

Completed acquisition by Tobii AB of Smartbox Assistive Technologies Limited and Sensory Software International Ltd

Summary of Final Report

Notified: 14 August 2019

1. On 8 February 2019, the Competition and Markets Authority (CMA) referred the completed acquisition by Tobii AB (Tobii) of Smartbox Assistive Technology Limited and Sensory Software International Limited (together, Smartbox) (the Merger) for an in-depth (phase 2) merger inquiry. The CMA is required to address the following questions:
 - (a) whether a relevant merger situation has been created; and
 - (b) if so, whether the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition (SLC) within any market or markets in the UK for goods or services.¹
2. Tobii and Smartbox (together, the Parties) both supply augmentative and assistive communication (AAC) solutions globally and in the UK. AAC solutions are communication aids that cater to the needs of those who may find communication difficult for a number of reasons. These could include people with a congenital disability (such as cerebral palsy, learning disability or autism), a progressive condition (such as motor neurone disease) or a suddenly acquired disability (such as through a stroke or brain damage following an injury). The end-users of the products supplied by the Parties are unusually dependent on technology to communicate and are therefore particularly vulnerable to any deterioration in the way the market for AAC solutions operates, and consequently can be regarded as vulnerable consumers.
3. The Parties overlap in the supply of dedicated AAC solutions. We define dedicated AAC solutions as a combination of four components: dedicated AAC hardware; AAC software; access means (in cases where the end-user cannot control the device solely through the touch screen, an AAC solution

¹ Enterprise Act 2002 (the Act), [section 35](#).

includes a means of access, such as a switch or an eye gaze camera); and customer support (including training, technical support and repairs).

4. Dedicated AAC solutions are often procured by organisations which fund purchases on behalf of end-users. Such organisations include the NHS (the largest customer for dedicated AAC devices in the UK), local authorities, schools and charities. Dedicated AAC solutions are also sold directly to the end-user.
5. The Parties also sell individual components of dedicated AAC solutions, including to some of their competitors in the supply of dedicated AAC solutions: for example, Tobii sells eye gaze cameras and Smartbox licenses its AAC software (the Grid) to competitors.
6. Tobii is headquartered in Sweden and has offices in the US, Asia and elsewhere in Europe, including in the UK. Smartbox is based in the UK, and has offices in Malvern and Bristol as well as a US office in Pennsylvania.
7. As part of our phase 2 inquiry, we invited a wide range of interested parties to comment on the Merger. These included customers of the Parties, interest groups, competitors and resellers of AAC hardware and software. We received 38 responses to our questionnaires and obtained additional evidence from calls and written information requests from 23 third parties, as well as using evidence from the CMA's phase 1 inquiry into the Merger. We also received several submissions and responses to information requests from the Parties, held two hearings with each of them, and carried out an extensive review of internal documents provided by the Parties. Lastly, we received a number of submissions from customers, end-users and carers, commenting on the CMA inquiry.

Relevant merger situation

8. We find that the Merger has created a relevant merger situation within the meaning of the Act because: (a) two or more enterprises have ceased to be distinct within the statutory period for reference; and (b) the share of supply test is met.

Counterfactual

9. To assess the effects of a merger on competition, we consider the prospects for competition with the merger against what would have been the competitive situation without the merger. This is called the 'counterfactual'.
10. Around the time of the Merger (in August 2018), the Parties entered into reseller agreements, whereby Smartbox agreed to act as a reseller of certain

Tobii products in the UK and Ireland, and Tobii agreed to act as a distributor of Smartbox's products worldwide.

11. Our view is that the most likely counterfactual is one in which:
 - (a) Smartbox continues to operate as an independent business, whether following a management buy-out or with no change of ownership;
 - (b) Smartbox is financially able to compete as it had done pre-Merger, including funding hardware and other product development; and
 - (c) The Parties are not operating under the reseller agreements entered into around the time of the Merger.
12. Therefore, we conclude that the relevant counterfactual is the pre-Merger conditions of competition, taken to be the situation prior to the August 2018 reseller agreements being agreed.

Market definition

13. Market definition provides a framework for assessing the competitive effects of the merger.
14. We find that the relevant markets in which to assess the effects of the Merger are:
 - (a) the supply of dedicated AAC solutions in the UK;
 - (b) the upstream supply of AAC software worldwide; and
 - (c) the upstream supply of eye gaze cameras in AAC applications worldwide.

Supply of dedicated AAC solutions in the UK

15. The Parties overlap primarily in the supply of dedicated AAC solutions, which we have defined as a combination of four components: dedicated AAC hardware, AAC software, access means and customer support. We recognise that dedicated AAC solutions thus defined are highly differentiated products and we have considered whether the conditions of competition differ across different types of dedicated AAC solutions as part of our assessment.
16. Tobii submitted that the Parties face strong competitive constraint from AAC solutions using mainstream consumer devices: some customers build their own AAC solutions by combining a consumer tablet (for example an iPad or a Microsoft Surface) with AAC software and sometimes peripherals bought independently (eg a case and external speakers). We have called such solutions 'non-dedicated AAC solutions', and we considered whether they

should be included in the relevant product market. We conclude that they should not, for the following reasons:

- (a) Customers and suppliers have highlighted a broad range of circumstances where end-users of dedicated AAC solutions would not consider a non-dedicated AAC solution as a good substitute for the end-user's needs.
 - (b) The Parties' internal documents that we have reviewed show that Smartbox's monitoring of competition focuses on other providers of dedicated AAC solutions and that Tobii's monitoring of competition focuses primarily on dedicated AAC solutions.
 - (c) The price of the Parties' dedicated AAC solutions has remained broadly constant over the past 3 years, which is difficult to reconcile with a proposition that the competitive constraint from non-dedicated AAC solutions is growing.
 - (d) Consistent with this qualitative evidence, estimated diversion from dedicated to non-dedicated solutions is low, indicating that customers of the Parties' dedicated AAC solutions generally think of other dedicated AAC solutions, rather than non-dedicated AAC solutions, as their next best options.
17. Suppliers have told us that having a local presence is important, both to understand the local health care system and to provide training and support to customers. We also note that UK customers only purchase dedicated AAC solutions from suppliers with a UK presence. We therefore consider that the relevant geographic market for dedicated AAC solutions is the UK.
18. For these reasons, our view is that the horizontal unilateral effects of the Merger should be assessed in a frame of reference for the supply of dedicated AAC solutions in the UK.

Upstream supply of AAC software worldwide

19. Tobii submitted that the relevant upstream software market is a distinct market for AAC software and that this is a market for highly differentiated products. Even though certain types of AAC software do not perform all the functions performed by the Parties' software (in particular Smartbox's Grid software), our view is that it is appropriate to define the relevant product market on a wide basis as the upstream supply of AAC software and to consider the substitutability of other AAC software with the Grid as part of our assessment of vertical effects.

20. Suppliers of dedicated AAC solutions source AAC software worldwide. We therefore consider that the relevant geographic market is worldwide.

Upstream supply of eye gaze cameras in AAC applications worldwide

21. Tobii submitted that the market for eye gaze includes eye gaze cameras for all applications (for example in consumer electronics, vehicles, gaming, and virtual reality as well as AAC solutions). However, having considered both demand-side and supply-side factors we consider that the relevant product market is no wider than the upstream supply of eye gaze cameras in AAC applications.
22. Suppliers of dedicated AAC solutions source eye gaze cameras worldwide. We therefore consider that the relevant geographic market is worldwide.

Competitive assessment – horizontal unilateral effects

23. We considered whether the Merger would enable the merged entity to increase prices, lower quality, reduce the range of its services and/or reduce product development in the supply of dedicated AAC solutions in the UK, relative to the counterfactual.
24. We find that the Parties were close competitors in the supply of dedicated AAC solutions in the UK pre-Merger, and that competitors will not provide sufficient constraint to mitigate the effects of the Merger on competition. We therefore conclude that the Merger has resulted, or may be expected to result in an SLC in the supply of dedicated AAC solutions in the UK.
25. The CMA estimates that the Parties have a combined market share in the supply of dedicated AAC solutions in the UK of [60-70%] by revenue, indicating that they have a very significant market presence at present. Most customers identify the Parties and Liberator Limited (Liberator) as the main suppliers of dedicated AAC solutions in the UK, with Techcess Limited (Techcess) mentioned as a smaller, lesser-known competitor. Competitors and resellers also identified the Parties, Liberator and Techcess as the only significant suppliers of dedicated AAC solutions in the UK.
26. As indicated above, our review of the Parties' internal documents indicates that the Parties benchmark their offerings of dedicated AAC solutions against each other and the other providers of dedicated AAC solutions. There are also examples of Tobii seeking to develop and improve its software products specifically in response to competition from Smartbox. Conversely, in the months before the Merger, Smartbox was focusing on strengthening its hardware offering. In our view, competition between the Parties spurred innovation and research and development (R&D).

27. The majority of the customers who responded to our questionnaire raised concerns about the impact of the Merger. Most of these concerns related to potential deteriorations in quality, service (including customer support) and/or the range of products available.
28. The closeness of competition indicated by third-party views and the Parties' internal documents and development plans is also supported by our estimates of the diversion ratios from Tobii's dedicated AAC solutions to Smartbox's products, and from Smartbox's dedicated AAC solutions to Tobii's products. Diversion to other suppliers indicates that only Liberator and, to a lesser extent, Techcess represent a meaningful constraint on the Parties.
29. For these reasons, we are concerned that the removal of one Party as a competitor is likely to allow the merged entity to increase prices, or deteriorate other aspects of its offering that are valued by customers, for example the quality and range of products, or the level of service associated with these products. The Merger is also likely to reduce incentives for the merged entity to engage in R&D and innovate.
30. We also note that at least two of these possible manifestations of an SLC, namely a reduction in the range of products available to customers and a reduction in R&D, had been decided as part of the Merger strategy prior to completion of the Merger, and were about to materialise when the CMA initiated its investigation.

Competitive assessment – vertical effects

31. We identified three potential vertical theories of harm, and for each we assessed: (a) the ability of the merged entity to foreclose competitors; (b) the merged entity's incentive to foreclose competitors; and, where we found ability and incentive, (c) the overall effect of the foreclosure strategy on competition in the affected market.

Input foreclosure of Smartbox's Grid software

32. We find that the merged entity is likely to have the ability and incentive to use its strong position in AAC software (specifically its Grid software) to foreclose its downstream competitors by making their access to the Grid more expensive and/or of inferior quality. Our conclusion is that this foreclosure is likely to result in an SLC in the supply of dedicated AAC solutions in the UK.
33. Our view is that the merged entity has a strong position in the upstream supply of AAC software due to its control of the Grid and that constraints from alternative software are weak. We therefore consider that the merged entity is likely to have the ability to increase the price it charges downstream

competitors for the Grid and/or the ability to reduce the extent to which the Grid supports competitors' dedicated AAC hardware, thus diminishing the quality of rival dedicated AAC solutions sold with the Grid. We also consider that downstream rivals would not be able to switch away from the Grid without significantly weakening their competitive position in the supply of dedicated AAC solutions.

34. We consider that it is likely to be profitable for the merged entity to foreclose its downstream competitors from the Grid. This is due to customers switching from these competitors' dedicated AAC solutions to those provided by the merged entity. This is more likely than downstream competitors switching to alternative software as the Grid is a key driver of sales of dedicated AAC solutions in the UK. In addition, we consider that the foreclosure incentives are significantly greater than Smartbox's pre-Merger incentives.
35. We find that any adverse reputational effects would not be enough to disincentivise the merged entity from foreclosing downstream competitors from the Grid.
36. We find that customers and end-users are likely to be worse off from having a reduced range of hardware that is fully supported by the Grid, and there is also likely to be harm to competition in the downstream supply of dedicated AAC solutions through higher prices and/or lower quality.

Customer foreclosure of Tobii's eye gaze camera competitors

37. We find that the merged entity is likely to have the ability and incentive to limit the compatibility of the Grid with the cameras of rival suppliers of eye gaze cameras, such that dedicated AAC solutions based on the Grid were no longer a route to market for these rival camera suppliers. We conclude that this would result in an SLC in the worldwide upstream supply of eye gaze cameras to providers of dedicated AAC solutions, including providers serving customers in the UK.
38. We find that eye gaze camera suppliers depend on compatibility with AAC software, particularly the Grid, to be able to compete in the supply of eye gaze cameras in AAC applications. Dedicated AAC solutions based on the Grid software are an important route to market for rival suppliers of eye gaze cameras in AAC applications, and the alternative routes to market which do not depend on the Grid are currently limited. This means that these providers of dedicated AAC solutions, who are the customers of Tobii's eye gaze camera competitors, are likely to switch to Tobii's eye gaze cameras if the merged entity limits the Grid's compatibility with these other cameras.

39. It is likely to be profitable for the merged entity to foreclose its eye gaze camera competitors in AAC applications by limiting the compatibility of their cameras with the Grid. This is based on the low likelihood of dedicated AAC solution providers switching to alternative AAC software in order to be able to use non-Tobii cameras.
40. We find that the effects of weakening Tobii's eye gaze camera competitors are likely to include reduced innovation in eye gaze cameras to serve AAC users' needs and higher prices of these cameras than would otherwise be the case. This in turn is likely to lead to adverse effects in the downstream market for dedicated AAC solutions in the UK, in particular from a reduction in the range of cameras available to meet end-user needs in AAC as well as a worsening of price and quality of dedicated AAC solutions which include eye gaze cameras.

Input foreclosure of Tobii's eye gaze cameras

41. We considered whether the merged entity might potentially harm or weaken its competitors downstream by making access to Tobii's eye gaze cameras more expensive, but provisionally consider that such vertical effects are unlikely to arise. We therefore conclude that there is unlikely to be an SLC in the supply of dedicated AAC solutions in the UK as a result of input foreclosure of Tobii's eye gaze cameras.
42. We find that the merged entity has limited ability to foreclose its downstream rivals in the supply of dedicated AAC solutions in the UK due to the constraints from alternative eye gaze cameras used in AAC applications. Given this, we find that it is unlikely that the merged entity has sufficient incentives to make access to Tobii's eye gaze cameras significantly more expensive for its downstream competitors in the supply of dedicated AAC solutions in the UK. This is due to this strategy leading to significantly greater switching to alternative eye gaze cameras upstream compared to the switching to the merged entity's downstream dedicated AAC solutions.

Countervailing factors

43. We considered whether there are countervailing factors which may prevent the SLC from arising.

Entry and expansion

44. We have not seen evidence of recent successful entry and/or expansion in the supply of dedicated AAC solutions in the UK. Nor have we seen evidence of recent entry and/or expansion in the supply of AAC software that would be a credible alternative to the Grid. We have also found that the perceived

threat from new entry or expansion by competitors is low. Based on the evidence we have received, we consider that the barriers to entry or expansion in the supply of dedicated AAC solutions and in the supply of AAC software to rival the Grid are significant.

45. For these reasons, it is our view that entry or expansion is unlikely to be timely, likely and sufficient such as to prevent an SLC from arising.

Buyer power

46. We considered to what extent the NHS, as the main purchaser of dedicated AAC solutions in the UK, could exercise buyer power. We note that in this market most purchases are based on list prices, with standard conditions. While NHS organisations are the predominant purchasers of dedicated AAC solutions in the UK, these organisations do not procure dedicated AAC solutions collectively, and even if they did, it is not clear that the market context would afford them a large degree of buyer power. Even in a scenario when the NHS could exert a degree of buyer power (which we consider unlikely), it is not clear that this would protect other customers from the effects of the SLC, and it is not clear that the effects of an SLC in terms of R&D and innovation would be averted.
47. Therefore, we consider that buyer power is unlikely to prevent an SLC through horizontal unilateral effects which have been identified in the supply of dedicated AAC solutions in the UK.

Efficiencies

48. We have seen insufficient evidence that efficiencies suggested by Tobii, including concerning R&D, could not be achieved absent the Merger, or that any such efficiencies could countervail or otherwise offset the effects of an SLC in the relevant markets.

Findings on SLC

49. As a result of our assessment, we conclude that the completed acquisition by Tobii of Smartbox has resulted in the creation of a relevant merger situation.
50. We also conclude that the creation of that situation has resulted, or may be expected to result, in an SLC due to:
- (a) Horizontal competition concerns in the supply of dedicated AAC solutions in the UK;

- (b) Vertical competition concerns with regard to input foreclosure by the merged entity of Smartbox's Grid software to the Parties' rivals in the downstream supply of dedicated AAC solutions in the UK; and
- (c) Vertical competition concerns with regard to customer foreclosure by the merged entity of Tobii's upstream competitors in the worldwide supply of eye gaze cameras to providers of dedicated AAC solutions, including providers serving customers in the UK.

Remedies

51. Having concluded that the Merger has resulted, or may be expected to result, in an SLC, we are required under the Act to consider whether action should be taken to remedy, mitigate or prevent the SLC or any adverse effects that may be expected to result from the SLC and, if so, what action should be taken.
52. In deciding on the appropriate remedy, the CMA will seek remedies that are effective in addressing the SLC and its resulting adverse effects and will then select the least costly and intrusive remedy that it considers to be effective. The CMA will seek to ensure that no remedy is disproportionate in relation to the SLC and its adverse effects.
53. We considered full divestiture of Smartbox, a partial divestiture remedy (combined with some behavioural remedies) proposed by Tobii (Tobii's Remedy Proposal), and a modified version of this alternative remedy (Tobii's Modified Proposal). For each remedy option, we assessed its effectiveness by considering the impact on the SLC and its resulting adverse effects, the appropriate duration and timing, practicality and risk profile.
54. We conclude that a full divestiture remedy, requiring Tobii to sell Smartbox to a suitable purchaser within a timeframe specified by the CMA, would comprehensively address our competition concerns at source, and thereby prevent any component of the SLC and consequently any resulting adverse effects we have identified arising from the Merger.
55. We conclude that neither Tobii's Remedy Proposal nor Tobii's Modified Proposal would be an effective remedy to the SLC we have found and its resulting adverse effects. Although some of the risks that we have identified might be capable of mitigation by Tobii developing further iterations of its proposals, our fundamental concerns in relation to its remedy approach – which ultimately flow from Tobii's ongoing ownership of the Grid and associated intellectual property – are not capable of being addressed through further modifications.

56. We considered whether there are any relevant customer benefits (RCBs) that should be taken into account in our remedy assessment. We considered RCBs that had been claimed by Tobii, including lower prices as a result of the merged entity's economies of scale and the benefits of combining the expertise of Tobii and Smartbox in terms of product development and customer support. We conclude that none of the claimed benefits constitute RCBs for the purposes of the Act and that, accordingly, there are no RCBs arising from the Merger.
57. We then considered the proportionality of the full divestiture remedy to the SLC we have found and its resulting adverse effects.
58. We found that a full divestiture remedy is the only effective action to achieve the legitimate aim of comprehensively remedying the SLC and its resulting adverse effects. We consider that a full divestiture remedy is no more onerous than is required to achieve that legitimate aim. Based on our conclusion that the Merger is likely to lead to significant and sustained adverse effects and that there are no relevant costs (including RCBs) which we should take into account, we conclude that a full divestiture remedy would not produce adverse effects which are disproportionate to the aim pursued. We therefore conclude that the full divestiture remedy would be proportionate to the SLC and its resulting adverse effects.
59. Tobii will be required to sell the whole of the Smartbox business subject to the CMA's approval of the identity of the purchaser and the terms of the transaction.
60. We propose to implement the full divestiture remedy by seeking suitable undertakings from the Parties. We will issue an Order if we are unable to obtain suitable undertakings from the Parties within the statutory timescale.