

ACQUISITION BY MICROSOFT CORPORATION OF NUANCE COMMUNICATIONS, INC

Decision on relevant merger situation and substantial lessening of competition

ME/6940/21

Please note that [X] indicates figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

SUMMARY

1. The Competition and Markets Authority (**CMA**) has found that the anticipated acquisition by Microsoft Corporation (**Microsoft**) of Nuance Communications, Inc. (**Nuance**) does not give rise to a realistic prospect of a substantial lessening of competition (**SLC**) in any market in the UK. Microsoft and Nuance are together referred to as the **Parties**, and the combination of Microsoft and Nuance is referred to as the **Merged Entity**.
2. Microsoft announced its agreement to acquire Nuance on 12 April 2021 (the **Merger**). The consideration for the Merger is approximately USD 19.7 billion (approximately £13.9 billion).
3. Microsoft is a publicly listed, US-headquartered, global technology company that offers a wide range of products and services to customers through three broad operating segments: (i) Productivity and Business Processes; (ii) Intelligent Cloud; and (iii) More Personal Computing.
4. Nuance is a publicly listed US-headquartered software company that principally offers voice recognition and transcription software. Nuance has two main business units, namely healthcare and enterprise.
5. The CMA has jurisdiction under the Enterprise Act 2002 (the **Act**) to review relevant merger situations. A relevant merger situation can arise where either: (a) the target

company generates more than £70 million of turnover in the UK (the turnover test); or (b) the merger results in the Parties having a share of supply of goods or services of any description in the UK of 25% or more with an increment (the share of supply test). In this case, the CMA has concluded that the Parties have a combined share of more than 25% in the supply of software that enables users with accessibility needs to command and control their personal computer and its applications using their voice (**C&C software**), and that the Merger results in an increment to the Parties' combined share of supply. Therefore, the CMA believes that the share of supply test in section 23 of the Act is met.

Counterfactual

6. The CMA reviewed a number of the Parties' internal documents and did not identify sufficient evidence to support a counterfactual different from the prevailing conditions of competition.

Competition assessment

7. The CMA focussed its investigation on the three theories of harm most likely to give rise to a realistic prospect of a substantial lessening of competition (**SLC**) based on the evidence it received:
 - (a) horizontal unilateral effects in the supply of healthcare transcription software;
 - (b) horizontal unilateral effects in the supply of C&C software; and
 - (c) conglomerate effects with patient administration tools, patient engagement tools and remote healthcare tools as the focal products and Nuance's healthcare transcription software as the adjacent product.

Horizontal unilateral effects in the supply of healthcare transcription software

8. Healthcare transcription software is used by healthcare professionals to dictate their medical notes about a patient into a device and have those notes transcribed directly into an electronic health record (**EHR**).
9. Nuance is active in the supply of healthcare transcription software primarily through its Dragon Medical range of software.
10. Microsoft is active in the supply of various products and services that include general purpose transcription functionality. This includes Microsoft's Azure Cognitive Services, Microsoft 365, Microsoft Teams and Windows operating system (**OS**) offerings.

11. The CMA found that Microsoft and Nuance do not compete closely in the supply of healthcare transcription software. In particular, the CMA considers that general-purpose transcription functionality does not compete closely with healthcare-specific transcription software.
12. Further, many third parties told the CMA that:
 - (a) Microsoft and Nuance are not close competitors in the supply of healthcare transcription software;
 - (b) Significant volumes of healthcare-specific speech data are required to develop an accurate healthcare transcription product; and
 - (c) Nuance competes most closely with 3M/M*Modal, rather than Microsoft.
13. Therefore, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in the supply of healthcare transcription software in the UK.

Horizontal unilateral effects in the supply of C&C software

14. The Parties overlap in the supply of software C&C software. Microsoft's solution, Windows Speech Recognition, is built-in to its Windows OS, whereas Nuance's solution is a feature in its Dragon Professional on-premise software.
15. The CMA found that the Merged Entity will be the largest supplier of C&C software on PCs, with a significant combined share of supply. However, the CMA also found that the evidence, taken in the round, shows that the Parties are not close competitors in the supply of C&C software. In particular, the CMA found that (i) Microsoft competes primarily against other OS providers, not against Nuance, and (ii) the majority of third parties that engaged with the CMA did not view the Parties as close competitors.
16. Therefore, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in the supply of C&C software in the UK.

Conglomerate effects with patient administration tools, patient engagement tools and remote healthcare tools as the focal products and Nuance's healthcare transcription software as the adjacent product

17. The CMA has considered whether the Merger may lead to the foreclosure of Microsoft's rivals in the supply of patient administration tools, patient engagement tools and remote healthcare tools (ie the 'focal' products) as a result of the Merged

Entity bundling this software with Nuance's healthcare transcription software (ie the 'adjacent' product).

18. The CMA notes that Microsoft's does not supply specialised patient administration tools or patient engagement tools. However, Microsoft's Dynamics 365 software can be adapted to function as patient administration and/or patient engagement tools through the use of Microsoft's Microsoft Cloud for Healthcare (**MCFH**) offering, third-party add-ons, or a customer's own adaptations. In relation to remote healthcare tools, the CMA notes that Microsoft's Teams software is currently used by some healthcare providers in the UK as a remote healthcare tool.
19. The CMA considered whether the Merger may be expected to result in the foreclosure of Microsoft's rivals as a result of either:
 - (a) commercial bundling, such as offering healthcare providers a discount when purchasing the relevant Microsoft software (ie Dynamics 365, MCFH, and Microsoft Teams) with Nuance's healthcare transcription software; and/or
 - (b) technical bundling, such as totally or partially restricting the interoperability of software provided by Microsoft's rivals with Nuance's healthcare transcription software such that they could not be easily integrated by healthcare providers.
20. In assessing whether the Merged Entity would have the ability to foreclose rival suppliers of patient administration tools, patient engagement tools and remote healthcare tools, the CMA considered the following:
 - (a) the market power of Nuance in the supply of healthcare transcription software;
 - (b) the feasibility of bundling patient administration tools and patient engagement tools with healthcare transcription software; and
 - (c) the feasibility of bundling remote healthcare tools with healthcare transcription software.

Ability to foreclose Microsoft's rivals

Market power of Nuance

21. In its assessment of Nuance's market power, the CMA considered: (i) the shares of supply for healthcare transcription software in the UK, (ii) the alternatives to Nuance available to healthcare providers, and (iii) barriers to entry and expansion in the supply of healthcare transcription software.

22. The CMA considers that the UK shares of supply in healthcare transcription software indicate that Nuance has a strong position. The CMA found that (i) healthcare providers do not have many effective actual or potential alternatives to Nuance, with only 3M/M*Modal being seen as a credible alternative, and (ii) the barriers to entry and expansion are high, particularly for new market entrants.
23. Based on the available evidence, the CMA believes that Nuance holds a strong position in the supply of healthcare transcription software.

Feasibility of bundling patient administration tools and patient engagement tools with healthcare transcription software

24. The CMA found that the Parties' products were generally not seen as complementary by their rivals and healthcare providers. Most third parties considered that that it would not be important for healthcare transcription software to interoperate with patient administration or patient engagement tools, and that it would be more important for healthcare transcription software to integrate with an EHR system. The CMA believes that a technical bundling strategy would be unlikely to succeed, as rival patient administration and patient engagement software providers will continue to be able to interoperate with EHR software.
25. Most healthcare providers contacted by the CMA said that they would not consider procuring healthcare transcription software with patient administration or patient engagement tools in future. The evidence gathered by the CMA suggest that Microsoft and other general software suppliers are likely to find it difficult to compete with specialist suppliers of healthcare software.
26. The CMA found that the Merged Entity would only be able to offer a bundle to a minority of Nuance's customers. This is because the Merged Entity's ability to implement a bundling strategy would be significantly limited by the fact that healthcare providers typically procure healthcare transcription software through third parties, such as EHR suppliers, rather than directly from Nuance.
27. Based on the available evidence, the CMA believes that offering customers a commercial or technical bundle of patient administration tools, patient engagement tools, and healthcare transcription software is highly unlikely to be a feasible strategy for the Merged Entity.

Feasibility of bundling remote healthcare tools with healthcare transcription software

28. The CMA found that there is only limited complementarity between the Parties' products. Further, the CMA understands that there is limited benefit to integrating

Microsoft Teams and Nuance's Dragon Medical software, as clinician calls are not typically transcribed for a patient's EHR. In addition, only a minority of healthcare providers indicated that it is important for their healthcare transcription software to interoperate with their remote healthcare tools.

29. The vast majority of healthcare providers that engaged with the CMA's investigation said that they would not consider procuring healthcare transcription software together with remote healthcare tools, and that they tend to prefer specialist remote healthcare tools. Accordingly, the CMA believes that a bundled offering of Microsoft Teams and Nuance's DMO software is highly unlikely to be attractive to healthcare providers.
30. Finally, the CMA found the Merged Entity would only be able to offer a bundle to a minority of healthcare providers. This is because the Parties' products are procured by different customers through different processes in the NHS. There is currently a centralised procurement process and contract for Microsoft 365 in the NHS, which covers all NHS healthcare providers and includes Microsoft's productivity software (such as Word and Excel) as well as Teams. In contrast, healthcare transcription software is procured and contracted for by each individual NHS provider, partly because of the different requirements and technology solutions in different NHS Trusts.
31. Based on the available evidence, the CMA believes that offering customers a commercial or technical bundle of remote healthcare tools and healthcare transcription software is highly unlikely to be a feasible strategy for the Merged Entity.

Conclusion on ability to foreclose Microsoft's rivals

32. Based on the available evidence, the CMA does not believe that the Merged Entity would have the ability to foreclose Microsoft's rivals. In particular, the CMA considers that the Merged Entity would not be able to foreclose rivals by bundling patient administration tools, patient engagement tools, or remote healthcare tools with healthcare transcription software.
33. As the CMA has concluded that the Merged Entity would not have the ability to foreclose Microsoft's rivals, it is not necessary for the CMA to consider the Parties' incentives to engage in, or the effects of, any such strategy.
34. Accordingly, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in the UK in relation to conglomerate effects with patient administration tools, patient engagement tools and remote healthcare tools as the

focal products and Nuance's healthcare transcription software as the adjacent product.

Decision

35. The CMA found that the Merger does not give rise to a realistic prospect of a SLC within a market or markets in the United Kingdom.
36. The Merger will therefore **not be referred** under section 33(1) of the Enterprise Act 2002.

ASSESSMENT

PARTIES

Microsoft

37. Microsoft Corporation (**Microsoft**) is a publicly listed, US-headquartered, global technology company. Microsoft offers a wide range of products and services to customers through three broad operating segments: (i) Productivity and Business Processes; (ii) Intelligent Cloud; and (iii) More Personal Computing.¹
38. In 2021, Microsoft's worldwide turnover was £124,750 million, of which £[redacted] million was generated in the UK.²
39. Microsoft offers a wide range of products and services, including the following:
- (a) Azure. Azure is Microsoft's public cloud platform and associated services. It offers over 200 infrastructure-as-a-service (**IaaS**) and platform-as-a-service (**PaaS**) solutions including compute, storage, networking, databases, operating systems, developer tools, and runtimes, to help enterprises build and run their systems, analytics and applications in the cloud. Customers pay consumption-based fees for the services they use.³
 - (b) Azure Cognitive Services (ACS). ACS is a collection of platform services that enable developers to integrate decisional artificial intelligence (**AI**) capabilities into applications.⁴ Microsoft's ACS offering includes application programming interfaces (**APIs**) that give access to transcription functionality that developers can integrate into their own applications.⁵ This transcription functionality is general-purpose, [redacted].⁶
 - (c) Microsoft Dynamics 365. Dynamics 365 is a subscription-based line of modular business applications that include CRM functionality.⁷ It is available on-

¹ Final Merger Notice, submitted on 29 December 2021 (**FMN**), paragraph 26.

² Email from Latham & Watkins (acting for Microsoft) to CMA at 22:51 on 15 February 2022.

³ FMN, paragraph 28.

⁴ Ibid.

⁵ FMN, paragraph 193.

⁶ FMN, paragraph 391.

⁷ FMN, paragraph 28.

premise and as a cloud-based service.⁸ Dynamics 365 offers core CRM functionality, including marketing automation, customer service, and commerce. The module Dynamics 365 Customer Service enables an end-to-end customer service experience built on Microsoft's cloud to deliver personalised support across various channels, including web, phone, email, SMS and social media.⁹

- (d) Microsoft 365. Microsoft 365 is Microsoft's productivity software suite. Within Microsoft 365 is the Microsoft Dictate tool, which provides transcription functionality to let users create documents using their voice. Microsoft Dictate is available for Word, Outlook, OneNote, and PowerPoint.¹⁰
- (e) Microsoft Teams. Microsoft Teams offers video calling, instant messaging and conferencing functionalities.¹¹ It is included within the Microsoft 365 productivity suite. Users can record meetings, which can include automatic transcription, so that users can play back meeting recordings with closed captions and search for discussion items in the transcript.¹²
- (f) Windows OS. Windows is Microsoft's PC operating system software platform. Windows includes built-in speech recognition technology (**Windows Speech Recognition**) which provides users with command and control (**C&C**) functionality.¹³ C&C functionality enables users with accessibility needs to use their voice to control a PC and its applications without having to use the mouse and keyboard.¹⁴ Microsoft is currently improving the C&C functionalities in its Windows 11 OS and the new functionalities will be known as 'voice access'.¹⁵
- (g) Microsoft Cloud for Healthcare. In October 2020, Microsoft released Microsoft Cloud for Healthcare (**MCFH**). MCFH is a collection of templates, connectors, configurations, and data models that can be used with other Microsoft products and services like Azure, Teams, and Dynamics 365 to make them more useful in a healthcare setting. It is not a standalone product but is intended to be used

⁸ FMN, paragraph 285; broadly speaking, an 'on-premise' software solution is deployed on a customer's own IT infrastructure, whereas a 'cloud-based' software solution is hosted by an external provider.

⁹ FMN, paragraph 286.

¹⁰ FMN, paragraph 191.

¹¹ FMN, paragraph 272.

¹² FMN, paragraph 191.

¹³ FMN, paragraph 192.

¹⁴ FMN, paragraph 466.

¹⁵ FMN, paragraph 467.

with other relevant products and services.¹⁶ MCFH was first offered in the UK in October 2021 [§<].¹⁷

Nuance

40. Nuance Communications, Inc. (**Nuance**) is a publicly listed US-headquartered software company that principally offers voice recognition and transcription software. Nuance has two main business units, namely healthcare and enterprise.
41. In 2021, Nuance's worldwide turnover was £995.8 million, of which £[§<] million was generated in the UK.¹⁸
42. In the healthcare sector, Nuance focuses on providing transcription software that integrates with third-party electronic health record (**EHR**) systems.¹⁹ Transcription software, often known as Automatic Speech Recognition (**ASR**) or speech-to-text (**STT**), is a technology used to convert speech into text.²⁰
43. Nuance's main product in healthcare is Dragon Medical. Dragon Medical allows doctors to dictate their medical notes about a patient into a device and have those notes transcribed directly into an EHR.²¹ Nuance also offers a newer, cloud-based, software-as-a-service (**SaaS**) version of Dragon Medical called Dragon Medical One (**DMO**).
44. Nuance also offers PowerScribe, which is a suite of services that allows radiologists to automatically dictate notes about a radiology image (eg an X-ray image) and have those notes transcribed directly onto the image for sharing with other medical professionals.²²
45. In addition, Nuance offers software development kits (**SDKs**) such as SpeechMagic and Dragon Medical SDK that allow developers of healthcare products to embed healthcare transcription capabilities into their application.²³
46. Outside of healthcare, Nuance offers dictation, transcription and accessibility applications through its Dragon Professional and Consumer (**Dragon P&C**) line of products.²⁴ Since 2018, Dragon P&C products are no longer available on Apple's

¹⁶ FMN, paragraphs 28 and 289.

¹⁷ FMN, paragraph 248 and footnote 213; [§<].

¹⁸ FMN, Table 2.

¹⁹ FMN, paragraph 7.

²⁰ FMN, paragraph 142.

²¹ FMN, paragraph 12.

²² Ibid.

²³ Ibid.

²⁴ FMN, paragraph 22.

Mac OS and are only available on Microsoft Windows OS.²⁵ Within the Dragon P&C line of products, Dragon Professional, an on-premise solution, includes C&C functionality;²⁶ Dragon Professional Anywhere, the new cloud-based version of Dragon Professional, does not include C&C functionality.²⁷ The Dragon P&C line of products also includes certain industry-specific products, namely Dragon Legal and Dragon Law Enforcement.²⁸

47. In the enterprise sector, Nuance provides voice engagement, digital engagement, and voice biometrics software.²⁹

Pre-existing strategic partnership between the parties

48. Since October 2019, Microsoft and Nuance have been in a strategic partnership collaborating on the development of AI-based ambient clinical intelligence (**ACI**) technologies for healthcare applications (the **DAX Partnership**). Nuance's Dragon Ambient eXperience (**DAX**) ACI product is the result of this collaboration. DAX is a cloud-based solution that aims to passively record doctor-patient conversations and automatically turn those conversations into structured medical notes that can be entered directly into an EHR.³⁰
49. An early commercialised version of DAX has been launched in the US. DAX is not being offered in the EEA or the UK [§<].³¹

TRANSACTION

Overview

50. The proposed transaction relates to Microsoft's anticipated acquisition of all the shares in Nuance (the **Merger**). Microsoft and Nuance are together referred to as the **Parties**, and the combination of Microsoft and Nuance is referred to as the

²⁵ FMN, paragraph 183.

²⁶ FMN, paragraph 23; Dragon Home (on-premise) includes only limited C&C functionalities which allow users to control Microsoft Word using their voice (see: FMN, Annex 020, Accessibility White Paper, (**Accessibility White Paper**) paragraph 9).

²⁷ FMN, paragraph 454.

²⁸ FMN, paragraph 25.

²⁹ FMN, paragraph 21; Microsoft offers some products and services with voice engagement, digital engagement, and voice biometric functionality. However, the CMA believes that any limited overlap between the Parties in these areas would not be expected to result in a substantial lessening of competition within any market or markets in the UK for goods or services, including because the Parties would have a low combined share of supply, and there are many alternatives to their offering. These products and services are therefore not considered further in this decision.

³⁰ FMN, paragraph 14.

³¹ FMN, paragraphs 16 – 17; footnote 329.

Merged Entity.

51. The Parties signed an Agreement and Plan of Merger on 11 April 2021 (the **APM**)³² and publicly announced the Merger on 12 April 2021.³³ The Merger is to be implemented as a reverse triangular merger pursuant to which Big Sky Merger Sub, Inc, a wholly-owned subsidiary of Microsoft, newly formed for the purposes of the Merger, will merge with and into Nuance. Nuance will continue as the surviving corporation in the merger, and as a wholly-owned subsidiary of Microsoft.³⁴
52. The consideration for the Merger is approximately USD 19.7 billion (approximately £13.9 billion).³⁵

Transaction rationale

53. The Parties state that Microsoft's traditional focus has been on general-purpose enterprise solutions that are used across sectors to make people more productive and operations more efficient.³⁶
54. The Parties also state that healthcare customers have specific needs that are best addressed by industry-specific solutions.³⁷ The purpose of the Merger is to help Microsoft deliver cloud services specially designed to meet the needs of healthcare providers, especially in the US. In particular, the acquisition of Nuance aims to provide Microsoft with [X].³⁸ Microsoft intends to use Nuance's [X] to achieve this goal. In addition, the Parties state that the Merger will enable Microsoft to combine Nuance's well-established healthcare offerings with Microsoft's own general-purpose cloud services.³⁹
55. Further, the Parties state that the Merged Entity will be better positioned to address the fast-evolving needs of the healthcare industry and better compete with other large technology firms like [X].⁴⁰
56. The Parties consider that the Merger will allow the Parties to [X].⁴¹ They submit that the Merger will allow them to [X].⁴² The Parties explained that the Merger will

³² FMN, Annex 002.1.

³³ Microsoft's Press release dated 12 April 2021 is available [here](#).

³⁴ FMN, paragraph 80.

³⁵ FMN, paragraph 81.

³⁶ FMN, paragraph 44.

³⁷ FMN, paragraph 45.

³⁸ FMN, Annex 016 (**White Paper on the Counterfactual**), paragraph 8.

³⁹ FMN, paragraph 46.

⁴⁰ Ibid.

⁴¹ FMN, paragraph 36.

⁴² FMN, paragraph 26.

[redacted].⁴³

57. The Parties submitted that, [redacted], the Merger nonetheless represents a real and important opportunity to accelerate Microsoft's efforts to improve accessibility in Windows.⁴⁴
58. The CMA found that Microsoft's internal documents support the Parties' submissions on the deal rationale.⁴⁵

JURISDICTION

59. The CMA believes that the Merger is sufficient to constitute arrangements in progress or contemplation for the purposes of the Enterprise Act 2002 (the **Act**).⁴⁶

Enterprises ceasing to be distinct

60. Each of Microsoft and Nuance is an 'enterprise' within the meaning of section 129 of the Act. As a result of the Merger, these enterprises will cease to be distinct for the purposes of sections 23(1)(a) and 26 of the Act.

Turnover test

61. Nuance's UK turnover for the financial year ended 30 September 2021 was £[redacted] million. Therefore, the turnover threshold set out at section 23(1)(b) of the Act is not satisfied.

Share of supply test

General

62. Under section 23 of the Act, the share of supply test is met if the merging enterprises supply or acquire goods or services of a particular description in the UK and will, after the merger, supply or acquire 25% or more of those goods or services in the UK as a whole or in a substantial part of it. The merger must also result in an increment to the share of supply (the **share of supply test**).⁴⁷

⁴³ White Paper on the Counterfactual, paragraph 6.

⁴⁴ FMN, Parties' response to RFI 5, Annex 015, paragraph 10.2.

⁴⁵ See, for example, FMN, Annex 007.15 and FMN, Annex 007.16, slide 17.

⁴⁶ Section 33(1)(a) of the Act.

⁴⁷ Section 23(2A)(a) of the Act.

Parties' submission

63. The Parties considered that the share of supply test is not satisfied. In particular, the Parties submitted that they have not identified any reasonable description of goods or services on which they would account for a combined share of supply of 25% or more in the UK (with an increment).⁴⁸
64. The Parties further submitted that they do not consider a hypothetical market for accessibility solutions for PCs is a reasonable description of goods and services.⁴⁹

CMA's view

65. As noted above, both Microsoft and Nuance offer software that enables users with accessibility needs to command and control their personal computer and its applications using their voice (**C&C software**). Microsoft's solution, Windows Speech Recognition, is built-in to its Windows OS, whereas Nuance's solution is a feature in its Dragon Professional on-premise software.
66. The CMA has a wide discretion to identify a specific category of goods or services supplied or procured by the merging parties for the purposes of the share of supply test. This discretion is set out in s.23(8) of the Act.⁵⁰
67. The CMA's guidance on jurisdiction and procedure⁵¹ (the **Jurisdictional Guidance**) states that the CMA will have regard to several considerations when applying the share of supply test. In particular, among others:⁵²
- (a) The CMA will have regard to any reasonable description of a set of goods or services to determine whether the share of supply test is met.
 - (b) The share of supply test is not an economic assessment of the type used in the CMA's substantive assessment. As such, the description of goods or services to which the jurisdictional test is applied may differ from the relevant economic market used for the purposes of the substantive assessment of the merger.

⁴⁸ FMN, paragraph 127.

⁴⁹ FMN, footnote 116.

⁵⁰ See also: [CMA2, Mergers: Guidance on the CMA's jurisdiction and procedure](#) (as amended on 4 January 2022), paragraph 4.59(d) and *Sabre Corporation v. Competition and Markets Authority* [2021] CAT 11, paragraph 140.

⁵¹ CMA2, Mergers: Guidance on the CMA's jurisdiction and procedure, January 2022.

⁵² Jurisdictional Guidance, paragraph 4.59.

- (c) The CMA will consider the commercial reality of the merger parties' activities when assessing how goods or services are supplied, focussing on the substance rather than the legal form of arrangements. Firms can engage in a variety of different business models and offer differentiated products or services, and the forms of supply which firms may offer in competition with one another can vary significantly. Further, the CMA will consider whether there are sufficient elements of common functionality between the merging parties' activities.

68. Applying these considerations to the facts of this case, the CMA believes that:

- (a) C&C software is a reasonable description of goods or services.⁵³ In particular, PC users with certain disabilities cannot use a mouse and keyboard and require the C&C functionality of Windows Speech Recognition or Nuance's Dragon Professional product; and
- (b) Some third parties told the CMA that certain users, depending on the nature of their accessibility needs, would consider Microsoft and Nuance's offerings to be alternatives.⁵⁴ Further, the Parties provided the CMA with details of common functionality in their offerings⁵⁵ and some third parties also noted common functionality between Microsoft and Nuance's offerings.⁵⁶

69. The Parties provided the CMA with *inter alia* estimated shares focusing on the supply of voice recognition technology to control a PC.⁵⁷ These are set out in the competitive assessment section below. These figures show that the Parties have a combined share of [70-80]% (with an incremental share increase of [10-20]%) in C&C software. The CMA therefore believes that the share of supply test in section 23 of the Act is met.

⁵³ The CMA notes that the supply software may be considered both a good and/or a service, depending on the nature of the solution offered. Notwithstanding, as the categorisation of C&C as a good or service does not alter the CMA's conclusions on jurisdiction. See also s.128(4) of the Act which provides that the supply of services includes making arrangements for the use of computer software.

⁵⁴ Note of call with a Third Party [redacted] of 13 December 2021, paragraph 22; Note of call with a Third Party [redacted] of 15 December 2021, paragraph 8.

⁵⁵ Parties' response to Question 3 of RFI 6, Table 1, "App/OS compatibility".

⁵⁶ Note of call with a Third Party [redacted] of 23 November 2021, paragraph 12; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 11.

⁵⁷ Parties' response to Questions 5 and 6 of RFI 5.

Conclusion

70. For the reasons set out above, pursuant to section 33(1)(a) of the Act the CMA believes that the Merger will, if carried into effect, result in the creation of a relevant merger situation.

COUNTERFACTUAL

71. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual).
72. In this case, the Parties submitted the relevant counterfactual to be the prevailing conditions of competition, including the Parties' pre-existing DAX Partnership. The CMA reviewed a number of the Parties' internal documents, including those relating to the DAX Partnership Agreement, and did not identify sufficient evidence to support an alternative counterfactual. Therefore, the CMA believes that the most appropriate counterfactual is the prevailing conditions of competition, including the Parties' pre-existing DAX Partnership.

BACKGROUND

Software used by healthcare providers

73. In the UK, healthcare providers, such as NHS Trusts, GPs, and private hospitals, are increasingly making use of a range of software applications.
- (a) **EHR systems** hold and systematise patients' medical records in a digital format. EHR systems allow healthcare professionals across organisations to create and manage patient information.
 - (b) **Healthcare transcription software** is used by healthcare professionals to dictate their medical notes about a patient into a device and have those notes transcribed directly into an EHR.
 - (c) **Patient administration tools** are applications that support the healthcare provider's management and administration of patients throughout their clinical journey, including appointment reminders, making and amending bookings, and managing referrals to specialist providers.
 - (d) **Patient engagement tools** are applications that allow patients to book, manage, and cancel appointments and interact directly with their healthcare providers through, for example, online messaging or health chatbots.

(e) **Remote healthcare tools** are applications that allow patients and healthcare professionals to conduct virtual consultations, such as telehealth software and videoconferencing software.

74. Patient administration, patient engagement, and remote healthcare tools used by healthcare providers are provided by both specialist healthcare suppliers and generalist suppliers. The CMA found that specialist suppliers generally offer different combinations of patient administration tools and patient engagement tools.⁵⁸ All healthcare providers that responded to the CMA's questionnaire use one or more of EHR systems, healthcare transcription software, patient administration tools, patient engagement tools, and remote healthcare tools.⁵⁹
75. The main healthcare provider in the UK is the NHS. In the UK, healthcare is a devolved matter and therefore each nation has responsibilities for its healthcare system. Across the UK, the NHS is prioritising the use of digital technology to enhance the provision of healthcare.⁶⁰ For example, NHS England's Long Term Plan, published in January 2019, sets out initiatives to future-proof the NHS over the next decade. The plan prioritises the digital transformation of the NHS. Among other things, it seeks to upgrade technology and digital services so that patients can more effectively manage their care, and clinicians can benefit from AI software to help them make decisions and reduce their administrative burden.⁶¹
76. The NHS has undertaken some procurement for software centrally (eg the procurement for a remote healthcare tool, Attend Anywhere, and general productivity software, Microsoft 365).⁶² However, the CMA understands that NHS Trusts are typically responsible for the procurement of software that they use.⁶³

⁵⁸ Products which include patient administration and engagement functionality are sometimes referred to as 'Healthcare CRM' software. For example, Salesforce's Health Cloud offering is referred to as 'CRM for Healthcare' on its website (see: <https://www.salesforce.com/products/health-cloud/overview/>), last accessed on 02/03/2022 and Cerner / Salesforce offer a product called HealtheCRM (see: [HealtheCRM \(cerner.com\)](https://www.cerner.com/health/health-crm)), last accessed on 02/03/2022.

⁵⁹ Third party responses to the CMA's healthcare provider questionnaire.

⁶⁰ See for example: [NHS England » Digital transformation](#); [New NHS Wales organisation for digital, data and technology - Digital Health and Care Wales](#); [Enabling, Connecting and Empowering: Care in the Digital Age \(www.gov.scot\)](#); [Digital Health and Care Northern Ireland - HSCB \(hscni.net\)](#), each last accessed on 02/03/2022.

⁶¹ NHS Long Term Plan, pages 29 – 33 and 91 – 98. See: [NHS Long Term Plan v1.2 August 2019](#), last accessed on 02/03/2022.

⁶² See: <https://news.microsoft.com/en-gb/2020/06/15/nhs-chooses-microsoft-365-to-create-a-truly-joined-up-national-health-service/>, last accessed on 02/03/2022.

⁶³ Note of call with a Third Party [redacted] of 3 December 2021, paragraph 21.

Healthcare transcription software

77. As noted above, healthcare transcription software is typically used by healthcare professionals to dictate their medical notes about a patient into a device and have those notes recorded directly into an EHR system. By enabling doctors to use their voice to auto-complete clinical documentation, healthcare transcription software aims to reduce the time doctors spend on administrative tasks.⁶⁴
78. Healthcare transcription software must be able accurately to transcribe specialised medical vocabulary.⁶⁵ The results of the CMA's questionnaire showed that transcription accuracy was one of the most important factors for customers when determining their choice of healthcare transcription software.⁶⁶
79. To develop healthcare transcription software that meets a high degree of accuracy, providers typically develop language recognition algorithms that are trained on large volumes of healthcare-specific speech data.⁶⁷
80. In the UK, there is a low but increasing adoption of healthcare transcription software. The Parties submitted that the total penetration rate of healthcare transcription software in the UK in 2020 was between [20-30] – [20-30]%, with Nuance's penetration rate between [10-20] – [10-20]%.⁶⁸ In contrast, the penetration rate is much higher in the US.⁶⁹ Third parties also indicated that, compared to the US, healthcare transcription software has not yet had a significant uptake in the UK and that, while the technology has been available in the UK for many years, it is currently used by less than 30% healthcare customers.⁷⁰

Command and control software

81. Voice recognition technology is an important tool for users with a wide spectrum of disabilities. It enables users with disabilities such as multiple sclerosis or motor neurone disease to command and control a PC using their voice, instead of a

⁶⁴ FMN, paragraph 166.

⁶⁵ FMN, paragraph 52.

⁶⁶ Third party responses to the CMA's healthcare provider questionnaire, question 13.

⁶⁷ FMN, paragraph 94.

⁶⁸ FMN, paragraphs 101 and 139.

⁶⁹ FMN, paragraph 139.

⁷⁰ Note of call with a Third Party [redacted] of 22 September 2021, paragraph 18 and note of call with a Third Party [redacted] of 4 October 2021, paragraph 22; one third party estimated that healthcare transcription software has been available in the UK for over a decade.

mouse and keyboard. C&C functionality is not only useful for users with a physical disability, it can also be helpful for users with disabilities such as dyslexia.⁷¹

82. Non-dedicated voice recognition solutions for accessibility are those which are built-in to OSs, such as Microsoft's Windows Speech Recognition (built into the Windows OS), and the solutions within Apple's Mac OS and Google's Chrome OS. The accessibility solutions built-in to OSs have improved in recent years, as providers have increasingly focussed on supporting users with accessibility needs.⁷²
83. Dedicated voice recognition solutions for accessibility, such as Nuance's offering as part of its Dragon Professional on-premise solution, are more likely to be required by users with more complex accessibility needs.⁷³ Dedicated solutions such as Nuance's work by integrating with OSs. For example, Nuance's Dragon Professional on-premise software is available on Microsoft Windows OS.⁷⁴ There are also some third-party specialist applications which build on top of Microsoft or Google's voice recognition APIs to offer accessibility solutions.⁷⁵

COMPETITIVE ASSESSMENT

84. The CMA has focussed on the consideration of three theories of harm in relation to the proposed Merger, which are discussed in turn below:
 - (a) horizontal unilateral effects in the supply of healthcare transcription software;
 - (b) horizontal unilateral effects in the supply of C&C software; and
 - (c) conglomerate effects with patient administration tools, patient engagement tools and remote healthcare tools as the focal products and Nuance's healthcare transcription software as the adjacent product.
85. The CMA notes that Microsoft offers a wide range of goods and services and that those goods and services may interact, to varying degrees, with Nuance's goods and services. The CMA focussed its investigation on the theories of harm that would

⁷¹ Note of call with a Third Party [§<] of 24 November 2021, paragraph 7, note of call with a Third Party [§<] of 3 December 2021, paragraph 4, and note of call with a Third Party [§<] of 15 December 2021, paragraph 15.

⁷² Note of call with a Third Party [§<] of 3 December 2021, paragraph 13 and note of call with a Third Party [§<] of 15 December 2021, paragraph 21.

⁷³ Note of call with a Third Party [§<] of 24 November 2021, paragraph 16.

⁷⁴ FMN, paragraph 23.

⁷⁵ Note of call with a Third Party [§<] of 24 November 2021, paragraph 15.

give rise to plausible competition concerns based on the evidence it received.⁷⁶

Horizontal unilateral effects

86. Unilateral effects can arise in a horizontal merger when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or to degrade non-price aspects of its competitive offering (such as quality, range, service and innovation) on its own and without needing to coordinate with its rivals.⁷⁷ Horizontal unilateral effects are more likely when the merging parties are close competitors.⁷⁸

Horizontal unilateral effects in the supply of healthcare transcription software

87. Nuance is active in the supply of healthcare transcription software primarily through its Dragon Medical range of software. Nuance also offers SDKs that allow developers of healthcare products to embed healthcare transcription capabilities into their applications. The Parties are also co-developing an ACI solution, DAX.
88. Microsoft is active in the supply of various products and services that include general-purpose transcription functionality. As noted above, this includes Microsoft's ACS, Microsoft 365, Microsoft Teams, and Windows OS offerings. [X].
89. In light of the Parties' respective transcription offerings, the CMA has considered whether the Merger would give rise to a realistic prospect of an SLC in the supply of healthcare transcription software in the UK.

The Parties' submissions

90. The Parties submitted that neither Microsoft's general-purpose APIs that offer transcription functionality nor the transcription functionality available within its productivity software is a substitute for Nuance's healthcare transcription software.⁷⁹ In particular, the Parties submitted that:
- a) Microsoft's general-purpose APIs that offer transcription functionality must be integrated by a developer into an application before they can be used and are therefore different from Nuance's out-of-the-box Dragon Medical products, which doctors can use to dictate directly into the EHR.

⁷⁶ CMA 129, Merger Assessment Guidelines, 18 March 2021 (the "**Merger Assessment Guidelines**"), paragraph 2.11.

⁷⁷ Merger Assessment Guidelines, paragraph 4.1.

⁷⁸ Merger Assessment Guidelines, paragraph 4.8.

⁷⁹ FMN, paragraphs 52 – 53 and 171 – 174.

- b) Microsoft's general-purpose APIs are also different from Nuance's healthcare-specific SDKs that have embedded vocabularies and features targeting healthcare use cases.⁸⁰
- c) [REDACTED]. In contrast, Nuance's Dragon Medical is integrated directly into EHR systems and so allows doctors to dictate medical notes directly into the patient record. This represents a large efficiency saving and is one of the key attractive features of the software.⁸¹

91. As noted above, [REDACTED].⁸²

92. The Parties submitted that access to significant volumes of healthcare-specific speech data is fundamental to being able to develop an accurate healthcare transcription software product. [REDACTED] Nuance has access to healthcare-specific speech data that has enabled it to train its language recognition algorithms to the high degree of accuracy required by healthcare customers.⁸³

93. In addition, the Parties submitted that to develop and market healthcare transcription software, it is important to have integrations with EHR systems, as well as relationships with frontline healthcare professionals and hospital departments. Nuance has these capabilities, [REDACTED].⁸⁴

94. Finally, the Parties submitted that Nuance's closest competitors in healthcare transcription include 3M/M*Modal, Recognosco, MedialInterface, Epro, and Vocalis, as well as EHR providers such as Cerner, which has recently partnered with Amazon to develop a healthcare transcription offering. The Parties submitted that [REDACTED].⁸⁵

The CMA's assessment

Internal documents

95. Microsoft's internal documents show that it does not compete closely with Nuance in the supply of healthcare transcription software. In particular:

- (a) Microsoft typically compares its transcription offering with that of other large technology companies, such as [REDACTED]. For example, one Microsoft internal

⁸⁰ FMN, paragraph 53.

⁸¹ FMN, paragraph 175.

⁸² FMN, paragraph 53.

⁸³ FMN, paragraphs 93 – 94.

⁸⁴ FMN, paragraphs 93 – 94.

⁸⁵ FMN, paragraph 54.

document compares its ACS offering with [redacted] offering and discusses how Microsoft can “win” against [redacted] and [redacted] in relation to AI apps and agents for “vision, speech, language, & decision”.⁸⁶

(b) Further, Microsoft internal documents suggest that it considers that [redacted].⁸⁷ Microsoft’s internal documents also show [redacted], further suggesting that the two offerings do not compete closely.⁸⁸

(c) Lastly, Microsoft’s internal documents support its submissions that Microsoft [redacted].⁸⁹

96. Nuance’s internal documents show that [redacted]. For example, one document notes that [redacted] and another states that [redacted].⁹⁰ In addition, this document suggests [redacted].⁹¹ In the UK, Nuance considers its primary competitor to be [redacted].⁹²

Third party views

97. Many third parties supported the view that Microsoft and Nuance were not close competitors in the supply of healthcare transcription software. For example, one competitor told the CMA that Microsoft’s general-purpose transcription offering does not compete with healthcare transcription software.⁹³ Another competitor noted that using general-purpose software in a healthcare setting would lead to less accurate results, and that it was not aware of any healthcare customer using Microsoft’s tools in this way.⁹⁴ Other third parties noted that Microsoft’s transcription offering would not recognise complex medical terminology.⁹⁵ Further, a customer of healthcare transcription products told the CMA that Microsoft had not marketed its transcription offering as a healthcare product.⁹⁶

⁸⁶ MSFT00000529.0001, [redacted], 8 January 2020, pages 15 and 28.

⁸⁷ MSFT00000913.0001, [redacted], 5 January 2021, page 19; MSFT00003618.0001, [redacted], 17 July 2018, page 4.

⁸⁸ FMN, Annex 007.54, [redacted], 7 December 2020, page 23.

⁸⁹ MSFT00003618.0001, [redacted], 17 July 2018, page 3 and 4.

⁹⁰ FMN, Annex 007, [redacted], 23 March 2021, page 19; NUA0040079, [redacted], 10 June 2019, page 63.

⁹¹ NUA0040079, [redacted], 10 June 2019, page 66.

⁹² NUA0089445, [redacted], 11 June 2019, page 69; NUA0617981, [redacted], 18 April 2021, page 3.

⁹³ Note of call with a Third Party [redacted] of 4 October 2021, paragraph 23.

⁹⁴ Note of call with a Third Party [redacted] of 22 September 2021, paragraph 16. In addition, the CMA also notes that no healthcare provider which engaged with CMA’s investigation stated that it used Microsoft’s offering for healthcare transcription purposes.

⁹⁵ Response by [redacted] to the CMA’s questionnaire, Question 4; and Note of call with a Third Party [redacted] of 13 December 2021, paragraph 9.

⁹⁶ Note of call with a Third Party [redacted] of 12 October 2021, paragraph 13.

98. In addition, many third parties supported the Parties' submission that significant volumes of healthcare-specific speech data are required to develop an accurate healthcare transcription product. For example, third parties told the CMA that:
- (a) the ability to recognise and accurately transcribe medical vocabulary is fundamental to an effective healthcare transcription product and that access to a significant amount of data is required to develop this functionality;⁹⁷
 - (b) the most important component to building a good speech product is in-domain data, and that this was the main barrier to entry;⁹⁸ and
 - (c) access to medical data and vocabulary is important to developing the basis for a healthcare transcription product. It is necessary to have the full range of medical terminology, the different pronunciations of the same word and the latest diagnoses, in all languages.⁹⁹
99. Finally, many healthcare transcription customers told the CMA that Nuance, in fact, competes most closely with 3M/M*Modal, rather than Microsoft.¹⁰⁰ This was supported by many competitors who told the CMA that Nuance's closest competitor is 3M/M*Modal.¹⁰¹

Conclusion on horizontal unilateral effects in the supply of healthcare transcription software

100. In light of evidence described above, the CMA believes that the Parties are not close competitors in the supply of healthcare transcription software in the UK. In particular, the evidence shows that Microsoft's general-purpose transcription offerings do not compete closely with Nuance's healthcare transcription offering. Therefore, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in the supply of healthcare transcription software in the UK.

⁹⁷ Note of call with a Third Party [redacted] of 4 October 2021, paragraphs 9 and 10.

⁹⁸ Note of call with a Third Party [redacted] of 27 September 2021, paragraph 6; and Response by [redacted] to the CMA's questionnaire, question 4.

⁹⁹ Note of call with a Third Party [redacted] of 13 September 2021, paragraph 24.

¹⁰⁰ Note of call with a Third Party [redacted] of 9 December 2021, paragraph 16; Note of call with a Third Party [redacted] of 1 December 2021, paragraph 6; Note of call with a Third Party [redacted] of 7 December 2021, paragraphs 6 to 8; and Note of call with a Third Party [redacted] of 12 October 2021, paragraph 11.

¹⁰¹ Note of call with a Third Party [redacted] of 22 September 2021, paragraph 11; Note of call with a Third Party [redacted] of 13 October 2021, paragraph 17.

Horizontal unilateral effects in the supply of C&C software

101. As noted above, Microsoft and Nuance overlap in the provision of C&C software, through their Windows Speech Recognition and the Dragon Professional on-premise offerings respectively.

The Parties' submissions

102. The Parties submitted that: (i) there is no supply-side or demand-side substitutability between OSs and specialist accessibility software providers; and (ii) Microsoft and Nuance do not competitively constrain one another.¹⁰² The Parties consider that Microsoft competes primarily against [REDACTED] in the supply of OSs, not against specialist providers of accessibility software.

103. The Parties further submitted that the Merger will not lead to any loss of innovation or price competition for the following reasons:¹⁰³

(a) Nuance has [REDACTED]. This is driven by the commoditisation of dictation and transcription functionality and increased cybersecurity concerns prompting OS and application providers to limit the access points of third-party developers into their software. At the same time, OS providers have been steadily improving their native accessibility functionalities at no additional cost to end customers.¹⁰⁴

(b) [REDACTED].¹⁰⁵

(c) The Merger will not give rise to any loss of price competition. Accessibility users account for only [REDACTED] of Nuance's userbase and Nuance is [REDACTED]. [REDACTED].¹⁰⁶ [REDACTED].¹⁰⁷

104. As for Microsoft's offering, the Parties stated that Microsoft is currently working on improving the C&C functionalities in Windows 11. [REDACTED]. Microsoft's submitted that its decision to improve the C&C functionalities in Windows is driven by: (i) Microsoft's moral commitment to accessibility; (ii) regulatory obligations, which set minimum

¹⁰² FMN, paragraph 518.

¹⁰³ Accessibility White Paper, paragraph 1.

¹⁰⁴ Accessibility White Paper, paragraph 2; and email from Slaughter & May to CMA at 13:56 on 16 February 2022.

¹⁰⁵ Accessibility White Paper, paragraphs 3 and 10 – 18.

¹⁰⁶ Accessibility White Paper, paragraphs 3 – 4.

¹⁰⁷ Accessibility White Paper, paragraph 5.

standards for accessibility controls within operating systems; and (ii) commercial considerations, including competition with rival OS providers, [redacted].¹⁰⁸

105. Finally, the Parties submitted that the Merger will benefit accessibility users by enabling Microsoft to leverage the differentiated functionality and capabilities of Dragon P&C to accelerate and augment accessibility functionality in Windows.¹⁰⁹

The CMA’s assessment

Shares of supply

106. The Parties submitted various shares of supply, including shares of supply focusing on the supply of voice recognition technology to control a PC, ie C&C software.¹¹⁰ The Parties’ share of supply estimates are shown in Table 1 below on a UK-wide and global basis.

Table 1: Estimated shares of supply for C&C software on PCs (users, 2020)

Suppliers	UK	Global
Microsoft	[60-70]%	[70-80]%
Nuance	[10-20]%	[0-5]%
Combined	[70-80]%	[70-80]%
Apple	[20-30]%	[10-20]%
Google	[0-5]%	[0-5]%
Linux	[0-5]%	[0-5]%

Source: Parties’ estimates, FMN, Table 7.

Note: The estimates for Linux users includes users of its own voice recognition functionalities as well as third-party applications and add-ons.

107. Table 1 shows that the Merged Entity will be the largest supplier of C&C software on PCs. The Merger will result in an increment of between [0-5] – [5-10]% to Microsoft’s share of supply depending on the geographic basis considered. The Merged Entity’s combined share of supply is estimated to be between [70-80] – [70-80]%, making it [redacted] times larger than the next largest supplier of C&C software on PCs.

Internal documents

108. Microsoft’s internal documents show that it compares its accessibility offering in Windows against competitors in the supply of OS. For example, Microsoft appears to regularly monitor the accessibility offering on the OS platforms [redacted]. In addition,

¹⁰⁸ Accessibility White Paper, paragraphs 19 – 23.

¹⁰⁹ Accessibility White Paper, paragraph 6.

¹¹⁰ FMN, paragraphs 518 – 526.

Microsoft frequently reacts to the announcements made by those suppliers relating to planned improvements in their accessibility offering.¹¹¹

109. By contrast, Microsoft's internal documents do not identify Nuance as a close competitor. While some internal documents show that Microsoft compares the accessibility features of Windows against those of Nuance's Dragon Professional product, they appear to do so for benchmarking the features available on the combined Windows/Nuance offering against those of rival OS platforms.¹¹²
110. As for Nuance, the CMA found no evidence in its internal documents to suggest that it views Microsoft as a competitor in C&C software.

Third party views

111. The majority of third parties that engaged with the CMA consider that Microsoft and Nuance are not close competitors in the supply of C&C software on a PC.¹¹³ Some third parties see Microsoft and Nuance as catering to different types of customer, with Nuance providing accessibility solutions for users with complex needs that cannot be met by the functionality included in an OS.¹¹⁴ Some third parties consider that Microsoft and Nuance's accessibility solutions are only alternatives for a subset of users with certain, less severe disabilities.¹¹⁵
112. Several third parties highlighted the differences between the accessibility offerings of Windows and Nuance's Dragon Professional product, noting that Nuance essentially offers a superior product.¹¹⁶ Some third parties, however, noted that Windows has steadily improved its built-in accessibility functionality, and consider that Windows' offering is likely to continue improving in future as developers focus more on accessibility.¹¹⁷ One third party told the CMA that the Parties' offerings are

¹¹¹ See: Parties' response to RFI 6, Annex 001; Parties' response to RFI 6, Annex 002, slides 11-16; Parties' response to RFI 6, Annex 006; Parties' response to RFI 6, Annex 007, slides 4 and 6.

¹¹² See: Parties' response to RFI 6, Annex 004.

¹¹³ Note of call with a Third Party [redacted] of 13 December 2021, paragraphs 8 and 24; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 13; Note of call with a Third Party [redacted] of 24 November 2021, paragraph 18.

¹¹⁴ Note of call with a Third Party [redacted] of 13 December 2021, paragraphs 9 and 21; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 14; Note of call with a Third Party [redacted] of 24 November 2021, paragraph 16.

¹¹⁵ Note of call with a Third Party [redacted] of 13 December 2021, paragraph 22; Note of call with a Third Party [redacted] of 15 December 2021, paragraph 8.

¹¹⁶ Note of call with a Third Party [redacted] of 13 December 2021, paragraph 21; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 11; Note of call with a Third Party [redacted] of 24 November 2021, paragraphs 12, 14 and 16.

¹¹⁷ Note of call with a Third Party [redacted] of 24 November 2021, paragraphs 9 – 13; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 7.

complementary, and that Microsoft will likely incorporate Nuance's technology into the Windows OS following the Merger.¹¹⁸

Conclusion on horizontal unilateral effects in the supply of C&C software

113. The CMA believes that the evidence, taken in the round, shows that the Parties are not close competitors in the supply of C&C software. In particular, Microsoft's internal documents, and most third-party evidence, suggest that Microsoft and Nuance's respective offerings do not compete closely, and that Microsoft currently competes most closely with rival OS suppliers, [redacted]. Therefore, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in the supply of C&C software in the UK.

Conglomerate effects

Conglomerate effects with patient administration tools, patient engagement tools and remote healthcare tools as the 'focal' products and healthcare transcription software as the 'adjacent' product

114. Conglomerate effects may arise when a merger involves firms that are not active within the same supply chain, but which are nevertheless related in some way.¹¹⁹ For example, this may be because their products target similar customers or may be purchased alongside each other.

115. Conglomerate mergers could weaken rivalry in some circumstances when the merged entity restricts its rival suppliers of one 'focal' product from accessing customers using its strong position in the supply of an 'adjacent' product.¹²⁰ The merged entity could do this through linking the sales of the two products in some way, thereby encouraging customers who want its product in the adjacent market to also purchase its product in the focal market, at the expense of rivals.

116. The CMA does not consider the loss of sales by competitors to be problematic in itself and notes that linked sales of related products can result in efficiencies.¹²¹ However, competition concerns may arise if such a strategy would result in rivals in the focal market becoming less effective competitors, which may result in higher prices or lower quality in the longer term.

¹¹⁸ Note of call with a Third Party [redacted] of 24 November 2021, paragraphs 18 and 21 – 22.

¹¹⁹ Merger Assessment Guidelines, paragraph 7.1.

¹²⁰ Merger Assessment Guidelines, paragraph 7.30.

¹²¹ Merger Assessment Guidelines, paragraph 7.31.

117. When assessing potential conglomerate effects, in line with the Merger Assessment Guidelines, the CMA considers whether the merged entity would have the ability and incentive to foreclose rivals, as well as the likely effect of any such foreclosure strategy.¹²²
118. In this case, the CMA has considered whether the Merger may lead to the foreclosure of Microsoft's rivals in the supply of patient administration tools, patient engagement tools and remote healthcare tools (ie the 'focal' products) as a result of the Merged Entity bundling this software with Nuance's healthcare transcription software (ie the 'adjacent' product).¹²³
119. The CMA notes that Microsoft does not supply specialised patient administration tools or patient engagement tools. However, Microsoft's Dynamics 365 software can be adapted to function as patient administration and/or patient engagement tools through the use of Microsoft's MCFH offering, third-party add-ons, or a customer's own adaptations.¹²⁴ In relation to remote healthcare tools, the CMA notes that Microsoft's Teams software is currently used by some healthcare providers in the UK as a remote healthcare tool.¹²⁵

Ability to foreclose Microsoft's rivals

120. The CMA first considered whether the Merged Entity would have the ability to foreclose Microsoft's rivals by implementing one of the following foreclosure strategies:
- (a) commercial bundling, such as offering healthcare providers a discount when purchasing the relevant Microsoft software (ie Dynamics 365, MCFH and Teams) with Nuance's healthcare transcription software; and/or
 - (b) technical bundling, such as totally or partially restricting the interoperability of software provided by Microsoft's rivals with Nuance's healthcare transcription software such that they could not be easily integrated by healthcare providers.
121. In assessing whether the Merged Entity would have the ability to foreclose rival suppliers of patient administration tools, patient engagement tools and remote healthcare tools, the CMA considered the following:

¹²² Merger Assessment Guidelines, paragraph 7.32.

¹²³ 'Foreclosure' means either foreclosure of a rival or to substantially competitively weaken a rival.

¹²⁴ Parties' response to RFI 9, Question 4.

¹²⁵ Third party responses to the CMA's healthcare provider questionnaire, question 23.

- (a) the market power of Nuance in the supply of healthcare transcription software;
- (b) the feasibility of bundling patient administration tools and patient engagement tools with healthcare transcription software; and
- (c) the feasibility of bundling remote healthcare tools with healthcare transcription software.

Market power of Nuance

122. The Merged Entity will only be able to have a substantial impact in the focal market if it occupies an important position in an adjacent market.¹²⁶ Otherwise, any attempt to make customers take the focal product alongside the adjacent one may result in customers buying the adjacent product from rivals.
123. In its assessment of Nuance's market power, the CMA considered: (i) the shares of supply for healthcare transcription software in the UK, (ii) the alternatives to Nuance available to healthcare providers, and (iii) barriers to entry and expansion in the supply of healthcare transcription software.

- *Shares of supply*

124. The Parties submitted shares of supply estimates for healthcare transcription software in the UK based on market intelligence information and Nuance's own data, while noting that there is limited publicly available data on shares of supply.¹²⁷ The CMA considers that it can place some weight on the share of supply estimates submitted by the Parties in this case, as they are broadly consistent with other evidence, including Nuance's internal documents and evidence gathered from third parties.
125. The Parties submitted share of supply estimates for healthcare transcription software by share of installed base in the UK between 2018 and 2020.¹²⁸ These share of supply estimates, set out in Table 2 below, show that other suppliers of healthcare transcription software are much smaller than Nuance in the UK, with Nuance being around twice the size of the next largest supplier (3M/M*Modal) in the period 2018 – 2020.

¹²⁶ Merger Assessment Guidelines, paragraph 7.33(a).

¹²⁷ Parties' response to RFI 1, paragraphs 19.34 – 19.53.

¹²⁸ Parties' response to RFI 1, Annex 004.1.

Table 2: Share of installed base of healthcare transcription software in the UK (2018 – 2020)

Suppliers	2018	2019	2020
Nuance	[50-60]%	[50-60]%	[50-60]%
3M/M*Modal	[20-30]%	[20-30]%	[20-30]%
Recognosco	[10-20]%	[10-20]%	[10-20]%
Epro	[0-5]%	[0-5]%	[0-5]%
DictatelT	[0-5]%	[0-5]%	[0-5]%
Others	[0-5]%	[0-5]%	[0-5]%

Source: RFI 1, Annex 004.1.

126. The Parties also submitted estimates for healthcare transcription software suppliers' share of new licenses issued in the UK between 2018 and 2020.¹²⁹ These share of 'flow' estimates show that Nuance issued the majority of new licenses to customers in 2019 ([50-60]%) and 2020 ([70-80]%), more [§<] the share issued by other suppliers [§<].¹³⁰

127. Overall, the CMA considers that the estimates for share of supply by installed base and the most recent shares of supply by 'flow' submitted by the Parties provide an initial indication that Nuance has a strong position in the supply of healthcare transcription software in the UK.

- *Alternatives to Nuance*

128. Internal documents obtained from Nuance show that [§<]. As set out above, internal documents reviewed by the CMA indicate that Nuance considers its closest competitor to be [§<].¹³¹ Nuance seems to be particularly responsive to [§<].¹³² In one internal document, Nuance considers that [§<].

129. Almost all software suppliers that engaged with the CMA's investigation considered Nuance to be a market leader in healthcare transcription software.¹³³ In addition, the majority of software suppliers contacted by the CMA view Nuance's healthcare transcription software as superior to its rivals because of its transcription accuracy, partly as a result of the relevant data that its holds.¹³⁴ As set out above, many

¹²⁹ Ibid.

¹³⁰ For completeness, Nuance's share of supply in the UK by flow in 2018 was estimated to be [20-30]%. However, the Parties note that shares of supply by flow can be lumpy for healthcare transcription software; see Parties' Response to RFI 1, paragraph 19.39.

¹³¹ See, for example: NUA0089445, [§<], 11 June 2019, page 69; NUA0617981, [§<], 18 April 2021, page 3.

¹³² NUA0044600, [§<], 11 September 2020, page 5.

¹³³ Third party responses to the CMA's CRM competitor questionnaire, question 4; Note of call with a Third Party [§<] of 13 September 2021, paragraph 7.

¹³⁴ Note of call with a Third Party [§<] of 13 September 2021, paragraph 4; Note of call with a Third Party [§<] of 13 September 2021, paragraph 11; Note of call with a Third Party [§<] of 22 September 2021, paragraph 7.

software suppliers said that healthcare providers value Nuance's deep level of integration with their EHR solutions, particularly with Cerner and Epic's EHR software platforms.¹³⁵

130. The majority of healthcare providers that engaged with the CMA's investigation said that 3M/M*Modal is the only credible competitor to Nuance. Healthcare providers that invited both suppliers to take part in their tender process said that 3M/M*Modal healthcare transcription software is broadly comparable to Nuance's healthcare transcription software in terms of accuracy, functionality, and quality.¹³⁶ Some of these providers told the CMA that Nuance and 3M/M*Modal have a similar level of integration with EHR systems.¹³⁷ However, other suppliers of healthcare transcription software were typically not seen by healthcare customers as credible alternatives to Nuance and 3M/M*Modal, for example because they did not integrate well with their EHR systems, or because they were much less accurate in their transcription.¹³⁸

- *Barriers to entry and expansion*

131. The CMA found that other suppliers of general-purpose transcription software face material barriers to entry in the supply of healthcare transcription software. As set out above, the highly specialised nature of medical vocabulary means that suppliers of general-purpose transcription software cannot match the quality of current suppliers of healthcare transcription software without access to healthcare voice data to improve accuracy of their product.¹³⁹ In addition, almost all healthcare providers that engaged with the CMA's investigation considered this to be a very important factor in their choice of transcription software.¹⁴⁰ Therefore, the CMA considers that suppliers of general-purpose transcription software are unlikely to successfully enter and compete effectively with Nuance in a timely manner.

¹³⁵ The CMA notes that Nuance's deep level of integration with Cerner and Epic's EHR software platforms is more relevant in the US, where Cerner and Epic are the main EHR suppliers to healthcare providers, than in the UK, where healthcare customers use a number of other suppliers of EHR solutions. See, for example: NUA0040079, 'Healthcare MYP', 10 June 2020, pages 221 – 223. However, the CMA understands integration with Cerner and Epic's EHR systems is still relevant factor for healthcare providers in the UK; see Note of call with a Third Party [redacted] of 7 December 2021.

¹³⁶ Note of call with a Third Party [redacted] of 1 December 2021, paragraph 8; Note of call with a Third Party [redacted] of 7 December 2021, paragraph 7; Note of call with a Third Party [redacted] of 11 December 2021, paragraph 11; Note of call with a Third Party [redacted] of 9 December 2021, paragraph 16.

¹³⁷ Note of call with a Third Party [redacted] of 1 December 2021, paragraph 7; Note of call with a Third Party [redacted] of 7 December 2021, paragraph 4.

¹³⁸ Note of call with a Third Party [redacted] of 7 December 2021, paragraph 8; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 8.

¹³⁹ See paragraphs 97 and 98.

¹⁴⁰ Third party responses to the CMA's healthcare provider questionnaire, question 13.

132. Further, some healthcare providers told the CMA that they would face significant costs if they were to switch to another supplier of healthcare transcription software. In particular, while some providers explained that they would have an opportunity to choose an alternative supplier were they to go through a tender process in future, one healthcare provider told the CMA that there would be large cost in implementing any new software at scale and integrating it with other software used in a clinical setting (particularly EHR systems).¹⁴¹ Some healthcare providers identified the time needed to successfully deploy the software in clinical settings and for each clinician to ‘train’ their healthcare transcription software to accurately recognise their own voice as reasons why they would not choose to switch to another supplier.¹⁴² The CMA considers that the costs associated with switching supplier will limit the ability of other suppliers to enter or expand in the supply of healthcare transcription software.

133. In addition, the CMA believes that barriers to entry are high, even where a healthcare provider does not currently use healthcare transcription software and, therefore, does not face switching costs (given low penetration rates, this represents a significant number of providers in the UK). This is because NHS Trusts typically require their software suppliers to have an established record of working with other similar providers (eg other NHS Trusts), which creates an advantage for incumbents such as Nuance and limits the extent to which new entrants and smaller market players can compete for these contracts.¹⁴³

- *Conclusion on the market power of Nuance*

134. Based on the evidence set out above, the CMA believes that Nuance holds a strong position in the supply of healthcare transcription software.¹⁴⁴ In particular, the CMA considers that (i) healthcare providers do not have many effective actual or potential

¹⁴¹ Note of call with a Third Party [redacted] of 3 December 2021, paragraph 7 and 9.

¹⁴² Note of call with a Third Party [redacted] of 1 December 2021, paragraph 10; Note of call with a Third Party [redacted] of 11 December 2021, paragraph 15; Note of call with a Third Party [redacted] of 3 December 2021, paragraph 9.

¹⁴³ Note of call with a Third Party [redacted] of 20 January 2022, paragraphs 16 – 17; Note of call with a Third Party [redacted] of 6 December 2021, paragraphs 6; Third Party response [redacted] to the CMA's questionnaire, question 4; Third Party response [redacted] to the CMA's questionnaire, question 7. See also notes of calls with Third Party [redacted] of 1 December 2021, paragraph 9 and Third Party [redacted] of 9 December 2021, paragraph 5 for [redacted] awareness of which suppliers work with other similar providers.

¹⁴⁴ The CMA has focussed its assessment of conglomerate effects on Nuance's Dragon Medical (including DMO) software and not its DAX product. As set out above, the Parties told the CMA that DAX is not being offered to healthcare providers in the EEA or the UK [redacted]. Given the nascent nature of Nuance's DAX product and the limited use of ACI software by healthcare providers, the CMA does not currently consider Nuance to have market power in the supply of ACI healthcare transcription software.

alternatives to Nuance (with only 3M/M*Modal seen as a credible alternative), and (ii) barriers to entry and expansion are high, particularly for new market entrants.

Feasibility of bundling patient administration tools and patient engagement tools with healthcare transcription software

135. A combined offering by a merged entity will only be feasible if customers have an incentive to buy the two products together, or if it would be realistic for the merger firms to link sales of the two products in some way.¹⁴⁵
136. The Parties submitted that they would not have the ability to foreclose Microsoft's rivals in the supply of patient administration tools and patient engagement tools because:
- (a) the Parties' products are not complementary and, as they are used by distinct user groups in different proportions, do not have a large pool of common customers;¹⁴⁶
 - (b) the Parties could only offer a bundle to a small proportion of Nuance's users as its healthcare transcription software is typically sold to customers through third parties;¹⁴⁷ and
 - (c) there is no technical benefit to buying the Parties' products together and no scope to offer an integrated product to customers.¹⁴⁸
137. In assessing the Parties' submissions that the Merged Entity would not have the ability to foreclose Microsoft's rivals in the supply of patient administration tools and patient engagement tools by offering customers a commercial or technical bundle, the CMA considered: the complementarity of the Parties' products; the attractiveness of the bundled offering to customers; and the ability of the Merged Entity to link the sales of the Parties' products.

¹⁴⁵ Merger Assessment Guidelines, paragraph 7.33b.

¹⁴⁶ FMN, Annex 021, Parties' response to CRM Complaint (**Parties' response to CRM Complaint**) paragraphs 14 – 18.

¹⁴⁷ Parties' response to CRM Complaint, paragraph 19.

¹⁴⁸ Parties' response to CRM Complaint, paragraphs 20 – 22.

- *Complementarity of the Parties' products*

138. The CMA found the Parties' products were generally not seen as complementary by their rivals and healthcare providers:¹⁴⁹
- (a) Most rivals consider that it would not be important for healthcare transcription software to interoperate with their patient administration or patient engagement tools, with no supplier contacted by the CMA currently integrating their products with Nuance's software.¹⁵⁰
 - (b) Only a minority of healthcare providers told the CMA that it is important their healthcare transcription software interoperates with their patient administration or patient engagement tools.¹⁵¹ In contrast, the vast majority of these providers said that it is important to very important that their healthcare transcription software interoperates with their EHR system.¹⁵²
139. In relation to a technical bundling strategy, the CMA found that patient administration and patient engagement tools regularly interoperate with EHR systems from different providers, which allows them to gather useful patient data to assist with patient administration and engagement.¹⁵³ By contrast, no patient administration and patient engagement tools currently interoperate directly with healthcare transcription software, and most healthcare providers considered that it

¹⁴⁹ The CMA has placed limited weight on the Parties' submissions that they would not have the ability to foreclose Microsoft's rivals through a bundling strategy as their products are used by distinct user groups in different proportions and do not have a large pool of common customers (Parties' response to CRM Complaint, paragraphs 14 – 18). This is because: (i) the CMA has not only considered as part of its assessment a 'pure' bundling strategy, where the Parties' products are only available to healthcare providers in fixed proportions, but also a 'mixed' bundling strategy, where the Parties' products are available to healthcare providers in variable proportions based on their individual demand and preferences for patient administration tools, patient engagement tools, and healthcare transcription software; (ii) the CMA found that, while the Parties' products are primarily used by different users, software used by healthcare providers are procured by the same team within their organisations, which may benefit from purchasing a bundled offering of patient administration tools, patient engagement tools and healthcare transcription software from a single supplier; and (iii) as purchasing decisions for the Parties' products are made by the same procurement team in each healthcare provider's organisation, the CMA considers that the Merged Entity will have a large pool of common customers to offer a bundled offering of patient administration tools, patient engagement tools and healthcare transcription software.

¹⁵⁰ Note of call with a Third Party [redacted] of 20 January 2022, paragraph 34; Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, question 2.

¹⁵¹ Third party responses to the CMA's healthcare provider questionnaire, question 25.

¹⁵² Third party responses to the CMA's healthcare provider questionnaire, question 24.

¹⁵³ Note of call with a Third Party [redacted] of 20 January 2022, paragraphs 25 and 34; Note of call with a Third Party [redacted] of 6 December 2021, paragraphs 6 and 7; Note of call with a Third Party [redacted] of 22 November 2021, paragraph 21 and 28; Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, questions 2 and 3; Third Party response [redacted] to the CMA's questionnaire, question 2.

would not be necessary or advantageous for patient administration and patient engagement tools to do so in future. As such, the CMA believes that a technical bundling strategy would be unlikely to succeed, as rival patient administration and patient engagement software providers will continue to be able to interoperate with EHR systems.

- *Attractiveness of the bundled offering to healthcare customers*

140. Most healthcare providers contacted by the CMA said that they would not consider procuring healthcare transcription software with patient administration or patient engagement tools in future.¹⁵⁴
141. In addition, the evidence gathered by the CMA suggests that of the small percentage of healthcare providers that would be minded to procure a bundle of the Parties' products, only very few would choose to use Microsoft's Dynamics 365 software as a patient administration and patient engagement solution. In particular, the CMA believes that Microsoft, and other general software suppliers, are likely to find it difficult to compete with specialist suppliers of healthcare software, as general software is not specifically adapted for use in clinical settings (or if it is adapted, eg through MCFH, it is insufficiently adapted to attract a significant volume of customers).¹⁵⁵ This is consistent with evidence from the Parties and healthcare providers, which shows that Microsoft Dynamics 365 (even with MCFH's healthcare specific tools) is only used by a small number of healthcare providers in the UK.
142. Accordingly, in light of the evidence described above, the CMA believes that a bundled offering of Dynamics 365 and Nuance's healthcare transcription software is highly unlikely to be an attractive offering to healthcare customers in the UK.

- *Linking the sales of the Parties' products*

143. The CMA found that the Merged Entity would only be able to offer a bundle to a minority of Nuance's customers. The Parties submitted that healthcare providers typically procure healthcare transcription software through third parties, such as EHR suppliers, rather than directly from Nuance.¹⁵⁶ In this regard, the Parties submitted that around [X] % of Nuance's revenue from DMO software was from this indirect sales channel in 2020.¹⁵⁷ The CMA considers that the Merged Entity's ability to implement a bundling strategy would be significantly limited by Nuance's

¹⁵⁴ Third party responses to the CMA's healthcare provider questionnaire, question 26.

¹⁵⁵ See paragraphs 100 – 101.

¹⁵⁶ FMN, paragraph 427.

¹⁵⁷ Parties' Response to CRM Complaint, paragraph 19.

use of third parties to distribute its software to customers, given the current importance of these third parties to Nuance's commercial strategy.

- *Conclusion on the feasibility of bundling patient administration tools and patient engagement tools with healthcare transcription software*

144. On the basis of the above evidence, the CMA believes that offering customers a commercial or technical bundle of patient administration tools, patient engagement tools and healthcare transcription software is highly unlikely to be a feasible strategy for the Merged Entity.

Feasibility of bundling remote healthcare tools with healthcare transcription software

145. The Parties submitted that the Merged Entity would not have the ability to foreclose Microsoft's rivals in the supply of remote healthcare tools because:

- (a) remote healthcare tools and healthcare transcription software are not complementary products;¹⁵⁸
- (b) offering clinicians the ability to launch their healthcare transcription software from within Teams is of limited additional convenience to launching the software from their PC or mobile device;¹⁵⁹ and
- (c) integration with transcription software would not affect customers' choice of a remote healthcare tools, which is driven by a range of factors such as their interoperability with other software used in healthcare.¹⁶⁰

146. In assessing the Parties' submissions that the Merged Entity would not have the ability to foreclose Microsoft's rivals in the supply of remote healthcare tools by offering customers a commercial or technical bundle, the CMA considered: the complementarity of the Parties' products; the attractiveness of the bundled offering to customers; and the ability of the Merged Entity to link the sales of the Parties' products.

- *Complementarity of the Parties' products*

147. The CMA found that there is only limited complementarity between the Parties' products. While a small number of suppliers of remote healthcare tools told the CMA

¹⁵⁸ FMN, Annex 023, paragraph 32.

¹⁵⁹ FMN, Annex 023, paragraph 33.

¹⁶⁰ FMN, Annex 023, paragraph 34.

that they consider it would be important for them to interoperate with transcription software in future, none of these suppliers currently integrate with Nuance or its rivals (in spite of already having the option to do so).¹⁶¹ Further, the CMA understands that there is limited benefit to integrating Microsoft Teams and Nuance's Dragon Medical software, as clinician calls are not typically transcribed in a patient's EHR.¹⁶² In addition, of the healthcare providers that engaged with the CMA's investigation, only a minority indicated that it is important for their healthcare transcription software to interoperate with their remote healthcare tools.¹⁶³

- *Attractiveness of the bundled offering to customers*

148. The vast majority of healthcare providers that engaged with the CMA's investigation said that they would not consider procuring healthcare transcription software together with remote healthcare tools.¹⁶⁴ Further, the evidence gathered by the CMA suggests that healthcare providers tend to prefer specialist remote healthcare tools. For example, in spite of having access to Microsoft Teams through its contract for Microsoft 365, the NHS has centrally procured Attend Anywhere—a specialist remote healthcare tool—for use by UK clinicians with their patients.
149. Accordingly, the CMA believes that a bundled offering of Microsoft Teams and Nuance's healthcare transcription software is highly unlikely to be attractive to healthcare providers.

- *Linking the sales of the Parties' products*

150. The CMA found the Merged Entity would only be able to offer a bundle to a minority of healthcare providers. This is because the Parties' products are procured by different customers through different processes in the NHS. As set out above, there is currently a centralised procurement process and contract for Microsoft 365 in the NHS, which covers eligible NHS healthcare providers and includes Microsoft's productivity software (such as Word and Excel) as well as Teams. In contrast, healthcare transcription software is procured and contracted for by each individual

¹⁶¹ Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, question 4; Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, question 5; Third Party response [redacted] to the CMA's questionnaire, question 2.

¹⁶² The CMA notes that, under the Parties' pre-existing strategic partnership, the Parties offer Nuance's DAX product as an add-on for Microsoft Teams. However, as set out above, the CMA has focussed its assessment of conglomerate effects on Nuance's Dragon Medical software given the nascent nature of DAX and the limited use of ambient transcription software by healthcare providers.

¹⁶³ Third party responses to the CMA's healthcare provider questionnaire, question 25.

¹⁶⁴ Third party responses to the CMA's healthcare provider questionnaire, question 26.

NHS provider, partly as a result of the different requirements and technology solutions in different NHS Trusts. The CMA considers that the Merged Entity's ability to implement a commercial bundling strategy would be limited by the Parties' products being procured and contracted for by different customers within the NHS.

- *Conclusions on the feasibility of bundling remote healthcare tools with healthcare transcription software*

151. On the basis of the above evidence, the CMA believes that offering customers a commercial or technical bundle of remote healthcare tools and healthcare transcription software is highly unlikely to be a feasible strategy for the Merged Entity.

Conclusion on ability to foreclose Microsoft's rivals

152. Based on the evidence set out above, the CMA does not believe that the Merged Entity would have the ability to foreclose Microsoft's rivals. In particular, the CMA considers that the Merged Entity would not be able to foreclose rivals by bundling patient administration tools, patient engagement tools, or remote healthcare tools with healthcare transcription software. Therefore, the CMA believes that the Merger does not give rise to a realistic prospect of an SLC in the UK in relation to this theory of harm.

153. As the CMA has concluded that the Merged Entity would not have the ability to foreclose Microsoft's rivals, it is not necessary for the CMA to consider the Parties' incentives to engage in, or the effects of, any such strategy.

BARRIERS TO ENTRY AND EXPANSION

154. Entry, or expansion of existing firms, can mitigate the initial effect of a merger on competition, and in some cases may mean that there is no SLC. In assessing whether entry or expansion might prevent an SLC, the CMA considers whether such entry or expansion would be timely, likely and sufficient.¹⁶⁵

155. However, the CMA has not had to conclude on barriers to entry or expansion as the Merger does not give rise to competition concerns on any basis.

¹⁶⁵ Merger Assessment Guidelines, from paragraph 8.40.

THIRD PARTY VIEWS

156. The CMA contacted many third parties about the Merger and received a number of responses to its invitation to comment issued on 13 December 2021. Third party comments have been taken into account where appropriate in the assessment above.
157. In addition to the issues considered in the assessment above, some third parties raised concerns that Microsoft's access to Nuance's patient health data could give the Merged Entity a competitive advantage when competing with its rivals to supply software to healthcare customers.¹⁶⁶ These third parties submitted that Microsoft might be able to exploit Nuance's healthcare-specific speech data to improve the quality of various software offerings to such an extent that rival suppliers of healthcare software would be foreclosed. However, the CMA did not receive sufficient evidence to show that Nuance's healthcare-specific speech data would materially improve Microsoft's broader software offering (beyond healthcare transcription software), nor that Microsoft's use of such data would provide the Merged Entity with an unassailable competitive advantage over its competitors, resulting in their foreclosure. Further, the CMA also notes that [§<].¹⁶⁷
158. A small number of third parties told the CMA that Microsoft could foreclose rivals in the supply of C&C software on Windows OS by restricting their access to certain necessary inputs, such as the built-in speech recognition engine.¹⁶⁸ One third party submitted that, while Microsoft currently offers access to its speech recognition engine to all software developers, its incentive to do so would change post-Merger. However, the CMA notes that Microsoft already offers its own C&C software, and there is no evidence that it has engaged in any such foreclosure strategy prior to the Merger. Moreover, the evidence gathered by the CMA suggests that Microsoft would be unable to successfully target such a foreclosure strategy at rivals in C&C software on Windows OS without also degrading interoperability between Windows OS and a broad range of third-party software that rely on the same inputs.¹⁶⁹ The CMA therefore does not believe that post-Merger the Parties would have the ability to foreclose rivals in the supply of C&C software by restricting their access to necessary inputs on Windows OS.

¹⁶⁶ Third Party response [§<] to the CMA's questionnaire, question 11; Note of call with a Third Party [§<] of 22 November, paragraph 34; Third Party response [§<] to the CMA's questionnaire, question 11.

¹⁶⁷ FMM, paragraph 39.

¹⁶⁸ Note of call with a Third Party [§<] of 13 December 2021, paragraphs 26 – 30; Note of call with a Third Party [§<] of 15 December 2021, paragraphs 10 and 23.

¹⁶⁹ The CMA was made aware during the course of its investigation of one rival provider of C&C software on Windows.

159. One third party raised a concern that the Merger may stifle competition between cloud providers and limit innovation between them.¹⁷⁰ However, the CMA did not receive any evidence or explanation to substantiate this concern.
160. Some third parties also suggested that the transaction may enable the Merged Entity to foreclose Nuance's rivals in the supply of healthcare transcription software, for example, by bundling Nuance's healthcare transcription software with Microsoft's productivity software.¹⁷¹ The CMA investigated these concerns at length and contacted several rival suppliers of healthcare transcription software during the course of its investigation. However, most of these suppliers were not concerned about the Merger. Moreover, as explained above, the CMA found that healthcare transcription software interacts primarily with EHR systems, rather than with productivity software, making this type of foreclosure strategy highly unlikely to succeed. Overall, the evidence suggests that the Merged Entity would be highly unlikely to have the ability to foreclose competing healthcare transcription software providers.
161. Finally, some third parties raised concerns about each Party that were unrelated to the Merger, and which the CMA did not investigate in detail.¹⁷²

¹⁷⁰ Note of call with a Third Party [redacted] of 3 December 2021, paragraph 26.

¹⁷¹ Third Party response [redacted] to the CMA's questionnaire; Email from [redacted] to the CMA dated 21 December 2021; Email from [redacted] to the CMA dated 30 December 2021; Email from [redacted] to the CMA dated 10 January 2022.

¹⁷² For example, some third parties raised concerns about Microsoft's existing market power in various software product categories, including in productivity software and PC OS (see note of call with a Third Party [redacted] of 3 December 2021, paragraph 27; Third Party response [redacted] to the CMA's questionnaire; and Third Party response [redacted] to the CMA's questionnaire). In addition, one third party raised a concern relating to Nuance's existing conduct in the supply of healthcare transcription software (Third Party response [redacted] to the CMA's questionnaire).

DECISION

162. Consequently, the CMA does not believe that it is or may be the case that the Merger may be expected to result in an SLC within a market or markets in the United Kingdom.

163. The Merger will therefore not be referred under section 33(1) of the Act.

Ricardo Zimbron
Director, Mergers
Competition and Markets Authority
2 March 2022

GLOSSARY

ACI	Ambient clinical intelligence
ACS	Azure Cognitive Services
the Act	The Enterprise Act 2002
AI	Artificial intelligence
API	Application programming interfaces
APM	The Agreement and Plan of Merger signed by the parties and dated 11 April 2021
ASR	Automatic speech recognition
C&C	Command and control
C&C software	Software that enables users with accessibility needs to command and control their personal computer and its applications using their voice
the CMA	The Competition and Markets Authority
DAX	Dragon Ambient eXperience
the DAX Partnership	The strategic partnership between Microsoft and Nuance in relation to the the development of AI-based ACI technologies for healthcare applications
Dragon P&C	Dragon Professional and Consumer
DMO	Dragon Medical Online
EHR	Electronic health record
FMN	Final merger notice, submitted on 29 December 2021
IaaS	Infrastructure as a service
Jurisdictional Guidance	CMA2, Mergers: Guidance on the CMA's jurisdiction and procedure (as amended on 4 January 2022)

MCFH	Microsoft Cloud for Healthcare
Merger	Microsoft's anticipated acquisition of all the shares in Nuance
the Merged Entity	The post-transaction combination of Microsoft and Nuance
Microsoft	Microsoft Corporation
Nuance	Nuance Communications, Inc
OS	Operating system
PaaS	Platform as a service
the Parties or a Party	Microsoft and Nuance or one of them
SaaS	Software-as-a-service
SDKs	Software development kits
SLC	Substantial lessening of competition
STT	Speech-to-text