NHS funding, and its clear growth potential.

82. As regards countervailing buyer power, it is clear that the NHS (including through NHS Supply Chain) could exercise significant countervailing buyer power should it choose to do so. For example, the renewal of the EAT Framework Agreement provides the opportunity for the NHS – as the preponderant purchaser of AAC solutions in the UK, as well as their component parts – to collectively exercise considerable buyer power (representing approximately 60% of UK purchases) to obtain significant discounts off list prices.
83. As regards efficiencies, Tobii has provided the CMA with considerable information on the synergies and efficiencies that it expects to achieve as a result of the merger. As it has explained, both Tobii Dynavox and Smartbox face considerable resourcing constraints in relation to R&D. Both have limited financial and human resources, and both have many more R&D projects that they would like to pursue, but cannot due to these constraints; [§]. By combining the parties’ R&D resources and eliminating duplication, they can be deployed much more effectively, leading to R&D projects being pursued that neither could have otherwise pursued, whether at all or in a timely manner. The merger will therefore both accelerate some R&D projects and allow others to be pursued that would not otherwise have been. The assertion that “in principle Tobii should be able to expand or otherwise re-organise its own resources to deliver these projects”⁷⁰ is unfounded. Tobii Dynavox already dedicates very substantial resources to R&D ([§]), but does not have limitless resources.

E. THE CMA’S APPROACH TO OBTAINING AND ASSESSING EVIDENCE IS FUNDAMENTALLY FLAWED

General observations

84. The CMA’s approach to obtaining and analysing evidence is flawed. This means that it does not have the evidence that is necessary for it to make a provisional finding of an SLC on the basis of either horizontal unilateral effects (in relation to ‘dedicated AAC solutions’), input foreclosure (in relation to Smartbox’s Grid software) and customer foreclosure (in relation to eye gaze cameras). In some cases, the CMA has simply not obtained the evidence necessary for it to properly analyse the competitive effects of the merger. Although it has sought to gather information from customers, it has not done so in a fair and objective manner and its analysis and preliminary findings based on such evidence are therefore unsound. In other cases, it has not analysed either factual or documentary evidence in an objective manner and in others it has resorted to relying on assumptions in place of factual or quantitative evidence.

⁶⁹ PFs, para. 8.40(d).

⁷⁰ PFs, para. 8.98.

The CMA's collection of evidence from customers

85. The CMA's procedures for obtaining evidence from third parties, in particular customers, has not been undertaken in a balanced, objective and robust manner. Its requests for information sent to customers (such as NHS hubs) were not prepared in a neutral and unbiased manner. The CMA also failed to collect evidence from end users. As a result, the CMA has failed to collect high quality and robust evidence and the conclusions that it has drawn from the evidence that it has obtained can be given little or no weight in its analysis of the competitive effects of the merger. The reasons for this are set out in more detail below.
86. The CMA used a market questionnaire to collect evidence from the parties' largest customers (e.g. NHS bodies, schools and local authorities). It justified the choice of a market questionnaire over a survey on the grounds that a small number of customers purchase a large number of the parties' products. Whilst such a justification may be valid in the choice of customer evidence collection, a number of difficulties with such an approach have previously been highlighted to the CMA:
- a. The appropriate form of evidence collection method should reflect the nature of the customers in question. Whilst it is true that, for large customers (such as NHS hubs) it is possible to engage them directly, as the CMA has, for the end-user segment, this evidence collection method is impossible.
 - b. Given that the end user segment accounts for [X] of Tobii Dynavox's customers (and that its importance is greater than this, because demand from larger customers is a derived demand), it was erroneous for the CMA to conclude that it did not need to collect, or evaluate, evidence relating to them.
 - c. The CMA's own choice of evidence collection method does not negate the need for it to collect evidence that is both of high-quality and robust.
87. Tobii has previously raised concerns regarding the quality of the evidence collected using the CMA's market questionnaire. In particular:
- a. The questions relating to diversion were not framed in terms of the customer's most recent purchase.
 - b. The market questionnaire was not designed to cover all possibilities.
 - c. The market questionnaire prompted certain options and did not randomise the ordering of options.
 - d. The questions asked prior to the diversion questions had not been framed neutrally.
88. As far as Tobii can ascertain, none of the concerns previously identified by it have been alleviated by the CMA in its consideration of its PFs. In fact, the fourth point is particularly problematic with regards to the CMA's definition of the relevant market and its associated segments.
89. The framing of the CMA's market questionnaire would have created an artificial distinction in the minds of the respondents between 'dedicated AAC solutions' and 'non-dedicated AAC solutions', particularly given that the definition of these purported markets and the segments of the 'dedicated AAC solutions' market has constantly changed throughout the CMA's Phase I and 2 investigations. Therefore, any diversion ratios or limits to substitutability inferred from the data

obtained from respondents to the questionnaire will suffer from serious bias. Specifically, a framing bias would have been created by both: (i) the language used throughout the questionnaire (i.e. questions preceding those relating to diversion referring to ‘dedicated AAC solutions’); and (ii) the ordering of the possible responses to the diversion question (i.e. placing the suppliers of ‘dedicated AAC solutions’ first), and (iii) in not making a consistent distinction between purpose built high end and mid-range devices and wrapped tablets.

90. The CMA has made the following points in response to the concerns expressed by Tobii throughout the Phase 2 investigation:

- a. The CMA has said that, since a large proportion of the merging parties’ products are bought by a small number of large, experienced customers, it was appropriate to approach these customers directly, without the need to resort to sampling or statistical inferences.⁷¹ Whilst the CMA may have made an appropriate choice of engagement for the specific customers it sought to engage, it erroneously ignored those customers who are end-users themselves. Engaging only with large organisations who purchase AAC solutions on behalf of end-users is simply insufficient, particularly when end users purchase AAC solutions themselves in a non-trivial amount.
- b. The CMA states that a detailed questionnaire allowed for ‘more open’ questions and respondents were able to provide more qualitative responses. Specifically, customers were able to highlight factors that limit the substitutability between dedicated and non-dedicated AAC solutions.⁷² The CMA’s position has two key difficulties:
 - i. Assessing limits to substitutability in a market which is characterised by segments facing differing competitive constraints cannot be done on only a qualitative basis, and as such the methodology does not allow the CMA to draw segment boundaries or relative sizes; and
 - ii. such open-ended qualitative responses will be valid only if the questions are carefully ordered and worded so as to avoid framing bias. This was demonstrably not the case as regards the CMA’s market questionnaire.
- c. The CMA asserts that the questionnaire engaged expert buyers from the NHS who purchase “both dedicated and non-dedicated AAC solutions”. Thus the CMA further asserts, that it is unlikely that any bias could be introduced through wording or ordering in the questionnaire.⁷³ To the contrary, considering that NHS bodies purchase a wide range of AAC products from Tobii Dynavox and only some of these would be considered by the CMA to be ‘dedicated AAC solutions’, no such distinction between ‘dedicated’ and ‘non-dedicated’ would be apparent in their immediate frame of reference, without prompting by the CMA. For instance Tobii Dynavox’s transaction data shows that NHS hubs purchase (i) AAC devices; (ii) eye tracking peripherals - importantly some with and some without (a) tablets, (b) AAC software, or (c) TD care included in the purchase; and (iii) Speech Cases to use with Apple’s iPad. It is therefore extremely unlikely that NHS hubs systematically consider there to be a clear-cut distinction between the CMA’s definition of ‘dedicated’ and ‘non-dedicated’ with regards to either AAC devices or solutions.

⁷¹ PFs, para. 5.27.

⁷² PFs, para. 5.28.

⁷³ PFs, para. 5.29.

- d. The CMA claims questions which preceded the diversion question were general questions on purchasing and were framed neutrally.⁷⁴ It is not understood how this can be the case when the questions regarding purchasing specifically included the term ‘dedicated AAC solutions’, thus prompting a distinction from the outset.
 - e. The CMA considers the respondents to its market questionnaire were sophisticated to such a high degree that the ordering of alternatives in the diversion questions would have had little to no chance of introducing a bias. This argument is completely unfounded and lacks any credibility. It must be highlighted that the CMA placed the respective merging parties ‘first’ on a narrow list of prompted alternatives, counter to all recognised good practice.
 - f. Furthermore, the CMA has not provided a rationale for including the term ‘tablet’ in brackets as an answer to the diversion question,⁷⁵ nor for the justification of not specifying any ‘consumer tablet’ brands.
91. In summary, the CMA’s assertion that any bias was minimal, or was mitigated by the nature of the respondents being interviewed, or that the CMA could somehow judge for itself that the people it engaged with had not been subconsciously biased, is simply not credible. These are serious errors, the likes of which would result in evidence not being relied upon to inform any serious policy decision, let alone a Phase 2 merger investigation. As such, it plainly remains the case that the CMA’s diversion ratios, and resultant GUPPI analysis, are unusable.
92. The approach taken by the CMA to its evidence gathering also needs to be seen in the context of its view that the market for ‘dedicated AAC solutions’ is characterised by highly differentiated devices and that competitive conditions vary significantly across key market segments (with an SLC only arising in certain segments of the market). Crucially, with such market nuances customer evidence collection must reflect the need to define and assess the size of any segments. Instead the CMA has considered all ‘dedicated AAC solutions’ together throughout its customer evidence collection. There was no attempt to identify, let alone define, any segments. By the framing the questions using the definition it sought to test the CMA has prevented any distinctions or segments in the market from being identified ‘naturally’.

The CMA has not properly weighted the available evidence

93. An end-user survey was also conducted on behalf of Tobii Dynavox to assess substitutability amongst individuals who purchased AAC solutions directly from Tobii. The CMA has placed no weight on the results of this survey, primarily for the following reasons: (i) the CMA typically places less weight on surveys conducted via online panels; (ii) the sample size falls short of the CMA’s requirements; (iii) a high number of respondents had purchased Tobii Dynavox products; and (iv) respondents could choose multiple options for the diversion questions, with no allocation for expenditure.
94. Given that (i) end users account for a significant part of Tobii Dynavox’s customer base, and the demand of larger organisations is derived from their needs; and (ii) the CMA’s own evidence collection is demonstrably fundamentally flawed, it is clear that the CMA has grossly misjudged the appropriate weight that should be given to each of the customer engagements.

⁷⁴ PFs, para. 5.30.

⁷⁵ PFs, para. 5.30.

95. With regards to the survey conducted on behalf of Tobii Dynavox, the survey questions were designed to collect the highest quality results possible, within the bounds of the limitations of the survey. Unfortunately, given the small pool of end users that would comprise the group of potential respondents, it was not possible for Tobii Dynavox to simultaneously meet all of the CMA's best practice criteria, as was also the case for the CMA's own evidence collection. In short, the unique features of this market mean there are inherent trade-offs, which should be – but have not been – recognised by the CMA.
96. As such, whilst there may be a degree of concern over the robustness of the findings of this survey, not nearly enough evidence has been presented by the CMA to disregard the results in their totality (especially in comparison with the extremely low-quality bar the CMA has applied to its own market questionnaire). In addition, the CMA has put forward no specific argument for ignoring the behaviour of individuals who purchase directly from Tobii Dynavox and represent [redacted] of its UK sales.
97. Whilst limitations that are inherent in the market will have prevented both Tobii Dynavox and the CMA from adhering completely to the CMA's own best practice guidelines, the CMA must consider the contrasting design of Tobii Dynavox's survey and its own market questionnaire in light of such limitations, and the degree to which the quality of the results allows the CMA to address the issues of defining the market and any SLC that may exist within it. In particular, the CMA must consider that Tobii Dynavox's end-user survey had a more robust design in terms of (i) collecting evidence without a framing bias, to allow limits to substitutability or segments to fall out naturally; and (ii) collecting evidence in such a way that the relative size of such distinctions can be assessed.

F. OBSERVATIONS ON THE CMA'S COUNTERFACTUAL

Smartbox's future performance absent the merger

98. The CMA's provisional finding is that Smartbox would have continued as an independent competitor and that it would have been able to continue operating as it had done prior to the merger. This finding is to a significant extent based upon the CMA's assessment of internal Smartbox documents and on a 'stress test' of a January 2019 business plan undertaken by the Monitoring Trustee; none of these documents have been disclosed to Tobii. Accordingly, Tobii is unable to make any substantive comments on their content or the CMA's analysis of it. This represents a major procedural failing on the CMA's part and gives rise to substantive unfairness, for the reasons set out above.
99. [redacted].
100. In addition, Tobii is extremely concerned that the CMA requested the Monitoring Trustee (which was – as the CMA records in the PFs⁷⁶ - appointed to monitor compliance with the Interim Order and the Unwinding Order) to undertake – at Tobii's expense – a financial analysis that appears to have nothing to do with monitoring compliance and was intended to be used to gather information for the CMA's investigation. This is wholly improper: if the CMA wished for such an analysis to be undertaken, it should have used its own, not inconsiderable resources to do so.

⁷⁶ PFs, footnote 90.

The reseller and distribution agreements

101. The CMA's provisional finding that Tobii Dynavox and Smartbox would not, absent the merger, have entered into reciprocal reseller and distribution agreements is noted. Tobii strongly disagrees with the CMA. The reasons for this are set out in Tobii's earlier Phase 2 submissions and are not repeated here.

102. However, [REDACTED].

G. CONCLUSIONS

103. The CMA's provisional conclusion that the Transaction will result in an SLC is flawed, for the following principal reasons:

- a. The CMA's approach to the obtaining evidence is fundamentally flawed, and its subsequent assessment of the evidence has not been undertaken in a neutral and objective manner, which renders each of its findings of an SLC unsafe.
- b. The CMA has failed to disclose to Tobii (whether at all or under confidentiality restrictions, such as a 'confidentiality ring') relevant evidence on which it bases its provisional findings, including (but not limited to) Smartbox internal documents and the responses to requests for information sent to third parties (in particular customers), which makes it impossible for Tobii to assess both the correctness of the CMA's interpretation and assessment of that evidence.
- c. Whilst the CMA is correct in finding that there will be no SLC as a result of horizontal unilateral effects in relation to 'mid-range' AAC solutions the CMA's position appears to be that hardware and software are not on their own determinative of the market boundary. The CMA's position is that the market boundary is defined with relation to both the *degree of hardware integration* and the *level of customer service/support* provided with the products sold. Both factors need to be evidenced, particularly so because levels of integration are available to consumers adding specially designed wraps such as Tobii's Speech Cases and military grade ruggedization, and because tablets have a level of customer support supplied by the manufacturer.
- d. The CMA's concerns about horizontal effects are limited to one segment ('high-end' purpose-built devices with high levels of customer service) of what it defines as the UK market for 'dedicated AAC solutions'. The nature and extent of competition then needs to be analysed in this high end where Tobii Dynavox's UK sales of such 'high-end' devices (the I-Series) have been in substantial and persistent decline (both in unit sales and a proportion of total device sales) since 2016. In 2019, Tobii Dynavox's sales are projected to be [REDACTED]. This is manifestly a small number of sales and reflects prescribers' and end users' move away from 'high end' devices to either mid-range solutions or solutions based on consumer tablets.
- e. When looking at the nature and extent of competition in the market the CMA has identified, PRC/Liberator, a global player, is Smartbox's closest competitor, whether from the evidence of customer feedback, or in volume and value terms. This is clear from the data in the CMA's PFs. The closeness of competition will not be changed by the transaction. To suggest that the transaction reduces competition between Tobii Dynavox and Smartbox

who are not the two closest competitors in the market is manifestly incorrect in the circumstances given the facts and the CMA's own assessments of the evidence.

- f. As regards the CMA's vertical foreclosure concerns, the numbers of third party 'dedicated AAC solutions' sold in the UK that run Grid software and/or use Tobii eye-gaze cameras are equally very low and on the CMA's case only a proportion of such sales would be lost. This is manifestly also a theoretical and very small effect, if at all.

104. It is therefore clear that, when properly analysed on the basis of all evidence that the CMA has available to it, and giving that evidence its proper weighting, the CMA should conclude that, on the balance of probabilities, the Transaction will not lead to an SLC on any relevant market, whether as a result of horizontal or vertical effects. In the alternative, it is clear that any SLC set out in the FPs that the CMA might be able to substantiate will be of an extremely limited nature, such that prohibition of the Transaction (which would require Tobii to divest Smartbox's entire global business) would be disproportionate. In considering potential remedies, the CMA must therefore consider the appropriateness of either limited divestments and/or behavioural remedies, which would be effective and proportionate.