

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 ISSUES STATEMENT

A. INTRODUCTION AND EXECUTIVE SUMMARY

1. This is the response of Tobii AB (publ) (“**Tobii**”) to the CMA’s Issues Statement dated 26 February 2019.
2. Tobii’s Initial Submission (dated 1 March 2019) contained detailed submissions on why its completed acquisition of Smartbox Assistive Technology Limited (“**SATL**”) and Sensory Software International Limited (“**SSIL**”) (together, “**Smartbox**”) (“**the Transaction**”) has not and will not result in a substantial lessening of competition (“**SLC**”) in any relevant market. Therefore, Tobii will not, in this response, repeat in detail points that it has already made in its Initial Submission. It will, in this response, highlight the key reasons why the Transaction will not result in an SLC, identify some further reasons why this is the case and provide some further evidence on these matters.
3. In summary:

a. *The Transaction is a merger of largely complementary businesses*

Tobii Dynavox (the augmentative and assisted communication (“**AAC**”) business of the Tobii group) and Smartbox had essentially complementary businesses: Tobii’s rationale for the Transaction was to combine the parties’ respective skills and expertise to complete Tobii Dynavox’s AAC portfolio and to enable the merged business to invest substantially in new products (hardware and software) that will better meet the needs of people with speech, language and communications disabilities.

The Transaction is not about acquiring market power, increasing prices, reducing customer choice and reducing innovation, none of which will result from the Transaction.

b. *The parties were not close competitors*

Tobii Dynavox had particular strengths in AAC hardware (including eye-tracking), but its AAC software offering [REDACTED].

By contrast, Smartbox had particular strengths in AAC software, [REDACTED].

Accordingly, the parties were not close competitors in either AAC hardware, AAC software or AAC solutions.

- c. *The parties face strong competition from AAC solutions using mainstream consumer devices*

AAC software is the same regardless of whether it is installed on a mainstream consumer device or a purpose-built device.

Increasingly, AAC solutions are being provided by mainstream consumer devices, including tablets and smartphones that run the Apple iOS, Windows or Android operating systems. The introduction of the Apple iPad in 2011 was a game-changer, with many users of previously purpose-built AAC devices quickly switching to tablets on which communication apps can be installed.

The accessibility features of tablets, including touch screens and eye-tracking (whether through integrated systems or a peripheral device) have improved significantly and will continue to do so. Tablets and other mainstream devices are therefore a viable platform for delivering AAC solutions, even for end-users with very complex speech, language and communications disabilities.

- d. *Tobii Dynavox will continue to face strong competition from AAC solutions using mainstream consumer devices and purpose-built devices*

Following completion of the Transaction, Tobii Dynavox will continue to face effective competition in the supply of AAC solutions in the UK from a wide range of solutions delivered using mainstream consumer devices on which AAC applications can be installed (in some cases with additional peripherals or cases to provide protection against damage), as well as from several strong providers of solutions based on purpose-built devices, in particular PRC and Jabbla, both of which have competitive hardware and software offerings.

It therefore follows that ‘static’ evidence on competitive constraints (in particular, market shares, even if properly calculated by the CMA, which it is not accepted is the case) relating specifically to the UK must be treated with care, since they are unlikely to be informative of competitive constraints.

In addition, barriers to entry are low and there are a number of other providers of AAC solutions active in other countries (in particular the US, the largest national market for

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AAC solutions), which can quickly and easily expand their operations to the UK. Due to their overall size and technical sophistication, these companies would impose a substantial competitive constraint on the merged entity and other suppliers in the UK.

e. *There is no risk of either input or customer foreclosure*

There is no risk of input foreclosure: not only has Tobii Dynavox publicly committed to continue licensing Smartbox's Grid 3 software and supplying its eye-gaze cameras to third party competitors, competitors cannot be foreclosed as they have viable alternatives for both software (including software that they have developed themselves) and eye-gaze cameras.

Equally, there is no risk of customer foreclosure of competing eye-gaze camera suppliers should Smartbox in future use only Tobii eye-gaze cameras: it represents [X] of global demand for eye-gaze cameras, for which demand is driven by other applications, in particular in the consumer electronics sector (e.g., for laptops, tablets, gaming and augmented or virtual reality devices), automotive sector and for other specialist applications.

f. *The Transaction will enable efficiencies and customer benefits to be achieved*

The Transaction will permit the parties to combine their respective R&D expertise, people and financial resources and to remove unnecessary duplication. Tobii Dynavox also intends to increase its R&D budget as compared to the pre-merger situation. This will enable the parties to use their R&D resources more efficiently and effectively than either party could do alone, thereby facilitating the development of improved and new devices and software, including for currently underserved disabilities such as aphasia and autism. Thus, rather than limiting innovation (as some appear to have suggested), the Transaction will enhance it.

The Transaction will also enable the achievement of other efficiencies, including product design and procurement savings. Tobii Dynavox has a world-class product design and sourcing capability, designing its products in Sweden and the United States to achieve the lowest possible bill of materials and having them manufactured by suppliers in South East Asia at the lowest possible cost. (By contrast, Smartbox is a small producer of devices, which have high product costs and high manufacturing costs.) This is an approach that is common to many significant producers of consumer electronics devices (such as Apple and Microsoft), such as PCs, laptops, tablets and smartphones. This reduces product and manufacturing costs and allows companies to

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operate more efficiently and to adapt and improve their products more quickly. The post-merger business and its customers will benefit- with better products being provided at lower prices.

By vertically-integrating Smartbox's hardware with Tobii Dynavox's eye-gaze cameras, the Transaction will also generate efficiencies by the elimination of double-marginalisation.

These efficiencies are merger-specific, likely to be achieved, timely and substantial: they could not be achieved absent the Transaction and Tobii Dynavox has clear plans to implement this new R&D strategy as soon as it can integrate Smartbox.

4. It is therefore submitted that the Transaction is pro-competitive and in the interests of UK customers and consumers, including those that prescribe, fund and, most importantly, use AAC solutions.

### **B. FRAME OF REFERENCE**

#### **The key focus of the CMA's competitive assessment should be on consumers in the UK**

5. Tobii agrees with the CMA that the key focus of the CMA's investigation should be on whether the Transaction will have negative effects for consumers in the UK,<sup>1</sup> i.e. those people who have disabilities (whether a congenital condition or acquired at birth, or as the result of an accident or degenerative condition)<sup>2</sup> that prevent them from communicating effectively.
6. Properly analysed, the Transaction will not have a negative effect on consumers in the UK, whether end-users of AAC technology or those that prescribe, recommend or fund its provision. There will remain strong competition in the supply of AAC solutions to UK end users, whether they use AAC software that is downloaded on to a consumer device (which may also use an access device, such as an eye-gaze camera), or a solution that combines a purpose-built device with AAC software (and in some cases, but by no means all, also an access device).

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<sup>1</sup> Issues Statement, paras 14 and 15.

<sup>2</sup> Whilst there is a wide range of disabilities that may or, in some cases will, result in a complex speech, language or other communication need that would benefit from AAC, the most common include: Alzheimer's/dementia, Parkinson's disease, autistic spectrum disorder, learning disabilities, stroke, cerebral palsy, head or brain injury, profound and multiple learning disabilities, motor neurone disease, Prader-Willi, Huntington's disease, William's syndrome, multiple sclerosis, muscular dystrophy, locked-in syndrome, myasthenia gravis, Rett syndrome and Angelman's syndrome: see Creer et al, *Prevalence of people who could benefit from augmentative and alternative communication (AAC) in the UK: determining the need* (2016) Int J Lang Commun Disord 1 (enclosed as **Annex IS.1**).

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7. The markets for ‘dedicated AAC hardware’ (should it exist), ‘AAC software’ and eye-gaze cameras are all global in scope, as the CMA recognises.<sup>3</sup> The UK represents approximately 5% of total current worldwide demand for AAC solutions. Therefore, the key competitive drivers for research and development into purpose-built AAC devices and software occur at the global level, in particular in the United States, which accounts for approximately 15% of total current worldwide demand for AAC solutions.
8. [X].
9. As Smartbox was a very small player in the global markets for purpose-built AAC hardware and AAC software, and was almost entirely absent from the US market (which drives innovation globally), it did not exercise a competitive constraint on these markets. As innovation takes place at the global level, the Transaction does not have any negative effect on the interests of UK consumers in terms of product innovation.

### **Consumer tablets and other mainstream electronic devices must be within the CMA’s frame of reference**

10. Tobii remains concerned that the CMA has not fully understood, and has not taken steps to obtain evidence on, the extent to which mainstream electronic devices (including, but not limited to, consumer tablets and smartphones) constitute an alternative platform (to purpose-built devices or adapted consumer tablets) for the delivery of AAC solutions.
11. In the Issues Statement, the CMA indicates that it intends to assess the effect of the Transaction on competition using a frame of reference that is limited to ‘dedicated AAC solutions’.<sup>4</sup> The term ‘dedicated AAC solutions’ is not defined in the Issues Statement, but (according to the Phase I decision) are “high-tech solutions developed for the primary purpose of meeting the communication needs of those with complex AAC needs and comprise of four key components: (i) AAC software, (ii) dedicated AAC hardware, (iii) access methods [such as an eye-gaze camera<sup>5</sup>] and (iv) customer support and training”.<sup>6</sup>
12. The CMA therefore expressly acknowledges in the Issues Statement that it does not intend, in its assessment of the competitive effects of the Transaction, to take account of (i) the use of

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<sup>3</sup> Issues Statement, para 11.

<sup>4</sup> Issues Statement, paras 10 – 14.

<sup>5</sup> An eye-gaze camera is only one of several methods by which a user who (due to disability) cannot manually control a device (using a keyboard, mouse or touch screen) can access an AAC device (or indeed any consumer electronic device). Other forms of access devices include switches, joysticks and head-mounted mice.

<sup>6</sup> Phase I Decision, para. 3.

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mainstream consumer electronics devices (such as tablets and smartphones) that support AAC solutions, (ii) assistive or augmentative software (such as Proloquo2Go or Avaz) that uses consumer tablets or (iii) the built-in accessibility and communication features of Microsoft Windows and Apple iOS.<sup>7</sup>

13. The CMA states that it has taken this approach on the basis of demand-side considerations. According to the Issues Statement, mainstream consumer devices and assistive software that is available on them are not substitutes for ‘dedicated’ devices and software, as differences in the functionality and features of consumer devices means that they are not suitable for those users with ‘more complex communications needs’.<sup>8</sup> It is notable that the CMA has made no attempt to define those needs.
14. The CMA’s approach is incorrect. End-users (who drive demand, whether directly or indirectly) wish for a device that enables them to communicate effectively. As in the population as a whole, users of AAC solutions wish to be able to communicate not only through speech, but also in non-voice, electronic ways. This will include email, SMS text and similar apps (such as WhatsApp), the internet and a wide range of social media platforms. Voice-based communication is thus only a small part of AAC technology. Many users will be able to use a touch-screen device; for others, unable to use a touch screen, keyboard or mouse (whether at all or sufficiently quickly for communication to be effective), this will require an access solution, of which eye-tracking is only one.
15. The software used on all devices (whether consumer tablets, mid-range devices or devices that meet the regulatory requirements for medical devices) is the same; thus, for example, Smartbox’s Grid software can be used on devices that run either the Apple iOS or Microsoft Windows operating systems. This means that end-users are agnostic to the device on which their AAC solution is delivered. In many cases, this solution will be a consumer tablet, sometimes with additional peripherals and accessories. Thus, Proloquo2Go is the leading AAC software globally, even though it is only available for download on Apple iOS devices.
16. As Tobii set out in its Initial Submission, AAC solutions provided by running AAC software on mainstream consumer devices (such as tablets and smartphones) are a viable alternative to solutions (which the CMA refers to as ‘dedicated AAC solutions’) delivered using purpose-built devices (which the CMA refers to a ‘dedicated AAC hardware’).<sup>9</sup> In summary:

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<sup>7</sup> Issues Statement, para. 14.

<sup>8</sup> Issues Statement, para. 14.

<sup>9</sup> Tobii Initial Submission (1 March 2019), paras 28 to 35 and 47 to 56.

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- a. Mainstream devices (including consumer and industrial tablets) have a wide range of in-built assistive communication technology and features, including touch screen access, eye-tracking software and speakers. With on-going technological development (driven by the mainstream mass-market and led by ‘technology giants’ such as Apple, Microsoft, Google, Samsung and Huawei), these features will become more prevalent and their functionality and performance will continue to improve.
- b. External peripherals and accessories can easily be added to a consumer tablet, including standalone eye-tracking devices, joysticks and switches. This is also the case for what the CMA describes as ‘dedicated AAC solutions’: for example, both Jabbla and Smartbox offer a range of optional eye-tracking peripherals for their hardware, which are not physically integrated into the device.
- c. AAC software can be downloaded on to a consumer device, in exactly the same way as it can be downloaded on to a ‘dedicated AAC solution’ (the device element of which is itself built around what is essentially a tablet computer): the software is the same. Thus, AssistiveWare’s ‘Proloquo2Go’ is the world’s leading AAC software, even though its only available for download on Apple’s AppStore, whilst other software (including Jabbla’s ‘Mind Express’, Smartbox’s ‘Grid 3’ and Tobii Dynavox’s ‘Snap+Core First’ and ‘Communicator 5’) are all available for download on Apple iOS and/or Windows devices.
- d. Future growth in the provision of AAC solutions will be primarily in the ‘software only’ segment (in which software is downloaded on to a tablet or other mainstream device<sup>10</sup>) and the ‘mid-range’ segment (using either a case into which a tablet can be fitted or a device that is built using or adapted from a standard tablet). This is driven entirely by the ubiquity of the Apple iPad, Microsoft’s Surface touch screen products and similar devices in delivering AAC solutions, whether because the device itself meets the end-user’s requirements or because it is a platform for delivering the solution through additional software and/or peripherals.
- e. Tobii Dynavox’s most recent devices, the so-called ‘mid-range’ devices (such as the Indi and the EyeMobile series) were developed, and have been priced, to respond to the growth in the use of iPads and other mainstream devices by end-users with communication disabilities, including those requiring an eye-tracking access solution.

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<sup>10</sup> This may be a device that the end-user already owns, or which is purchased by or for him or her.

17. Mainstream consumer devices are a credible platform for delivering AAC solutions for even those end-users who, in England, are referred to one of the 16 regional specialized ‘AAC Hubs’, which benefit from ring-fenced funding by NHS England. These users (who represent around 10% of UK users of AAC technology) are, by definition, those with the most complex communication disabilities, determined primarily by their needs for assisted access to a device, being unable to use a touch screen, mouse or switch.<sup>11</sup> However, even amongst this group of end-users, NHS Hubs will provide a considerable number of end-users with a mainstream consumer tablet (such as an iPad) as the device on which their AAC solution will be delivered. This is consistent with NHS England’s guidelines, which clearly envisages the use of mainstream technology (such as tablets) as means of delivering AAC solutions:

*“Communication aids provided by specialised commissioning arrangements may be based on mainstream technology, such as tablet computers, or more dedicated hardware. They will include specialist communication software (that takes a user’s input and outputs synthesised speech); vocabularies or language systems loaded into the software; and accessories (such as access methods, speakers, etc.).”<sup>12</sup> (emphasis applied).*

18. There is substantial evidence that mainstream devices, with appropriate software, meet the needs of AAC users. This includes academic and practitioner research. Research by Texas Tech University,<sup>13</sup> has found that:

*“tablet-based devices, especially iOS devices (i.e., iPad and iPod Touch) were highly effective in increasing the communication skills of individuals with autism and developmental disabilities. Also, the results provided evidence that several participants were able to continue communicating using the devices and to use them in novel contexts. Furthermore, caregivers have positive*

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<sup>11</sup> The remaining users are either supported by local NHS speech and language services (in so-called ‘spoke’ units), which provide services to local Clinical Commissioning Groups or have to purchase AAC solutions privately, whether using their own funds or with funding from another source (such as a local authority, school or charity).

<sup>12</sup> NHS England, *Guidance for commissioning AAC services and equipment* (2016), available at: <https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2016/03/guid-comms-aac.pdf>, page 14.

<sup>13</sup> N. Alzrayer, D.R. Banda and R.K. Koul, *Use of iPad/iPods with Individuals with Autism and other Developmental Disabilities: A Meta-analysis of Communication Interventions* (2014) Rev J Autism Dev Disord 179 (enclosed as **Annex IS.2**).



*perceptions of using iOS-based speech-generating devices for communication skills.”<sup>14</sup> (emphasis applied)*

and

*“using iOS-based [Speech Generating Devices] have positive effects on communication skills of individuals with autism and developmental disabilities. Based on AAC systems comparison studies, iOS-based SGDs surpassed other AAC systems (e.g., [Manual Signs] and [Picture Exchange Communication Systems]). Specifically, iPads are more effective than other tablet-based computers. As for the iOS-based Apps, Proloquo2Go appeared to be the most effective communication app.”<sup>15</sup> (emphasis applied)*

19. Users of AAC have also written about the positive effects of using a tablet with an appropriate app. For example, a Canadian user of AAC with cerebral palsy has written about how an iPad together with the Proloquo2Go App has enabled her to communicate more effectively than she could with a conventional AAC solution,<sup>16</sup> observing that “*the iPad allowed for a deeper level of communication that would not have been possible with a single-function AAC device*” and “*being able to whip out my iPad from my handbag and having a choice of communication methods for when I’m on the go is life changing. Technology is finally catching up to my needs.*”
20. Finally, a developer of AAC (the CEO of Saltillo Corporation)<sup>17</sup> has written that:

*“Like traditional AAC devices, these mobile devices often have touch screens, plenty of processing power, and speech output capabilities, While currently there may be sacrifices such as durability and accessibility, price and convenience often make these products an attractive alternative to traditional AAC devices. Plus, rather than using a specialized device that may accentuate a disability, one can use the hottest technology on the market.*

*Loading AAC apps on to commercial devices makes AAC solutions more accessible to parents of individuals with speech disorders. Rather than going through a lengthy evaluation and funding process, a parent can now download*

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<sup>14</sup> *Ibid.* page 179.

<sup>15</sup> *Ibid.* page 190.

<sup>16</sup> G Watson Hyatt, *The iPad: A Cool Communicator on the Go*, published in ‘Perspectives on Augmentative and Alternative Communication’ (enclosed as **Annex IS.3**).

<sup>17</sup> D Herschberger, *Mobile Technology and AAC Apps from an AAC Developer’s Perspective*, published in ‘Perspectives on Augmentative and Alternative Communication (enclosed as **Annex IS.4**).

*an app ranging from \$5 to \$200 on to a device they may already own. This often provides the family with a greater sense of control and participation in providing a voice for their child.*

*On many levels, these new opportunities are refreshing and exciting. The mere fact that more people have access to AAC solutions is exciting in itself. But just as this new technology has changed how we think of consumer technology, it is also changing our concept of AAC technology. Not only is our concept of hardware platform changing, but also the methods in which these devices are used, funded and supported*” (emphasis applied)

21. [REDACTED].<sup>18</sup> [REDACTED]:
- a. [REDACTED].
  - b. [REDACTED].
  - c. [REDACTED].
  - d. [REDACTED].
  - e. [REDACTED].
22. In defining, narrowly, its scope of reference, the CMA also appears to have focused heavily on the need for dedicated customer support and training. In reality, in the UK (and unlike in some other countries, in particular the United States), the level of such support and training is limited:
- a. Tobii Dynavox may demonstrate its products to NHS and other healthcare professionals who are involved in assessing the requirements of end-users with communications disabilities and taking prescribing decisions; this may include the provision of training to those professionals and the provision of demonstration models for use in patient assessments. This is essentially a marketing activity and is not ‘customer support’: its purpose is to raise professionals’ awareness, with a view to them prescribing Tobii Dynavox’s products.
  - b. In the case of NHS provision (whether by an NHS England specialized ‘AAC hub’ or by local NHS providers; whether in England or the other nations),<sup>19</sup> the assessment is made by the treating medical professional, usually a speech therapist, although other

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<sup>18</sup> [REDACTED].

<sup>19</sup> On the provision of AAC in the UK, see generally Judge et al, *Provision of powered communication aids in the United Kingdom* (2017) Augmentative and Alternative Communication (enclosed as **Annex IS.5**).

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professionals (such as occupational therapists and assistive technology experts) may also be involved, particularly in the AAC hubs. The choice of possible solutions is the same throughout the NHS, including low-tech solutions (e.g. use of printed cards or boards), mainstream products and devices (including consumer tablets) and hi-tech solutions (including software and purpose-built devices). It is very unusual for the suppliers of an AAC solution to be involved in the assessment of an individual end-user's needs. Thus, Tobii Dynavox will merely receive and process an order and deliver the product; it will not generally have any involvement in setting up the device or training the end-user: this is the responsibility of the NHS.

- c. In the case of private provision (either because an end-user is not eligible for NHS funding, an NHS provider does not have funding available, or the end-user does not wish to wait for assessment by the NHS), the end-user will generally be under the care of a healthcare professional, such as a speech and language therapist, who will conduct the assessment and make the prescribing decision. In some cases, Tobii Dynavox may provide assistance (such as providing demonstration models), but will not be involved in the prescribing decision (if the end-user does not, for some reason, have a treating therapist, Tobii Dynavox will recommend the use of a therapist, who must make or sign-off an assessment decision). Again, the manufacturer's involvement is essentially a sales and marketing activity.
- d. Customers can also purchase products directly from a manufacturer, over the internet, in which case they will generally not receive pre-sale advice from the manufacturer, although they may have received advice from a therapist or other healthcare professional.
- e. Post-sale, the involvement of a supplier of a device is primarily limited to warranty support, whether – depending on the product - under a standard two or three year manufacturer warranty or an additional standalone warranty product. This will include repairs, including – for some products and depending on the warranty chosen – in the case of accidental damage and the provision of a loan device whilst a user's device is under repair. After the warranty period expires, repairs are charged for. All customers are also provided with telephone support, for free and for the life of the product. Whilst some suppliers of a mainstream device may not necessarily provide a similar level of support (although AAC software suppliers, including suppliers of app will do so, whether online or by telephone), this is reflected in the price paid by the consumer for a product with and without a warranty (i.e. it reflects the level of risk chosen by the customer).

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23. It therefore follows that the provision of some (but not extensive) training and customer support in relation to purpose-built devices does not mean that AAC solutions based on such devices are in a separate product market from solutions that use mainstream devices. The existence of such support (and its cost of provision) is merely one factor among many that prescribers, funders and end-users will take into account in deciding which AAC solution is the right one for an individual end-user's specific communications needs.
24. Tobii therefore remains of the view that the CMA has adopted an unduly narrow frame of reference against which to assess the effects of the Transaction on competition: AAC solutions that are delivered using a tablet *are substitutable* for solutions delivered using a purpose-built device, as both run the same software and both can use peripherals and accessories where necessary, for example to provide an access solution (of which an eye-gaze camera is only one solution). As a result, the CMA's analysis will be based on an incorrect definition of the relevant markets for AAC hardware (should such a market exist), AAC software and AAC solutions.
25. Even if (which is not accepted) the CMA were to be correct to define the relevant markets narrowly, in accordance with its proposed approach set out in the Issues Statement, the CMA would (as it accepts it must<sup>20</sup>) still need to consider whether AAC solutions based on consumer tablets and other mainstream devices (i.e. which are outside of the relevant market) impose a competitive constraint on suppliers of 'dedicated AAC solutions'. This requires it to obtain evidence on the extent to which this may be the case, including – importantly – from customers and end-users.
26. However, the CMA's Phase 2 request for information sent to customers (a copy of which has been seen by Tobii) is focused entirely on what the CMA refers to in that request as 'dedicated AAC solutions', i.e. a "dedicated AAC Device (combining dedicated AAC hardware and AAC software and an access methods such as an eye-gaze camera) alongside customer support and training services". This request for information accordingly makes no reference to, and therefore contains no questions on, the extent to which either mainstream consumer electronic devices (such as tablets, either with or without additional peripherals) or AAC software that operates on such devices are an effective means of providing AAC solutions to end-users with even complex communications disabilities. The CMA's questions are also based on the assumption that the only credible competitors to Tobii Dynavox and Smartbox are PRC<sup>21</sup> (in

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<sup>20</sup> Issues Statement, para. 9.

<sup>21</sup> With effect from 1 January 2019, PRC and Saltillo (which had originally merged in 2007, but had retained separate identities) began operating under the name 'PRC-Saltillo': see <https://www.prentrom.com/articles/prentke-romich-company-announces-merger?mode=view>. For simplicity, and consistency with the Issues Statement, the company will be referred to as 'PRC'.

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the UK, through its wholly-owned distributor, Liberator) and Jabbla (in the UK through its wholly-owned distributor, Techcess); this is clearly incorrect, for the reasons set out in Section C below.<sup>22</sup>

27. It therefore follows the CMA has adopted an unduly narrow approach not only to the question of market definition, but also to the gathering of relevant evidence, particularly from those who prescribe, fund or use AAC solutions. This is a fundamental procedural error on the CMA's part. It is therefore urged to reconsider its approach to both of these issues as a matter of urgency.

### C. COUNTERFACTUAL

28. Tobii has already expressed to the CMA its views on the appropriate counterfactual against which to assess the Transaction.<sup>23</sup> In summary, the appropriate counterfactual includes the reseller agreements entered between Tobii Dynavox and Smartbox in August 2018, which were entered into in the ordinary course of business and were concluded on standard terms and conditions that were the same as both parties offered to their respective resellers generally.

29. As the CMA is aware, Smartbox had for many years been a reseller of Tobii Dynavox products in the UK, including both devices and standalone eye-gaze cameras, other than for a short period between January 2017 and August 2018, [REDACTED], including because it had been unable to resell Tobii Dynavox eye-gaze cameras as a peripheral to its own wrapped tablet devices (its purpose built device, the Grid Pad 12 not having been released until July 2018).<sup>24</sup> The reseller agreement therefore merely restored the status quo ex ante.

30. Prior to August 2018, Tobii Dynavox was permitted, under a licensing agreement first entered into in 2013, to resell Smartbox's software. The agreements entered into on 15 and 29 August 2018 merely replaced and updated an existing agreement.<sup>25</sup>

### C. THE TRANSACTION WILL NOT SUBSTANTIALLY LESSEN COMPETITION AS A RESULT OF HORIZONTAL EFFECTS

31. According to the Issues Statement, the CMA will consider whether the Transaction has resulted, or may be expected to result, in an SLC due to horizontal unilateral effects in respect of the

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<sup>22</sup> The CMA makes the same error in the Issues Statement, para. 25(c).

<sup>23</sup> Tobii Initial Submission, paras. 20 to 22. [REDACTED]

<sup>24</sup> [REDACTED]

<sup>25</sup> See Tobii's Response to the Financial Questionnaire (5 March 2019), pages 18 to 22 (response to Questions 15 and 16). See also Tobii's Response to the Market Questionnaire (5 March 2019), pages 12 and 13 (response to Question 12).

supply of ‘dedicated AAC hardware’ (on a worldwide basis), the supply of ‘AAC software’ (on a worldwide basis) and the supply of ‘dedicated AAC solutions’ (in the UK).<sup>26</sup> The CMA also asserts that its “current view is that only Liberator/PRC and Techcess/Jabbla are credible competitors to the Parties in the three relevant markets where they overlap”.<sup>27</sup>

32. Tobii has already explained in detail to the CMA why the Transaction has not resulted and will not result in an SLC on the basis of horizontal unilateral effects on any properly-defined relevant market.<sup>28</sup> It does not repeat below in detail points already made in its Initial Submission. The CMA is also incorrect to assert that, in relation to each of hardware, software and AAC solutions, the parties had only two credible competitors, PRC and Jabbla. As is explained below, there are numerous other credible competitors, whether on a global basis or specifically in the UK.

### **Hardware**

33. In relation to a possible market for ‘dedicated AAC hardware’, it is not clear that such a market exists. Manufacturers of purpose-built hardware that is used in an AAC solution do not generally supply devices as a standalone product (without software) to third parties: they will supply it as part of an integrated AAC solution, under their own brand name, either to a reseller or directly to a customer.
34. As the CMA accepts, any market for hardware is worldwide in geographic scope. Innovation in such a market will therefore be driven by competition at the global level, at which level Smartbox was [REDACTED]. Smartbox was [REDACTED]:
- a. It had [REDACTED], with the majority of its hardware sales being made in the UK.
  - b. It had only started producing ‘wrapped’ consumer tablets in 2015, when it introduced its Grid Pad 11 and Grid Pad 13 products. This involved it merely assembling, at its Malvern premises, the devices from standard components that it bought-in. This involved adding a case and certain peripherals (such as speakers and in some cases an access device, such as an eye-gaze camera) to a standard consumer tablet (using the Windows operating system), on which it installed its own software, including the Grid. These products were [REDACTED].

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<sup>26</sup> Issues Statement, para. 23.

<sup>27</sup> Issues Statement, para. 25.

<sup>28</sup> Tobii Initial Submission, Section D, in particular paras 58 to 68 (in relation to AAC software) and paras 69 to 90 (in relation to AAC solutions).

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- c. Smartbox's first attempt at developing a purpose-built device, the Power Pad, [REDACTED].
  - d. Although its follow-up product, the Grid Pad 12, was eventually launched in July 2018, it is [REDACTED].
  - e. [REDACTED].
35. Accordingly, [REDACTED], the Transaction has not resulted, and will not result, in an SLC in the supply of AAC hardware.

### Software

36. As Tobii has set out in its Initial Submission, there are numerous developers of AAC software, some of which have a broad focus, and others of which are for specific conditions or uses. Tobii Dynavox will therefore continue to face effective competition in the development and supply of AAC software. There are literally hundreds of AAC software titles available.<sup>29</sup>
37. The software products of the parties are essentially complementary. The only software products that have similar or overlapping functionality are Grid 3 (Smartbox) and Communicator 5 and Compass (Tobii Dynavox). However, there several competing software products that have equivalent functionality, including Mind Express (Jabbla), Essence (PRC), Clicker 7 (Crick Software) and Predictable and Chatable (Therapy Box), as well as many other products that contain certain features of Grid 3 or Communicator. There were, and will remain, a considerable number of competing AAC software products. Whilst Liberator does not licence its Essence software to third parties (such that it is available only on PRC's own devices), it does impose a competitive constraint on both Tobii Dynavox and Smartbox in the development of software, as their AAC solutions (each of which contains their own software) must be competitive with those of PRC, which will include Essence.
38. Tobii Dynavox's software (Communicator and Compass) are not close competitors to Smartbox's Grid software. [REDACTED].<sup>30</sup> Accordingly, Tobii Dynavox was not a close competitor to Smartbox in the market for AAC software.

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<sup>29</sup> The website *Speech Bubble* (<https://speechbubble.org.uk/>) lists several hundred software titles that are available in the UK.

<sup>30</sup> [REDACTED]

## **AAC solutions**

39. As Tobii has set out in its Initial Submission,<sup>31</sup> there are numerous suppliers of AAC solutions in the UK, including of what the CMA has defined as ‘dedicated AAC solutions’.

### *Existing competitors*

40. Tobii Dynavox and Smartbox face competition from several other suppliers of ‘dedicated AAC solutions’ in the UK, including: PRC (through its wholly-owned reseller, Liberator), Jabbla (through its wholly-owned reseller, Techcess) and Abilia.
41. In addition, for the reasons set out above (and also in the Initial Submission), they face strong and growing competition from AAC solutions provided using consumer tablets (either with or without specialised AAC software), which meet the communication and access needs of end users with a wide range of disabilities.<sup>32</sup>

### *PRC*

42. PRC is active in the UK through its wholly-owned distributor, Liberator.<sup>33</sup> Its products include communication devices (the Accent 800, 1000 and 1400 models), eye-gaze systems and other access systems. Its software includes its own software (Unity, Essence, EasyChat and WordPower) and its devices also include a range of other software, including its Grid 3. PRC is a well-established, US-based provider of AAC solutions, including its own devices and software, including Essence, which is a strong competitor to Grid 3 and Communicator.
43. PRC has a particularly strong reputation in areas such as congenital disabilities and is developing its software offerings for progressive literate users (e.g. motor neurone disease or multiple sclerosis) and for ‘distance communication’ (i.e. communication using email, SMS text and social media). It has good quality devices, a good customer support network in the UK and has a good reputation, particularly for users with more complex communication needs.

### *Jabbla*

44. Jabbla, a Belgian company, is active in the UK through its wholly-owned subsidiary, Techcess. Jabbla makes sales worldwide.
45. Jabbla has well-regarded hardware (including the Tellus 5, Tellus i5 and Mobi 3 devices) and software products (particularly Mind Express, which is an effective competitor to Smartbox’s

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<sup>31</sup> Tobii Initial Submission, paras 69 to 84.

<sup>32</sup> Tobii Initial Submission, paras. 72 to 76.

<sup>33</sup> See <https://www.liberator.co.uk/>.



Grid 3 and Tobii Dynavox's Communicator 5). Its Tellus 5, Tellus i5 and Mobi 3 devices run on Windows 10 and support text- or symbol-based communication (including text, phone calls, email and internet), eye-gaze access solutions (which are in-built in the Tellus i5) and general computing. Its Vibe device is a portable, touch screen device.

46. Jabbla has a good reputation with customers in the UK. Although its sales of AAC solutions in the UK are, so far as Tobii Dynavox is aware, lower than those of PRC, Tobii Dynavox and Smartbox, this is not a reflection of the quality of its products or customer service. Therefore, if it wished to do so, Jabbla could easily increase its sales in the UK.

*Abilia*

47. Abilia is a Swedish company that sells a range of assistive technology products worldwide, including in the UK.<sup>34</sup> Its communication devices include the Lightwriter, a range of dedicated text-to-speech devices for literate users without an accessibility disability who are unable to communicate effectively through speech.

*Tobii Dynavox*

48. Tobii Dynavox's products were, until January 2017, distributed in the UK mainly by Smartbox, which has been a reseller of Tobii's AAC devices since 2006.
49. Termination of the reseller arrangement with Smartbox meant that [REDACTED]. In this way, although Tobii Dynavox did have 'brand awareness' amongst prescribers and funders of AAC solutions, it effectively had to re-enter the UK market.
50. Tobii Dynavox has a good reputation in the UK (and globally) for its hardware, on which it has historically focused, being a technology-driven business. [REDACTED].<sup>35</sup> [REDACTED].

*Smartbox*

51. Smartbox is best known in the UK for its Grid software (now Grid 3).
52. In 2015, it introduced new 'wrapped' tablets (Grid Pad 11 and 13), in which it added a plastic case and speakers to a standard Fujitsu tablet and installed the Grid 3 and other software. It did not include integrated eye-tracking, although this could be added as an external peripheral. [REDACTED]. Smartbox's follow-up product, the Power Pad, [REDACTED]. Although the Grid Pad 12 was launched in July 2018, [REDACTED].

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<sup>34</sup> See <http://abilia.co.uk/>.

<sup>35</sup> [REDACTED].

*Tobii Dynavox and Smartbox were not close competitors*

53. It is clear that Tobii Dynavox and Smartbox were not close competitors. Although Tobii Dynavox had good quality devices, [REDACTED]. Conversely, whilst Smartbox had a well-regarded software product, Grid 3, and good levels of customer support, its hardware products (including its ‘flagship’ Grid Pad 12) [REDACTED]. Both faced strong competition from PRC, Jabbla and Abilia, as well as from solutions based on consumer tablets (including those on which Grid 3 for iPad had been downloaded by or on behalf of an end-user).

*Potential competitors*

54. There are also a number of suppliers of AAC solutions, including ‘dedicated AAC solutions’, that are active in other geographic markets (in particular the United States) and which could easily expand their operations into the UK. These include: Forbes AAC,<sup>36</sup> Talk to Me Technologies,<sup>37</sup> Ablenet,<sup>38</sup> Rehavista,<sup>39</sup> Humanelektronik,<sup>40</sup> Lingraphica<sup>41</sup>, LC Technologies<sup>42</sup> and EyeFree.<sup>43</sup> As barriers to entry are low (see below), and they already supply communication products using the English language, these suppliers could easily enter the UK market for AAC solutions.

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<sup>36</sup> See <https://www.forbesaac.com/>. According to its website, Forbes AAC provides “the most technologically advanced communication devices and accessories available”, including devices that use both the Apple iOS (ProSlate) and Windows (WinSlate) operating systems, including with eye-tracking solutions

<sup>37</sup> See <https://www.talktometechnologies.com/> and <https://www.talktometechnologies.com/pages/all-aac-devices>. Talk to Me supplies a wide range of devices, including with eye-tracking solutions.

<sup>38</sup> See <https://www.ablenetinc.com/>. Its ‘Quick Talker Freestyle’ product is based on the Apple iPad, allowing access to a wide range of AAC software and apps.

<sup>39</sup> See <http://www.rehavista.de/?at=Produkte&ag=14&f=ad&p=R02195>.

<sup>40</sup> See <https://humanelektronik.de/en/>. Its products include SeeTechPro, which includes eye-tracking.

<sup>41</sup> See <https://aacdevice.aphasia.com/>. Its products include AllTalk which it markets as a lightweight and ultra-sleek device which and can be positioned as a laptop, tablet, tent, or stand for convenient use in a variety of settings.

<sup>42</sup> See <https://eyegaze.com/>. Its flagship product is The Eyegaze Edge which, according to its website, is the “world’s most advanced eye-driven tablet communication system”.

<sup>43</sup> See <https://www.eyecontrol.co.il/>. This company is presently recruiting for a UK sales manager, indicating that it intends to enter the UK market: see [https://www.linkedin.com/jobs/search?locationId=OTHERS.worldwide&f\\_C=18089088&trk=companyTopCard\\_top-card-button&pageNum=0&position=1](https://www.linkedin.com/jobs/search?locationId=OTHERS.worldwide&f_C=18089088&trk=companyTopCard_top-card-button&pageNum=0&position=1).

*Conclusion: no SLC in relation to AAC solutions generally or ‘dedicated AAC solutions’ specifically*

55. For the reasons set out above, the Transaction has not resulted, and will not result in an SLC in relation to the supply of AAC solutions to end-users in the UK, whether generally or (should, which is not accepted, there be a narrower relevant market) for ‘dedicated AAC solutions’.

**D. THE TRANSACTION WILL NOT SUBSTANTIALLY LESSEN COMPETITION AS A RESULT OF VERTICAL EFFECTS**

56. The Issues Statement identifies three vertical theories of harm by which the merged entity may have the ability and incentive to foreclose competitors, leading to an SLC.<sup>44</sup> Tobii has already explained, its Initial Submission, why each of these theories of harm is unfounded and does not repeat in detail why this is the case. However, in summary:

- a. Tobii Dynavox will not have the ability to foreclose competing providers of AAC solutions by refusing to licence (or to licence on materially worse terms) Smartbox’s Grid 3 software as it is not a ‘must have’ software for competing suppliers of AAC solutions (there being alternative software with similar functionality) and Grid 3 will remain available for download generally.
- b. Tobii Dynavox will not have the ability to foreclose competing providers of AAC solutions by refusing to supply (or to supply on materially worse terms) its eye-gaze cameras, as there are several other suppliers of eye-gaze cameras that are or are capable of being used for AAC applications.
- c. Tobii Dynavox will not have the ability to foreclose competing suppliers of eye-gaze cameras by switching Smartbox’s demand for such cameras to Tobii Dynavox, as AAC solutions represent a very small proportion of global demand for eye-gaze cameras and Smartbox represents a both small proportion of global demand for such cameras for AAC solutions and a very small proportion of global demand for such cameras generally.

57. It therefore follows that there is no prospect of an SLC as a result of either input or customer foreclosure. In relation to the two theories of input foreclosure identified by the CMA, it should also be noted that Tobii Dynavox has already stated publicly its clear intention to continue to

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<sup>44</sup> Issues Statement, paras. 27 – 31.

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licence the Grid 3 software to third parties and to continue to supply eye-gaze cameras to third parties.<sup>45</sup>

### E. COUNTERVAILING FACTORS AND EFFICIENCIES

58. Whilst the Transaction will not lead to an SLC on any relevant market, the CMA should, as part of its overall assessment of the Transaction, take account of the following matters.

#### **Barriers to entry in the supply of AAC solutions in the UK are low and future entry will be likely, timely and sufficient**

59. Barriers to entry in the supply of AAC solutions in the UK are low, particularly for an existing supplier active in another country.<sup>46</sup> There are no specific regulatory barriers to entry.<sup>47</sup> Such a supplier would merely need to either identify and collaborate with a British reseller or distributor or, alternatively, establish its own sales team in the UK. The use of resellers, with local knowledge of the market is an established means of distribution in the AAC sector, with all manufacturers of AAC devices and suppliers of AAC solutions using resellers in most countries. For example, Tobii Dynavox originally relied entirely on resellers in the UK and uses them in most countries in which it sells, as does Smartbox.

60. Entry by establishing a local sales force can also be achieved easily: for example, Smartbox established its own sales force in the US, [REDACTED], whilst Tobii Dynavox's team in the UK has fewer than [REDACTED] employees. Such entry is timely, as it could be achieved in less than a year, whether through a reseller or establishment of a UK sales operation. It is also likely, as there are at least eight established suppliers of AAC solutions overseas that could readily enter the UK market and could do so at low cost, building upon their existing AAC or eye-control businesses overseas. Finally, it will be sufficient, as entry by one or more established suppliers of AAC solutions would be sufficient to replace Smartbox as an effective competitor.<sup>48</sup>

#### **The NHS has countervailing buyer power**

61. The NHS is a preponderant purchaser of AAC solutions in the UK (accounting for over two-thirds of demand) and can exercise significant buyer power, for example by switching to

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<sup>45</sup> At the Communications Matters Annual Conference held at the University of Leeds on 8 to 10 September 2018, Rob Gregory (Sales Manager, UK and Ireland, Tobii Dynavox) and Dougal Hawes (Business Development Director, Smartbox and VP Customer Experience-elect, Tobii Dynavox) gave a presentation, during which Mr Gregory made clear Tobii Dynavox's commitment to continue licensing Grid 3 and supplying eye-gaze cameras to competing suppliers of AAC solutions.

<sup>46</sup> Tobii Initial Statement, para. 85. [REDACTED]

<sup>47</sup> [REDACTED].

<sup>48</sup> See para. 54 above. [REDACTED].

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another supplier (such as PRC or Jabbla), sponsoring new entry by a supplier active in other countries or using public procurement procedures.<sup>49</sup> For example, in the NHS EAT Framework procurement, the product category for eye-tracking devices was based on a product by the Israeli company, Eye Control, which had not then been launched in the UK, which demonstrates that the NHS can sponsor new entry.

### **The Transaction will generate substantial efficiencies that will benefit UK customers and end-users**

62. The Transaction will generate substantial efficiencies, by combining the parties' R&D expertise (Tobii Dynavox in hardware and Smartbox in software development) and budgets and eliminating unnecessary duplication. This will benefit consumers by enabling the merged entity to develop products more quickly than the parties could individually and also developing new products that they could not develop individually, due to a lack of resources.<sup>50</sup> This will, as Tobii Dynavox has stated publicly,<sup>51</sup> include the development of new solutions for communications disabilities that are not presently well-served by AAC companies, in particular aphasia and autism.
63. The Transaction will also generate efficiencies in terms of:
- a. procurement efficiencies (in relation to third party contract manufacturing of hardware);<sup>52</sup> and
  - b. the removal of double-marginalization (for example, in the supply of eye-gaze cameras to Smartbox and the licensing of software to Tobii Dynavox).
64. It is notable that Tobii Dynavox intends to increase the merged entity's R&D budget and to maintain the size of, and integrate, the parties' customer support teams).
65. These efficiencies are merger-specific: neither party could have achieved them without the merger, due to their respective company knowhow and resourcing constraints (both human and

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<sup>49</sup> Tobii Initial Statement, para. 86.

<sup>50</sup> Tobii Initial Statement, paras. 103 to 110. [REDACTED]. [REDACTED].

<sup>51</sup> For example, at the Competition Matters Annual Conference held at the University of Leeds on 8 to 10 September 2018, Rob Gregory (Sales Manager, UK and Ireland, Tobii Dynavox) and Dougal Hawes (Business Development Director, Smartbox and VP Customer Experience-elect, Tobii Dynavox) gave a presentation, during which Mr Gregory made clear Tobii Dynavox's commitment to R&D in these fields, as well as in improving and developing new hardware devices.

<sup>52</sup> [REDACTED].

financial) and the fact that they can be achieved only by combining the parties' largely complementary knowhow and R&D expertise.

66. They are likely, as Tobii [REDACTED], with increased R&D expenditure.<sup>53</sup> They are also timely, as the merged entity will be able to implement them immediately upon the CMA approving the Transaction.<sup>54</sup> As with all R&D-based efficiencies, the outcome of the R&D projects will not be realised immediately and cannot be quantified precisely on an ex ante basis, but the merger will lead to an increased number of discrete (and non-duplicated) R&D projects from which new and improved devices and software can be developed.

**G. POSSIBLE REMEDIES AND RELEVANT CONSUMER BENEFITS**

67. As the Transaction will not result in an SLC under any theory of harm identified by the CMA in the Issues Statement, Tobii makes no observations on potential remedies. However, the Transaction will result in significant merger-specific efficiencies and benefits for users of AAC solutions: see Section E above.

**H. CONCLUSION**

68. The Transaction has not resulted, and will not, result in an SLC in any relevant market. Tobii Dynavox therefore looks forward to engaging further with the CMA Inquiry Panel and Phase 2 staff team during the remainder of its investigation.

**12 March 2019**

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<sup>53</sup> [REDACTED].

<sup>54</sup> The parties have been unable to implement them due to the CMA's Interim Enforcement Order and subsequent Interim Order.