



EUROPEAN COMMISSION
DG Competition

Case M.10290 - MICROSOFT / NUANCE

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(1)(b) NON-OPPOSITION
Date: 21/12/2021

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EUROPEAN COMMISSION

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PUBLIC VERSION

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

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**Subject: Case M.10290 – MICROSOFT/NUANCE
Commission decision pursuant to Article 6(1)(b) of Council Regulation
No 139/2004¹ and Article 57 of the Agreement on the European Economic
Area²**

Dear Sir or Madam,

- (1) On 16 November 2021, the European Commission received notification of a proposed concentration pursuant to Article 4 and following a referral pursuant to Article 4(5) of Council Regulation (EC) No 139/2004 by which Microsoft Corporation (“Microsoft”, or the “Notifying Party”, USA) will acquire sole control of Nuance Communications, Inc. (“Nuance”, USA) within the meaning of Article 3(1)(b) of the Merger Regulation (the “Transaction”). Microsoft and Nuance are together referred to as the “Parties”.

¹ OJ L 24, 29.1.2004, p. 1 (the ‘Merger Regulation’). With effect from 1 December 2009, the Treaty on the Functioning of the European Union (‘TFEU’) has introduced certain changes, such as the replacement of ‘Community’ by ‘Union’ and ‘common market’ by ‘internal market’. The terminology of the TFEU will be used throughout this decision.

² OJ L 1, 3.1.1994, p. 3 (the ‘EEA Agreement’).

1. THE PARTIES

- (2) **Microsoft** (USA) is a global technology company, which offers a wide range of products and services to customers. Microsoft's products include: (i) Azure, a cloud computing platform; (ii) Microsoft Windows, operating systems ("OS") for PCs, (iii) Microsoft 365 productivity services which include Word and Excel; (iv) the enterprise communication software Teams; and (v) Dynamics 365, customer relationship management ("CRM") software.
- (3) **Nuance** (USA) is a software company that principally offers voice recognition and artificial intelligence ("AI") software solutions in two business segments:
- Healthcare, which consists of health-related speech and AI solutions that help physicians to dictate or record patient's information more efficiently. The healthcare business segment also contains Nuance's Dragon Professional & Consumer (i.e., AI-powered transcription solutions for professional and consumer customers, "P&C").
 - Enterprise, in which Nuance provides: (i) voice engagement; (ii) digital engagement; and (iii) voice biometrics for customer service and sales engagement.
- (4) Nuance is primarily active in the United States, where the company generates [80-90]% of its revenues. Nuance generates less than [10-20]% of its revenues in the EEA.

2. THE OPERATION AND CONCENTRATION

- (5) The Transaction will be implemented by means of an Agreement and Plan of Merger (the "APM") entered into on 11 April 2021 by Microsoft, Big Sky Merger Sub Inc. ("Merger Sub"), a newly created and wholly owned subsidiary of Microsoft, and Nuance. Under the APM, Merger Sub will be merged with and into Nuance. Following this merger, Merger Sub will cease to exist, and Nuance will be a wholly owned subsidiary of Microsoft. This will take effect on closing, when all the necessary regulatory approvals and governmental consents have been obtained.
- (6) The Transaction consists of the acquisition of sole control by Microsoft over Nuance, within the meaning of Article 3(1)(b) of the Merger Regulation.

3. UNION DIMENSION

- (7) The Transaction does not have an EU dimension within the meaning of Articles 1(2) and 1(3) of the Merger Regulation due to the limited revenues of Nuance in Europe.
- (8) Following the Parties' reasoned submission on 25 June 2021, the Transaction was referred to the Commission pursuant to Article 4(5) of the Merger Regulation. The Transaction meets the legal requirements set out in Article 4(5) of the Merger Regulation: (i) it is a concentration within the meaning of Article 3 of the Merger Regulation; and (ii) it is capable of being reviewed under the national competition

laws of at least three Member States.³ The Commission informed the Parties on 19 July 2021 that the case was deemed to have an EU dimension.

4. MARKET DEFINITION

- (9) Nuance’s activities are related to transcription software, which is also referred to as automated speech recognition or speech-to-text (“STT”) software. The output text can be used for a variety of purposes (e.g., to create a document, to complete forms or as an input to be analysed by additional software). In the past, an end user dictated the text to the transcription software (referred to as dictation speech transcription) but the technology is evolving to allow specialised transcription software to convert conversational speech into text (referred to as ambient or conversational speech transcription).
- (10) The main markets affected by the Transaction are: (i) transcription software, (ii) customer engagement solutions, (iii) cloud computing services, (iv) enterprise communication services, (v) productivity software and (vi) customer relationship management software.

4.1. Transcription software

4.1.1. *Relevant product market*

- (11) Transcription software is a technology used to convert speech into text. Transcription software is used in a wide range of applications, including, for example, document completion, conversational assistants, and speech translation. In the Form CO, the Notifying Party indicates that transcription technology is no longer cutting-edge. It has become mature to the point of commoditization, with firms offering both dedicated applications and transcription technology that developers can use as building blocks to include transcription capabilities into their own application.⁴

4.1.1.1. The Commission’s previous practice

- (12) There are no precedents in which this market was analysed by the Commission. With respect to software in general, in *Broadcom/Symantec*,⁵ the Commission found that software products can generally be segmented based on their: (i) functionality (e.g., transcription/voice recognition); (ii) the industry sector concerned (e.g., healthcare); and (iii) the end-user (e.g., enterprise software vs. consumer software)

4.1.1.2. The Notifying Party’s view

- (13) In the absence of relevant Commission precedents, the Notifying Party observes that the Commission has typically considered that software products can be segmented

³ Form RS, footnotes 228 and 229. The Transaction is capable of being reviewed in Austria, Denmark and Germany. The Notifying Party cannot exclude that notification thresholds are met also in Spain and Portugal.

⁴ Form CO, paragraph 122.

⁵ Commission decision of 30 October 2019 in case M.9538 – *Broadcom/Symantec Enterprise Security Business*, paragraphs 14-16

based on: (i) their functionality (in this instance transcription software);⁶ (ii) the sector concerned (e.g., healthcare software);⁷ and (iii) their end-use (e.g., enterprise vs. consumer software)⁸. The Notifying Party, therefore, submits the following product market definitions along the above criteria.

(A) Transcription software for healthcare

- (14) The Notifying Party argues that in past cases the Commission has considered healthcare software to be in a separate market from software used in other sectors⁹ and therefore considers that transcription software for healthcare constitutes a separate product market, with a potential sub-segment for healthcare transcription software for radiology. Transcription software for healthcare should be considered as a separate product market from transcription software in other areas as suppliers of transcription software for healthcare would offer products that are deeply integrated with the workflow of healthcare providers and the specific applications they use, like the electronic health records (“EHRs”). Physicians also use a particular vocabulary that is very different from other sectors and cannot be substituted.
- (15) The Notifying Party further submits that transcription software for healthcare can be provided to customers at different levels of the supply chain. Nuance mostly provides its Dragon products to end-users as ready-to-use solutions. In addition, Nuance offers transcription functionality through software development kits (“SDKs”) to developers. Microsoft targets developers with application programming interfaces (“APIs”) that include STT and text-to-speech (“TTS”) functionalities offered as part of Azure Cognitive Services.
- (16) The Notifying Party argues that, in any event, the exact product market definition can be left open as the Transaction does not raise any competition issues regardless of the product market definition.

(B) Transcription software outside healthcare

- (17) Outside of healthcare, Nuance offers transcription software under the Dragon brand. Its software is used primarily by professionals for transcription purposes to convert speech into text. Dragon Professional can also be used to control a Windows device OS and applications with a user’s voice, rather than a keyboard or a mouse, for accessibility purposes. Microsoft does not offer transcription software as a standalone product. Instead, it offers transcription functionalities in some of its products, such as Office 365 and Windows OS as well as APIs as part of Azure

⁶ *Broadcom/Symantec Enterprise Security Business*, paragraphs 14-16; Commission decision of 20 June 2011 in case M.6237 – *Computer Sciences Corporation/iSoft Group*, paragraph 22; Commission Decision of 8 March 2017 in case M.8223 – *Micro Focus/HPE Software Business*, paragraph 17.

⁷ Commission decision of 20 June 2011 in case M.6237 – *Computer Sciences Corporation/iSoft Group*.

⁸ Commission decision of 30 October 2019 in case M.9538 – *Broadcom/Symantec*, paragraphs 14-16; Commission decision of 20 June 2011 in case M.6237 – *Computer Sciences Corporation/iSoft Group*, paragraphs 22-25; Commission decision of 8 March 2017 in case M.8223 – *Micro Focus/HPE Software Business*, paragraph 17.

⁹ Form CO, paragraph 274. See also Commission decision of 20 June 2011 in case M.6237 – *Computer Sciences Corporation/iSoft Group*, paragraph 32.

Cognitive Services that allow developers to integrate transcription functionalities into their products.¹⁰

- (18) The Notifying Party considers that the market for transcription software outside healthcare constitutes a separate relevant product market, which is distinct from the market for transcription software for healthcare. The Dragon Professional product can be used in a number of sectors. The “base” of products offered by Nuance outside of healthcare would essentially be the same. Depending on the customer’s needs and preferences, Nuance works with the individual customer to customise the software and map commands that match specific workflows (including specific linguistic requirements), rather than implementing significant differences in its products between sectors outside healthcare. Nuance’s focus on certain sectors is a commercial decision having identified sectors with use cases for its products.¹¹
- (19) The Notifying Party considers that the relevant market for transcription software outside healthcare includes both transcription and voice control accessibility solutions.¹² While the transcription and accessibility functionalities differ, the same speech recognition technology that powers transcription can be used to power accessibility. The two functionalities are also offered together as part of the same Dragon software.
- (20) In addition, the Notifying Party argues that the lines between the two functionalities are blurred. What can be defined as accessibility functionality also includes transcription functionality. A user can command the OS to open a certain application (i.e., an accessibility function) and then continue to use the application with their voice, transcribing the voice input into text (i.e., the transcription function), relying on the same Dragon software. For instance, they could direct the OS to open their email application and then dictate the content of the email.¹³
- (21) The Notifying Party, therefore, submits that there is supply-side substitution between transcription software and voice control accessibility, with some transcription software offering both transcription and voice control accessibility functionalities.¹⁴ The Notifying Party considers, in this respect, that a segmentation between specialist providers of accessibility software and OSs (which include accessibility features) is more appropriate.¹⁵ The Notifying Party also notes that transcription software can be offered at different levels of the supply chain, i.e., as APIs or SDKs for developers to integrate speech recognition into other products, or as finished products (out-of-the-box) ready for use by the end consumer. All such products would be part of the same overall market.
- (22) In any event, the Notifying Party concludes that the definition of the relevant product market can be left open in the present case, as the Transaction does not raise any

¹⁰ Form CO, paragraphs 438 ss.

¹¹ Response to RFI dated 2 July 2021, paragraphs 6.1-6.3.

¹² Form CO, paragraph 282.

¹³ Form CO, paragraph 283.

¹⁴ Form CO, paragraph 287.

¹⁵ Form CO, paragraph 288.

competition concern even if accessibility software is assessed separately from transcription software.¹⁶

4.1.1.3. The Commission's assessment

- (23) The majority of respondents to the market investigation agree with the Commission's precedents that software products can generally be segmented based on their: (i) functionality; (ii) the industry sector concerned; and (iii) the end-user (e.g., enterprise software vs. consumer software).¹⁷ On this basis, the Commission considers that based on its functionality, transcription software has to be distinguished from all other software products.
- (24) As to a potential segmentation of transcription software, depending on its use in healthcare versus outside healthcare, the majority of customers for transcription software considers that, in general, there are significant differences in transcription/voice recognition software depending on the specific industry sector in which it is used.¹⁸ A competitor agrees with such position, but only with respect to healthcare as this sector needs a specific language model and vocabulary to function effectively.¹⁹ Since transcription software for healthcare raises specific linguistic and technical integration issues (because transcription software for healthcare needs to be integrated with EHR systems to enable doctors to directly dictate patient's medical information in it),²⁰ the Commission considers that transcription software for healthcare belongs to a separate market. It can be left open whether there is an overall market for transcription software outside healthcare, without industry distinction, as this does not affect the outcome of the assessment.
- (25) As regards the question whether transcription software used to enhance user accessibility ("accessibility software") should be distinguished from transcription software, the market investigation did not provide elements indicating that accessibility software is separate from transcription software, but rather a specific use case of the latter.²¹ The Commission considers that such distinction can be left open, as the Transaction does not lead to anticompetitive concerns, regardless of the market definition adopted.
- (26) As regards the question whether an API/SDK for a transcription software is a suitable substitute for an out-of-the-box transcription software solution, the market investigation triggered mixed replies. The majority of customers for transcription software replied that these products are valid alternatives, although some respondents indicate that this is true for certain use cases only.²² The superiority of

¹⁶ Form CO, paragraph 294.

¹⁷ Q2 - Questionnaire to customers for transcription software, replies to question 5; Q4 - Questionnaire to competitors for communication platforms, replies to question 5.

¹⁸ Q2 - Questionnaire to customers for transcription software, replies to question 6.

¹⁹ Q1 - Questionnaire to competitors for transcription software, replies to question 6; Q4 - Questionnaire to competitors for communication platforms, replies to question 6.1.

²⁰ For example, 3M's speech recognition products are specifically designed for the healthcare sector, and not for other sectors, such as the legal sector. 3M's speech recognition products are built using specific medical concepts, in order to have a final product capable to function in the healthcare record system. See non-confidential minutes of call with 3M on 7 October 2021, Doc. ID 569.

²¹ Q1 - Questionnaire to competitors for transcription software, replies to question 11.1.

²² Q2 - Questionnaire to customers for transcription software, replies to question 7.

one solution over another will depend on customer-specific factors, such as resource and timing constraints, design goals, and issues specific to the customer's industry. An out-of-the-box solution enables customers (such as hospitals) to use the feature immediately, with the software provider managing the quality, robustness, and enhancement of the feature. The API/SDK approach, on the other hand, enables customers to customise and modify their use of this feature in a manner that best suits their needs.²³ The Commission considers that the market investigation is not conclusive as to whether out-of-the-box solutions and SDK/APIs are part of the same product market. The Commission, however, considers that the exact market definition can be left open, as this does not affect the outcome of the assessment.

- (27) As to the possible distinction between transcription software and ambient transcription software, the replies to the market investigation have further indicated that there are similarities between transcription software and ambient transcription software, as they are both based on transcription technology.²⁴ Ambient transcription, however, is different in that it is able to capture conversation between individuals. To implement such functionality, the software needs to be able to distinguish and recognise different speakers. At the moment, ambient transcription software does not appear to be fully developed yet. Therefore, its current functions are mostly based on transcription software. It is possible, in the future, that ambient transcription software develops into a separate product market as it distinguishes itself further from dictation transcription software. The Commission considers that, at the moment, ambient transcription software belongs to the same market as transcription software.
- (28) Based on the above considerations, the Commission considers that there is a separate market for transcription software for healthcare, including ambient transcription software for healthcare, and that it can be left open whether there is an overall market for transcription software outside healthcare (with a possible segmentation by industry). The Commission also considers that, with respect to the possible distinctions between (i) transcription software outside healthcare and accessibility software, and (ii) out-of-the-box solutions and SDK/APIs modules, the exact product market definition may be left open, as this does not affect the outcome of the competitive assessment.

4.1.2. *Relevant geographic market*

4.1.2.1. The Commission's previous practice

- (29) The Commission has typically considered software markets to be EEA-wide or worldwide in scope.²⁵

²³ Q4 – Questionnaire to competitors for communication platforms, replies to question 7.1.

²⁴ Q2 - Questionnaire to customers for transcription software, replies to questions 8, 8.1, 8.2 and 8.3; Q3 – Questionnaire to competitors for cloud services, replies to questions 8, 8.1, 8.2 and 8.3.

²⁵ See for instance the markets for HR and FMS high-function solutions or software in Commission decision of 26 October 2004 in case M.3216 – *Oracle/PeopleSoft*, paragraphs 174 *et seq.*; and more recently for productivity and CRM software in Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs 27 and 56.

4.1.2.2. The Notifying Party's view

- (30) The Notifying Party submits that the markets for transcription software for healthcare and outside healthcare are at least EEA-wide in scope. The Notifying Party acknowledges that transcription software must understand a particular language and not all providers support all languages, which could potentially warrant narrower markets.²⁶ The Notifying Party, however, argues that: (i) the major suppliers of transcription software are present across the EEA; (ii) they rely on the same underlying technology and regularly add support for new languages; and (iii) advances in deep learning technology mean that supply side substitutability between languages is increasing, with the process for developing a new language now taking between [...]. Such considerations apply equally to transcription software for healthcare and outside healthcare (and, in relation to the latter, even if separate markets for transcription and accessibility software were to be defined).²⁷
- (31) In any event, the Notifying Party concludes the definition of the relevant geographic markets can be left open in the present case, as the Transaction does not raise any competition concern regardless of the geographic scope of the markets.

4.1.2.3. The Commission's assessment

- (32) The market investigation indicates that transcription software is considered in principle part of a global geographic market ²⁸ As a customer explains: "*The main difference is that each language needs support for speech recognition in that language. Apart from that they are mostly similar*".²⁹ A possible exception exists for transcription software for healthcare, which requires specific medical vocabulary and integration with EHR systems in each country, in order to be developed and made available in additional languages.
- (33) Based on the above considerations, the Commission observes that fundamental supply-side substitutability exists between different geographic areas. Transcription technology remains the same, regardless of the territory, and its adaptation to a specific language merely depends on the existence of sufficient business opportunities. The Commission, therefore, concludes that the relevant geographic markets for transcription software for healthcare and for transcription software outside healthcare, and relevant segmentations thereof, are at least EEA-wide, if not global.

4.2. Customer engagement solutions

- (34) Customer engagement solutions are business applications that simulate a voice or text conversation with customers to deliver information or take action on behalf of the customer. Customer engagement solutions operate via voice, live chat, SMS, consumer messaging applications, native mobile applications, social media and other web-based or mobile interfaces.

²⁶ Form CO, paragraph 279.

²⁷ Form CO, paragraphs 278-280 and 295-298.

²⁸ Q2 – Questionnaire to customers for transcription software, replies to question 9; Q3 – Questionnaire to competitors for cloud services, replies to question 10.

²⁹ Q2 – Questionnaire to customers for transcription software, replies to question 9.1.

- (35) Voice engagement products enable human-like interactions allowing individuals to self-serve and successfully resolve issues by engaging with the software. Powered by natural language understanding (“NLU”), conversational voice recognition software allows customers to use their own words while the technology accurately captures their intent, predicts why they are calling and addresses the matter at hand directly. Nuance voice engagement software allows callers to access information via pre-recorded messages and/or be transferred to a human agent when needed to provide an adequate answer. They are offered either as on-premises or as cloud-based solutions.
- (36) Digital engagement products use natural language processing, machine learning, AI and analytics (including virtual assistants, chatbots, and live assist messaging over digital channels) as means of addressing customer requests. Nuance’s technology allows its clients to engage customers on desktops, smartphones and tablets by relying on automated digital channels as much as possible.
- (37) Voice biometric products enable customers to use voice to authenticate their customers, identify fraudsters, and detect cases of potential fraud. The products enable enterprises to authenticate customers without passwords or lengthy security questions relying instead on the customers’ interactions with the voice recognition system and their voice. Nuance’s standalone products offer a voice biometrics solution for enterprises. Microsoft does not have a similar product, but recently included limited speaker recognition technology in Azure Cognitive Services.

4.2.1. Relevant product market

4.2.1.1. The Commission’s previous practice

- (38) In previous cases, the Commission has taken the view that business application software could be broadly categorised into: (i) infrastructure software; and (ii) enterprise application software (“EAS”).³⁰ There are no precedents in which the Commission assessed the specific customer engagement solutions at issue in the Transaction.

4.2.1.2. The Notifying Party’s view

- (39) According to the Notifying Party, customer engagement solutions are a separate market, within the broader business software space, and can be segmented by functionality: (i) voice engagement products; (ii) digital engagement products; and (iii) voice biometric products. The Notifying Party submits that these markets should not be further segmented according to industry application (e.g., banking, retail, transport) as the core technology is shared and the customer engagement industry is characterised by vendors that offer core platforms and capabilities across vertical sectors, which are customised to meet an individual enterprise’s business needs.³¹

³⁰ Commission decision of 26 October 2004 in case M.3216 – *Oracle/PeopleSoft*, paragraph 15.

³¹ Form CO, paragraphs 303.

- (40) The Notifying Party further argues that there is no need to segment the market for the provision of APIs or SDKs for customer engagement solutions by the technology used (i.e., STT, TTS and NLU).³²
- (41) In any event, the Notifying Party considers that for the purposes of this case the precise scope of the product market can be left open, given the absence of competition concerns regardless of the precise market definition.

4.2.1.3. The Commission's assessment

- (42) Information collected during the investigation indicates that customer engagement solutions include voice engagement, digital engagement and voice biometrics. The former two technologies are used to design *callbots* or *chatbots* for consumers, that is software solutions that help customers to understand and answer queries from their clients, with no (or minimal) human intervention. Voice biometrics is used by businesses to identify customers and verify their identity by recognising the sound of their voice.
- (43) Individual elements of the technology are similar to those of transcription software and includes components such as STT engines, TTS engines and NLU engines. Such components are used to assemble a finished product that can be customised and used across various customers and industries. Unlike transcription software, customer engagement solutions are not used to dictate human language, but rather to convert it, process the converted statement by artificial intelligence and generate a reply useful to the customer.³³
- (44) Based on the above, the Commission considers that customer engagement solutions, possibly segmented into voice engagement, digital engagement and voice biometrics, are part of a product market distinct from transcription software, due to the additional elements a customer engagement solution requires compared to transcription software as well as the different use cases the two technologies address. The Commission considers that it can be left open whether voice engagement, digital engagement and voice biometrics are part of the same market, as this does not affect the outcome of the competitive assessment.

4.2.2. *Relevant geographic market*

4.2.2.1. The Commission's previous practice

- (45) The Commission has typically considered software markets to be EEA-wide or even worldwide in scope.³⁴

³² Form CO, paragraph 315-316. Nuance does not generally supply APIs and SDKs on a standalone basis, and Nuance's sales of APIs and SDKs are very limited both worldwide and in the EEA (less than [...] worldwide and less than [...] in the EEA in 2020). Nuance focuses on the provision of out-of-the-box solutions that Nuance or its resellers fully customise to cater to the requirements of specific customers. The technology for "general purpose" voice recognition (STT, NLU and TTS with no specialised vocabulary or use case) is commoditised, and, according to the Notifying Party, other providers offer such services, including Amazon, Google, IBM, Facebook, Baidu.

³³ Minutes of the call dated 27 September 2021, Doc ID 183.

³⁴ See for instance the markets for HR and FMS high-function solutions or software in Commission decision of 26 October 2004 in case M.3216 –*Oracle/PeopleSoft*, paras 174 et seq.; and more recently for

4.2.2.2. The Notifying Party's view

- (46) The Notifying Party considers that markets for customer engagement solutions, regardless of segmentation, can be assessed at worldwide or EEA-level. This is because suppliers are active globally, delivering their solutions worldwide and across the EEA. Although customer engagement solutions based on voice technology (voice recognition and voice biometrics) must, by definition, be able to understand different languages, the vast majority of voice recognition and voice biometric suppliers offer their products across the EEA or even across the globe.³⁵

4.2.2.3. The Commission's assessment

- (47) Information in the Commission's file indicates that suppliers of such technology may initially focus on a specific country and then expand to other countries. This appears possible, in particular, in European countries, where suppliers seem to be able to develop a new language model without too much difficulty.³⁶
- (48) The Commission therefore considers that the relevant geographic market is at least EEA-wide, if not global. The exact geographic market definition, however, can be left open, as this does not affect the outcome of the competitive assessment.

4.3. Cloud computing services (IaaS, PaaS)

- (49) Cloud providers offer a "stack" of hardware and software components/functionalities on-demand to customers. These services allow customers to avoid the costs related to the purchase, configuration, and maintenance of on-premises data centres and software licenses, while benefiting from the most advanced hardware and software solutions and the ability to easily scale up and down (i.e., add or subtract resources when needed, for instance due to a sudden increase or decrease in traffic to a hosted website).
- (50) Microsoft offers general, industry-agnostic solutions, including Azure public cloud, which delivers a combination of infrastructure-as-a-service ("IaaS") and platform-as-a-service ("PaaS") services, including data analytics services (e.g., Azure Data Explorer and Azure Data Lake); Microsoft 365 productivity services (including Word, PowerPoint, Teams and Excel), which are software-as-a-service ("SaaS") products; and Dynamics 365, another SaaS product that consists of modular applications that include customer relationship management ("CRM") functionality. Nuance is not active in the provision of cloud services and data analytics.

4.3.1. Relevant product market

4.3.1.1. The Commission's previous practice

- (51) In *Microsoft/GitHub*,³⁷ the Commission considered whether a segmentation of cloud computing services between Infrastructure-as-a-Service ("IaaS") and Platform-as-a-

productivity and CRM software in Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paras 27 and 56.

³⁵ Form CO, paragraphs 317-318.

³⁶ Minutes of the call dated 27 September 2021, Doc ID 183.

³⁷ Commission decision of 19 October 2018 in Case M.8994 – *Microsoft/GitHub*, paragraph 61.

Service (“PaaS”) is appropriate, but it ultimately left this question open and assessed the relevant transaction on an overall market for cloud computing services.

- (52) In *Google/Fitbit*,³⁸ the Commission, after considering whether it was appropriate to define a product market for digital healthcare, including the provision of cloud and data analytics services and other digital services for healthcare, concluded that it was not appropriate to do so. This is because the provision of cloud services “*is substantially different from other digital healthcare initiatives*” and instead considered cloud computing services as a separate product market and defined the relevant market as that for the “*provision of cloud infrastructure and data analytics*”.

4.3.1.2. The Notifying Party’s arguments

- (53) The Notifying Party submits that IaaS and PaaS form part of a single market due to both demand-side and supply-side substitution. All major public cloud computing service providers offer a full range of IaaS and PaaS services to customers. Amazon Web Services (“AWS”) initially focused on IaaS but subsequently expanded its services to offer a fully-fledged developer platform typically associated with PaaS. Microsoft’s Azure service initially built a market presence in PaaS and subsequently positioned itself as a provider of a broad range of IaaS and PaaS services.³⁹
- (54) The Notifying Party considers that the Transaction should be assessed on the overall market for cloud computing services, but that the exact definition of the relevant product market can be left open, as the Transaction does not raise any competition concerns regardless of the market definition adopted.⁴⁰

4.3.1.3. The Commission’s assessment

- (55) All the Parties’ competitors responding to the market investigation agree with the Commission’s previous definition of an overall market for cloud services and data analytics without further segmentation between PaaS and IaaS.⁴¹
- (56) The Commission therefore concludes that the relevant product market is the overall market for cloud services and data analytics without further segmentation between PaaS and IaaS.

4.3.2. Relevant geographic market

4.3.2.1. The Commission’s previous practice

- (57) Previously, the Commission left open whether the geographic scope of the market for the provision of cloud computing services was EEA wide or worldwide.⁴² In

³⁸ Commission decision of 17 December 2020 in Case M.9660 – *Google/Fitbit*, para. 266 and 272-274.

³⁹ Form CO, paragraph 320.

⁴⁰ Form CO, paragraph 322.

⁴¹ Q1 – Questionnaire to competitors for transcription software, replies to question 13; Q3 – Questionnaire to competitors for cloud services, replies to question 11.

⁴² Commission decision of 15 December 2014 in case M.7458 – *IBM / INF Business of Deutsche Lufthansa*, paras. 30-32; Commission decision of 21 December 2016 in case M.8180 – *Verizon / Yahoo*, para. 75.

Google/Fitbit, the Commission concluded that the market in question is at least EEA-wide in scope.⁴³

4.3.2.2. The Notifying Party's view

- (58) The Notifying Party submits that the market definition can be left open, as the Transaction does not raise any concern regardless of the geographic scope of the market.

4.3.2.3. The Commission's assessment

- (59) All the Parties' competitors responding to the market investigation consider the relevant geographic market for cloud and data analytics services to be worldwide in scope.⁴⁴
- (60) The Commission observes that suppliers of cloud services (e.g., Microsoft, Amazon, Google, etc.) are multinational technology providers, all active at global level. In addition, cloud solutions, whether IaaS or PaaS, consist of solutions accessible from any geographic location, not of physical hardware. The Commission therefore concludes that the relevant geographic market for cloud and data analytics services is worldwide in scope.

4.4. Enterprise communication services

- (61) Microsoft's enterprise communication service is Teams. Microsoft Teams is the successor to Skype for Business Online. Teams includes features such as voice and video calling, instant messaging, video conferencing, document sharing, and team collaboration. Teams is a cloud-native service. There is no on-premises version.⁴⁵ Nuance is not active in enterprise communication service.⁴⁶

4.4.1. Relevant product market

4.4.1.1. The Commission's previous practice

- (62) The Commission has assessed the enterprise communications market in a number of cases, some of them involving Microsoft. In *Microsoft/Skype*, the Commission looked at enterprise communication services as a single product market and considered, but ultimately left open, whether it would be appropriate to further segment it on the basis of functionality (e.g., advanced telephony, unified messaging – email, fax, voice messaging combined, web, voice and videoconferencing, IM/presence, collaborating tools, etc.), platform (e.g., PCs, smartphones, tablets), and operating system.⁴⁷ In the more recent *Microsoft/LinkedIn* decision, the Commission carried out its assessment on the overall market for enterprise

⁴³ M.9660 - *Google/Fitbit*, paragraph 278.

⁴⁴ Q1 – Questionnaire to competitors for transcription software, replies to question 14 and Q3 – Questionnaire to competitors for cloud services, replies to question 12.

⁴⁵ Form CO, paragraphs 255-256.

⁴⁶ Form CO, Table 8.

⁴⁷ Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs 81-83.

communication services.⁴⁸ The Commission did not yet assess whether there is a separate market for enterprise communication services in the healthcare sector.

4.4.1.2. The Notifying Party's view

- (63) The Notifying Party considers that it is appropriate to define a separate market for enterprise communication services in the healthcare sector in the present case. Within the healthcare sector, customers place a particular emphasis on security and privacy features of the service and have traditionally relied on distinct trusted suppliers that integrate communication services with telehealth services. However, the Notifying Party submits that ultimately the exact scope of the market can be left open as the Transaction does not raise any competition concern regardless of how the product market is defined.⁴⁹

4.4.1.3. The Commission's assessment

- (64) The majority of respondents to the market investigation agrees with the Commission's previous market definition of communication services separating consumer from enterprise communication services.⁵⁰ As some respondents pointed out, typically, enterprise tools require significantly more scalability, higher accuracy, and more configuration options than consumer tools.⁵¹
- (65) As to the possible existence of a separate market for healthcare customers, in the market investigation, the question whether specific features of such products are necessary to carry out medical visits has triggered mixed replies.⁵² In particular, some respondents have noted that, as tele-healthcare becomes more widespread in the future, healthcare professionals and institutions might find it useful to have communication services with specific features, such as integration with their electronic health records.⁵³
- (66) The Commission therefore considers that the relevant product market includes enterprise communications services, distinct from consumer services. The question whether a separate market exists for enterprise communication services used in the healthcare sector can be left open, as this does not affect the outcome of the competitive assessment.

⁴⁸ Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs 81-83.

⁴⁹ Form CO, paragraph 340.

⁵⁰ Q2 – Questionnaire to customers for transcription software, replies to question 10.

⁵¹ Q4 – Questionnaire to competitors for communication platforms, replies to question 11.1.

⁵² Q2 – Questionnaire to customers for transcription software, replies to question 11; Q4 – Questionnaire to competitors for communication platforms, replies to question 12.

⁵³ Q2 – Questionnaire to customers for transcription software, replies to question 11.1; Q4 – Questionnaire to competitors for communication platforms, replies to question 12.1.

4.4.2. Relevant geographic market

4.4.2.1. The Commission's previous practice

(67) The Commission has previously indicated that the market for enterprise communication services is at least EEA-wide in scope, if not worldwide, but has ultimately left the precise scope of the market open.⁵⁴

4.4.2.2. The Notifying Party's view

(68) In line with the precedents, the Notifying Party considers that the market for enterprise communication services is at least EEA-wide in scope, if not worldwide, but that the precise market definition can be left open since the Transaction does not give rise to any competition concern regardless of how the geographic scope of the market is defined.⁵⁵

4.4.2.3. The Commission's assessment

(69) Almost all respondents to the market investigation agree that the geographic scope of the market for communication services is global.⁵⁶ There are some geographic differences (for example, a different legal framework for privacy in the EEA and in the United States) that could militate toward having markets divided by region, such as the EEA.⁵⁷ Generally, however, in view to the globalisation of many business sectors, communication services are provided on a global scale. The Commission therefore concludes that the market for enterprise communication services is global or at least EEA-wide in scope.

4.5. Productivity software

(70) Productivity software consists of applications that allow users to create documents, graphs, worksheets and presentations. Productivity software includes applications such as word processing and spreadsheet applications, and can be delivered either as on-premises software or as an online service hosted in the cloud (SaaS). Microsoft 365 is Microsoft's cloud-based productivity suite for PCs and mobile devices. Nuance is not active in this space.

4.5.1. Relevant product market

4.5.1.1. The Commission's previous practice

(71) In *Microsoft/LinkedIn*, the Commission defined productivity software as applications that enable users to create documents, databases, graphs, worksheets, etc. This includes applications such as word processing and spreadsheet applications.⁵⁸ Productivity software can be used either on-premises on the user's own hardware or in the cloud, hosted by a third party.

⁵⁴ Commission decision of 7 October 2011 in case M.6281 – *Microsoft/Skype*.

⁵⁵ Form CO, paragraph 343.

⁵⁶ Q2 – Questionnaire to customers for transcription software, replies to question 12; Q4 – Questionnaire to competitors for communication platforms, replies to question 13.

⁵⁷ Q4 – Questionnaire to competitors for communication platforms, replies to question 13.1.

⁵⁸ Commission decision of 6 December 2014 in case M.8124 – *Microsoft/LinkedIn*, paragraph 19.

(72) In *Microsoft/Nokia*, the Commission considered that mobile productivity applications constituted a distinct market separate from other types of applications for smartphone devices and productivity applications for desktops and laptops.⁵⁹ In *Microsoft/LinkedIn*, the Commission retained its previous product market definition of productivity software for PCs, without considering it necessary to further segment the market depending on the type of productivity software.⁶⁰

4.5.1.2. The Notifying Party's arguments

(73) The Notifying Party considers the relevant product market to be productivity software for PCs, although the exact definition can be left open as the Transaction does not raise any competition concern regardless of how markets are defined.

4.5.1.3. The Commission's assessment

(74) The majority of customers responding to the market investigation agrees that a separate market for the productivity software for PCs (desktops and laptops) exists, without it being necessary to consider whether this market could be further segmented depending on the type of productivity software (e.g., personal productivity applications).⁶¹

(75) In the above respect, the Commission observes that mobile productivity applications have fewer features, provide less functionality and are less user-friendly than applications designed for PCs. From the supply-side perspective, productivity applications for PCs are written for different hardware environments: faster processors, larger screens and also the presence of a mouse and physical keyboard. From the demand point of view, typically, users use their smart mobile devices mainly to read and check items or make small edits, and not for intensive work over extended periods of time. The Commission therefore considers that the relevant product market is the market for productivity software for PCs (desktop and laptops), excluding mobile productivity applications, without further segmentations.

4.5.2. Relevant geographic market

4.5.2.1. The Commission's previous practice

(76) In previous decisions, the Commission found that the market for productivity applications was at least EEA-wide, if not worldwide, in scope, but ultimately left the precise geographic market definition open.⁶²

4.5.2.2. The Notifying Party's arguments

(77) The Notifying Party agrees with the Commission's approach in previous cases.

⁵⁹ Commission decision of 4 December 2013 in case M.7047 – *Microsoft/Nokia*, paragraphs 46-55.

⁶⁰ Commission decision of 6 December 2014 in case M.8124 – *Microsoft/LinkedIn*, paragraph 25.

⁶¹ Q2 – Questionnaire to customers for transcription software, replies to question 13.

⁶² Commission decision of 4 December 2013 in case M.7047 – *Microsoft/Nokia*, paragraphs 80-81.

4.5.2.3. The Commission's assessment

- (78) Almost all market respondents agree that the relevant geographic market for productivity software is worldwide in scope.⁶³ In particular, it is noted that productivity software is installed in devices, which are sold globally and also provided as SaaS that can be accessed and used worldwide.⁶⁴
- (79) The Commission therefore concludes that the relevant geographic market definition for productivity software is worldwide in scope.

4.6. Operating systems

- (80) OS are system software products that control the basic functions of computing devices such as PCs, tablets and smartphones and enable the user to operate the device and run application software on it. Windows 10, until recently Microsoft's latest OS product, was launched in July 2015 and is designed for both PCs and tablets. The successor, Windows 11, has been launched in 4 October 2021. Nuance is not active in this space.

4.6.1. Relevant product market

4.6.1.1. The Commission's previous practice

- (81) The Commission assessed OS in a number of cases, in which they were defined as system software products that control the basic functions of computing devices such as servers, PCs, tablets and smartphones to enable the user to use the device and run application software on it.⁶⁵ In *Google/Motorola Mobility*, while leaving the exact market definition open, the Commission took the view that OS for PCs and OS for smart mobile devices belong to separate product markets, given that both such OS use different hardware and have different performance capacities.⁶⁶ This approach was confirmed recently in *Google/Fitbit*.⁶⁷

4.6.1.2. The Notifying Party's arguments

- (82) The Notifying Party considers that the relevant product market is OS for PCs, although the exact market definition can be left open.⁶⁸

⁶³ Q2 – Questionnaire to customers for transcription software, replies to question 14.

⁶⁴ Q2 – Questionnaire to customers for transcription software, replies to question 14.1.

⁶⁵ Commission decision of 13 February 2012 in case M.6381 – *Google/Motorola Mobility*, paragraphs 26 and 29-30; Commission decision of 4 December 2013 in case M.7047 – *Microsoft/Nokia*, paragraph 27; Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs 11-15; Commission decision of 18 July 2018 in case AT. 40099 – *Google/Android*, paragraphs 218-219.

⁶⁶ Commission decision of 13 February 2012 in case M.6381 – *Google/Motorola Mobility*, paragraphs 26 and 29-30; Commission decision of 4 December 2013 in case M.7047 – *Microsoft/Nokia*, paragraph 27; Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs 11-15; Commission decisions of 6 September 2018 in case M.8788 – *Apple/Shazam*, recitals 82-85 and of 18 July 2018 in case AT.40099 – *Google/Android*, paragraphs 218-219.

⁶⁷ Commission decision of 17 December 2020 in case M.9660 – *Google/Fitbit*, paragraph 95.

⁶⁸ Form CO, paragraph 327.

4.6.1.3. The Commission's assessment

- (83) The majority of respondents to the market investigation agrees that OS for PCs belong to a separate product market (as opposed to OS for mobile devices). Although one respondent notes that a convergence might take place between OS for PCs and mobile devices in the future, it indicates that there will still be differences between stationary and mobile systems.⁶⁹
- (84) Based on the above considerations, the Commission therefore considers that the relevant product market is the market for OS for PCs.

4.6.2. *Relevant geographic market*

4.6.2.1. The Commission's previous practice

- (85) The Commission has previously concluded that the markets for OS, including PC OS, are least EEA-wide, or even worldwide, in scope.⁷⁰

4.6.2.2. The Notifying Party's arguments

- (86) The Notifying Party agrees with the Commission's approach to previous cases and submits that the same approach can be taken in this Transaction.

4.6.2.3. The Commission's assessment

- (87) Almost all market respondents agree that the relevant geographic market for OS is worldwide in scope.⁷¹
- (88) Based on the above considerations and on the fact that OS are installed on PCs sold worldwide to satisfy a global demand, the Commission therefore considers that the relevant geographic market for OS for PCs is worldwide.

4.7. Customer Relationship Management (CRM) software

4.7.1. *Relevant product market*

- (89) CRM software helps companies manage their customer interactions by organising, automating, and synchronising data from sales, marketing, customer databases, customer service and other technical functions. CRM software consists of software that collates sets of data and displays them in a user-friendly manner. Microsoft's CRM product is Dynamics 365. Nuance does not have a CRM product.

4.7.1.1. The Commission's previous practice

- (90) The Commission previously considered possible segmentations of CRM products based on functionality (e.g., customer service, sales, marketing, and digital

⁶⁹ Q2 – Questionnaire to customers for transcription software, replies to question 15.

⁷⁰ Commission decision of 17 December 2020 in case M.9660 – Google/Fitbit, para. 100.

⁷¹ Q2 – Questionnaire to customers for transcription software, replies to question 16.

commerce), type of service (i.e., cloud or on-premises), and customer size or industry sector.⁷² However, it eventually left the exact market definition open.

4.7.1.2. The Notifying Party's view

- (91) The Notifying Party does not consider it necessary to further segment the CRM market. In particular, it argues that there is not a sound basis for defining CRM submarkets based on the industry sector. While, in fact, there are CRM providers that specialise in serving a particular industry (e.g., Healthgrades CRM for healthcare; Builder CRM & Marketing for construction; and Masterdigm CRM for real estate professionals), customers in those industries also have the choice of using one of the more general-purpose CRM solutions, and many do. Given this demand substitutability, the Notifying Party submits that CRM constitutes a single market that should not be segmented by industry sector.⁷³
- (92) In any case, the Notifying Party considers that for the purposes of this case, the precise scope of the product market can be left open, given the absence of competition concerns regardless of the precise market definition.

4.7.1.3. The Commission's assessment

- (93) The Commission considers that the exact product market definition, including whether CRM should be segmented by industry, functionality, type of service and customer size, can be left open, as this does not affect the outcome of the competitive assessment.

4.7.2. *Relevant geographic market*

4.7.2.1. The Commission's previous practice

- (94) The Commission has previously concluded that the CRM market is at least EEA-wide, if not worldwide, but has ultimately left open the precise scope of the geographic market.⁷⁴

4.7.2.2. The Notifying Party's view

- (95) The Notifying Party submits that the market for CRM software is worldwide in scope on the basis that (i) CRM solutions do not vary significantly across regions; (ii) there are no significant regulatory or technical differences or local customisation in the provision of CRM solutions (apart from local language adjustments); (iii) there is no difference in transport costs, in part given the prevalence of cloud-based solutions; and (iv) the main providers operate on the basis of global or multi-country contracts with their customers.⁷⁵

⁷² Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs. 36-50.

⁷³ Form CO, paragraphs 347-348.

⁷⁴ Commission decision of 6 December 2016 in case M.8124 – *Microsoft/LinkedIn*, paragraphs. 36-50.

⁷⁵ Form CO, paragraph 350.

(96) In any case, the Notifying Party argues that the exact scope of the relevant geographic market can be left open, given the absence of competition concerns.⁷⁶

4.7.2.3. The Commission's assessment

(97) The Commission considers that there are no elements on its file suggesting a departure from its previous decisional practice. The Commission considers that the market for CRM software is at least EEA-wide but that the exact geographic market definition can be left open, as this does not affect the outcome of the competitive assessment.

5. COMPETITIVE ASSESSMENT

(98) The Parties' activities overlap with regard to transcription software (including its use for accessibility purposes) and customer engagement solutions. However, the Parties submit that there are no horizontally affected markets, either in the EEA or globally (see Section 5.1 below).

(99) There is one vertically affected market: Microsoft's upstream cloud computing activities and Nuance's downstream transcription software for healthcare (see Section 5.2 below).

(100) In addition, the Commission assessed potential conglomerate concerns in the following markets⁷⁷:

- Nuance's transcription software for healthcare and Microsoft's enterprise communication services (see Section 5.3.1 below);
- Nuance's transcription software outside healthcare and Microsoft's productivity software (see Section 5.3.2 below);
- Nuance's transcription software outside healthcare and Microsoft's PC OS (see Section 5.3.3 below); and
- Nuance's transcription software for healthcare and Microsoft's CRM software (see Section 5.3.6 below).

5.1. Horizontal relationships

(101) The Transaction involves no significant horizontal overlaps between the Parties. In relation to **the transcription software market** and its various segmentations⁷⁸, the transaction could lead to a horizontal overlap (see Section 5.1.1 below), in which case the transcription software for healthcare market would be affected based on

⁷⁶ Form CO, paragraph 351.

⁷⁷ The Transaction gives rise to a number of conglomerate relationships based on actual or potential product integrations between Microsoft and Nuance.

⁷⁸ See Section 4.1 above. This Section discusses the overall transcription software market, a transcription software market for healthcare, a transcription software market outside healthcare as well as accessibility solutions. These markets are discussed both at an EEA and worldwide level.

Nuance's EEA-wide share of [60-70]%, and worldwide share of [50-60]%.⁷⁹ There are no other segmentations that give rise to affected markets.

- (102) In relation to **the market for customer engagement solutions**, including potential segments for voice engagement, digital engagement and voice biometrics, the Parties' activities result in limited horizontal overlaps with modest combined market shares, and in any event below 20%.⁸⁰ Therefore, even based on the narrowest market definition possible, there are no horizontally affected markets.

5.1.1. Transcription software for healthcare

- (103) Nuance's core business is transcription technology that is used in a variety of applications and services that capture and convert spoken words into digital text. The healthcare sector is a key focus area for Nuance, with applications and services that are integrated into the workflow of physicians and that are plugged into the tools that are used in the healthcare sector, including in EHRs. In healthcare, first, Nuance's main product is Dragon Medical, with a newer cloud-based version branded Dragon Medical One ("DMO"). DMO is a transcription product that can be used by physicians to dictate a patient's story, diagnosis, results, etc., which are then transcribed into records in the EHR. DMO can be installed on any Windows-based PC. It is not available on other PC OS such as macOS.⁸¹ Second, in 2020, Nuance launched Dragon Ambient eXperience ("DAX"), a healthcare service recently co-developed with Microsoft.⁸² DAX is an ambient clinical intelligence product that extends the functionalities of DMO with ambient sensing technology and AI. DAX is currently being launched in the US and is not currently available in the EEA. Third, Nuance also supplies products specifically focused on radiology, i.e., PowerScribe and PowerShare, which have [...] sales in the EEA. Finally, in addition to providing complete out-of-the-box solutions for physicians, Nuance also offers SDKs that enable developers to integrate Nuance's technology into their application: SpeechMagic and Dragon Medical SpeechKit.
- (104) Within the potential market for transcription software in healthcare, Nuance is the market leader with an EEA-wide share of [60-70]%, and a worldwide share of [50-60]%.⁸³ Within the EEA, the second and third largest competitors are Recognosco and MediaInterface with EEA market shares in 2020, according to the Notifying Party's estimates, between [10-20]% and between [10-20]% respectively, and worldwide market shares in 2020 between [0-10]% each.⁸⁴ The third largest competitor, 3M/M*Modal has a low market share in the EEA of [0-5]%, as

⁷⁹ Form CO, Tables 9 and 9A (2020). These market shares are based on installed base and which increases to [60-70]% when considering market shared based on new sales.

⁸⁰ 2020 market shares.

⁸¹ See <https://nuancecommunity.force.com/NuanceHealthcareSupport/s/article/Is-there-an-Apple-Macintosh-version-of-Dragon-Medical12729>.

⁸² DAX is a cloud-based service that uses sensors around a doctor's office or examination room to passively record doctor-patient conversations and automatically turn them into structured medical notes that can be entered directly into a patient's medical record. It therefore differs from Nuance's existing products which are based on the doctor speaking directly to the transcription software to prepare notes or complete an electronic health record.

⁸³ Form CO, Tables 9 and 9A (2020). These market shares are based on installed base and which increases to [60-70]% when considering market shared based on new sales.

⁸⁴ Form CO, Table 9.

estimated by the Notifying Party. However, on a worldwide level, its market share is significantly higher between [30-40]%.⁸⁵

- (105) The Notifying Party submits that there is no horizontal overlap because it does not offer any standalone transcription software. Instead, Microsoft offers general-purpose transcription functionalities as part of Azure Cognitive Services, which consist of APIs that give access to cloud-based services that developers can integrate into their applications (see paragraph (113) below). According to the Notifying Party, these APIs are not suitable for use in the specialised healthcare environment.⁸⁶ Microsoft submits that Azure Cognitive Services do not focus on healthcare providers, and therefore lack the medical vocabulary that Nuance's products have. Finally, Azure Cognitive Services also do not allow customers to dictate into an EHR.⁸⁷ In addition, while Nuance's Dragon Medical products would be out-of-the-box solutions that healthcare customers can use to dictate their medical notes into the EHR, Azure Cognitive Services would target developers and must be integrated by the developer into an application before they can be used by healthcare customers.
- (106) The majority of respondents to the market investigation considered that in the area of transcription software for healthcare either the Parties do not compete at all or the Parties do not closely compete.⁸⁸ These respondents note that Microsoft offers APIs (components), while Nuance offers out-of-the-box (finished) standalone products. Further, these respondents also note that, unlike Microsoft's general STT capabilities, Nuance products are specialised healthcare transcription software solutions.⁸⁹ Two respondents finally also specifically clarified that the customers of Nuance's specialised medical solutions would generally not purchase Microsoft's general transcription services.⁹⁰
- (107) On the one hand, to the extent that Microsoft's APIs and Nuance's out-of-the-box solutions are considered as part of separate relevant markets, the Transaction would not lead to a horizontal overlap between the Parties. On the other hand, if Microsoft's APIs and Nuance's out-of-the-box solutions are considered as part of the same relevant transcription software for the healthcare market, the Transaction would lead to a horizontal overlap. However, in the latter case, the Commission considers that the Microsoft and Nuance products are not closely competing with each other.
- (108) First, as set out in paragraph (105) above, Microsoft's Azure Cognitive Services do not focus on healthcare providers and therefore lack the specialised medical

⁸⁵ Form CO, Table 9A.

⁸⁶ Form CO, paragraph 158.

⁸⁷ Form CO, paragraph 158.

⁸⁸ Q1 – Questionnaire to competitors for transcription software, replies to question 24, Q2 - Questionnaire to customers for transcription software, replies to question 19, Q3 – Questionnaire to competitors for cloud services, replies to question 14, and Q4 – Questionnaire to competitors for communication platforms, replies to question 15.

⁸⁹ Q1 – Questionnaire to competitors for transcription software, replies to question 24, Q2 - Questionnaire to customers for transcription software, replies to question 19, Q3 – Questionnaire to competitors for cloud services, replies to question 14, and Q4 – Questionnaire to competitors for communication platforms, replies to question 15.

⁹⁰ Q1 – Questionnaire to competitors for transcription software, replies to question 24, Q2 - Questionnaire to customers for transcription software, replies to question 19.

vocabulary or integrations with EHR that Nuance's products have. This specialised medical vocabulary is essential for patient safety and the success of the product as transcription errors require manual corrections and therefore, if numerous, defy the purpose of using transcription software in the first place. In addition, some errors might even lead to medical mistakes, e.g., in case of prescribed medication. Further, Azure Cognitive Services do not allow customers to dictate into an EHR. As such, Microsoft's general-purpose APIs for developers do not compete with Nuance's highly specialised out-of-the-box medical products.

- (109) Second, in any event, the Notifying Party submits that its estimated market share in the market for transcription software for healthcare amounts to close to 0% both at worldwide and EEA-level.⁹¹ This market share is based on Microsoft's Azure Cognitive Services' revenues with healthcare customers which amounted to approximately [...] in 2020 worldwide.⁹² Accordingly, the Transaction would only give rise to a negligible or no increment at all.
- (110) Finally, as set out in paragraph (104) above, the Notifying Party estimates that the total penetration rate of transcription software for healthcare in 2020 in the EEA is between [10-20]%. In this space, large competitors are present such as Recognosco (Nuance's largest EEA competitor) [...] ⁹³, MediaInterface (the third largest EEA competitor), 3M/M*Modal and other providers (such as Epro and Vocalis, each accounting for approximately [0-5]% of the total EEA market, as well as new entrants that collectively account for approximately [0-5]%, e.g., Amazon Transcribe Medical (in partnership with EHR provider Cerner) and Inscripta).⁹⁴ Therefore, even if a horizontal overlap exists, the Parties do not exercise a significant competitive constraint on each other.
- (111) In light of the above considerations, the Commission concludes that the Transaction does not lead to an affected market in the market for transcription software for healthcare, and therefore does not raise serious doubts as to its compatibility with the internal market.

5.1.2. *Transcription software outside healthcare*

- (112) Outside healthcare, Nuance offers standalone transcription software for consumers, professionals and certain other specific industries such as legal and law enforcement. [explanation of Nuance's market positioning in professional and consumer transcription software].⁹⁵ Almost all of Nuance products outside healthcare are out-of-the-box products for end-users. Even though Nuance does offer a Dragon SDK enabling developers to integrate Nuance's transcription technology into their own applications, [indication of market performance of the product].
- (113) Microsoft integrated transcription functionalities in a number of its products: (i) APIs as part of Microsoft Azure to allow developers to integrate general purpose

⁹¹ Response to RFI 10, Table 3.

⁹² The Notifying Party maintains that, even if the Commission were to consider that Azure Cognitive Services belongs to the market for transcription software, [...]. See Response to RFI 10, paragraphs 8-9.

⁹³ Form CO, paragraph 370.

⁹⁴ Form CO, paragraph 370.

⁹⁵ Form CO, paragraphs 20 and 173. Annex 15.4 to the Form CO (dated June 2020) shows [indication of market performance of the product].

transcription into their applications; (ii) dictation functionality incorporated into Microsoft 365 (i.e., Word, Outlook, PowerPoint, etc.); (iii) transcription functionality incorporated into Teams; (iv) voice recognition built into Windows OS to allow voice control of the system (see below Section 5.1.3 regarding accessibility solutions).

- (114) On the market for transcription software outside healthcare, Nuance would have a market share of [0-5]% in the EEA and [0-5]% worldwide⁹⁶, and Microsoft an EEA and worldwide share of less than [0-5]% for the APIs for transcription software sold through Azure (2020).⁹⁷ Microsoft submits that it is not able to calculate a market share that includes the transcription services sold as part of Microsoft 365, Teams or Windows OS. Whilst both Parties are offering products with transcription functionality (i.e. transforming speech to text), the Notifying Party argues that Microsoft and Nuance do not compete as: (i) Nuance's products are predominantly finished, out-of-the-box solutions, whereas the Azure APIs require input from a developer to create a finished product; and (ii) Nuance's products are sold separately, whereas the functionalities of Microsoft 365, Teams and Windows OS are part of the respective software, meaning that there is no price competition.
- (115) The majority of respondents to the market investigation considered that in the area of transcription software outside healthcare the Parties either do not compete or do not compete closely.⁹⁸ Respondents noted that Microsoft includes speech recognition as part of a bundle with Office, whereas Nuance has separate standalone products. The products of the Parties would be sold in a different manner, with different functionalities and different price levels.⁹⁹ Similarly, the majority of respondents to the market investigation considered that, when considering transcription software components such as STT, NLU and TTS modules in the area of transcription software outside healthcare, the Parties either do not compete or do not compete closely both have products.¹⁰⁰
- (116) On the one hand, to the extent that Microsoft's APIs and Nuance's out-of-the-box solutions are considered as part of separate relevant markets, the Transaction would not lead to a horizontal overlap between the Parties. On the other hand, if Microsoft's APIs and Nuance's out-of-the-box solutions are considered as part of the same relevant transcription software outside healthcare market, the Transaction would lead to a horizontal overlap. However, in the latter case, the Commission considers that the Microsoft and Nuance products are not closely competing with each other, and in any event, Nuance and Microsoft would have very limited market shares as set out in paragraph (114) above. Therefore, even if a horizontal overlap

⁹⁶ Form CO, paragraphs 451, 453 and Tables 11-11A.

⁹⁷ Form CO, paragraph 458 and Response to RFI 10, Table 3.

⁹⁸ Q1 – Questionnaire to competitors for transcription software, replies to question 25; Q2 - Questionnaire to customers for transcription software, replies to question 20; Q3 – Questionnaire to competitors for cloud services, replies to question 15; and Q4 – Questionnaire to competitors for communication platforms, replies to question 16.

⁹⁹ Q2 - Questionnaire to customers for transcription software, replies to question 20.

¹⁰⁰ Q1 – Questionnaire to competitors for transcription software, replies to question 26; Q2 - Questionnaire to customers for transcription software, replies to question 21; Q3 – Questionnaire to competitors for cloud services, replies to question 16; and Q4 – Questionnaire to competitors for communication platforms, replies to question 17.

exists, the Parties do not exercise a significant competitive constraint on each other. Finally, and in any event, these market shares do not give rise to an affected market.

- (117) In light of the above considerations, the Commission concludes that, the Transaction does not lead to an affected market in the market for transcription software outside of healthcare, and therefore does not raise serious doubts as to its compatibility with the internal market.

5.1.3. Accessibility

- (118) Even if the product market definition is left open and transcription software used for accessibility purposes is considered as a separate product market, the Transaction does not lead to competition concerns.
- (119) Nuance transcription products can also be used to control a PC's operating system and applications by customers with vision, hearing, mobility or cognitive function impairments. In particular, Nuance offers accessibility functionalities to professional and consumers through its Dragon P&C line of business. As set out in paragraph (112) above, [indication of market performance of the product].
- (120) Microsoft offers accessibility functionalities within its productivity software Microsoft 365 and its Windows OS. [...].
- (121) The Commission considers that the Parties' activities in accessibility software do not lead to a horizontal overlap, due to the fact that only Nuance offers a standalone solution. Microsoft, instead, offers accessibility solutions as an added feature to its Windows OS, the Microsoft 365 productivity software.¹⁰¹
- (122) Even if one were to consider Microsoft's accessibility functions as competing with Nuance, [indication of the market positioning and strategy associated to Nuance's product]^{102 103 104 105}.
- (123) In light of the above considerations, the Commission concludes that, regardless of the exact market definition adopted, the Transaction does not lead to affected markets in a potential market for accessibility software, and therefore does not raise serious doubts as to its compatibility with the internal market.

¹⁰¹ As evidence of the fact that standalone, specialist solutions and consumer hardware and software offering accessibility features do not compete with each other, the Notifying Party refers to both a CMA Final Report (Completed acquisition by Tobii AB of Smartbox Assistive Technologies Limited and Sensory Software International Ltd Final report 15 August 2019, para 5.40.) and a report by AbilityNet (<https://abilitynet.org.uk/factsheets/voice-recognition-overview>). In particular, the CMA found that, while Google, Microsoft and Apple seek to make their OS as accessible as possible, "*meeting the specialised needs of users of dedicated [accessibility] solutions is not their focus, and they tend not to see themselves as competing directly with suppliers of dedicated [accessibility] solutions*". See, Form CO, paragraph 288.

¹⁰² Form CO, paragraphs 171 ss. Reply to RFI 5, reply to question 7.

¹⁰³ Reply to RFI 5, reply to questions 7 and 9.

¹⁰⁴ Reply to RFI 5, paragraph 9.2. The Notifying Party explains that, because viruses and other malware threats have become more sophisticated, OS providers have had to improve OS security from the base system upwards. OSs have therefore restricted opportunities to access certain base system level resources and unfortunately thereby also reduced access for accessibility vendors [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

¹⁰⁵ Reply to RFI 5, reply to question 4, paragraphs 15 and 16. [...]

5.2. Vertical relationship

- (124) Depending on the market definition, the Transaction results in one vertically affected market:
- (a) Upstream: Microsoft’s cloud services and data analytics (EEA: [20-30]%; Global: [10-20]%)¹⁰⁶; and
 - (b) Downstream: Nuance’s transcription software for healthcare (EEA: [60-70]%; Global: [50-60]%)¹⁰⁷.
- (125) When considering this vertical relationship with all other segments of transcription software, including transcription software outside of healthcare or an overall market for transcription software, no vertically affected market arises as neither party has a market share in excess of 30% in either the upstream or downstream market.

5.2.1. Possible foreclosure of competing healthcare transcription providers by restricting access to Microsoft’s cloud services and data analytics (input foreclosure)

- (126) The Commission’s market investigation indicates that today, the majority of healthcare software in the EEA, including electronic healthcare records and transcription software are hosted “on-premises”, that is on servers owned and managed by the healthcare providers.¹⁰⁸ There does appear however to be a trend towards moving these services to the cloud where the data and software would be hosted on servers owned and managed by cloud providers. The technology research and consulting company Gartner forecasted that worldwide spending on public cloud would increase by 18% in 2021 (compared to 2020), driven by enterprise spending on switching from on-premises solutions to cloud-based solutions.¹⁰⁹ This is reflected in the results of the market investigation with many respondents reporting that there is an increasing trend of hospitals moving to the cloud, including for their healthcare transcription software.¹¹⁰ This indicates that cloud services are likely to become an increasingly important input for the provision of transcription software for the healthcare sector as well.
- (127) In Europe, Nuance currently offers its services on-premises, or hosted on Microsoft’s cloud platform.¹¹¹ Hosting Nuance’s services on other cloud platforms is not currently possible.

¹⁰⁶ Form CO, paragraphs 563 and 573, Tables 23 and 23A. These figures include both IaaS and PaaS.

¹⁰⁷ Form CO, Tables 9 and 9A. These market shares are based on installed base and which increases to [60-70]% when considering market shared based on new sales.

¹⁰⁸ Minutes of call dated 17 September 2021, Doc ID 174; Minutes of call dated 17 September 2021, Doc ID 291; Minutes of call dated 7 October 2021, Doc ID 569.

¹⁰⁹ See <https://www.gartner.com/en/newsroom/press-releases/2020-11-17-gartner-forecasts-worldwide-public-cloud-end-user-spending-to-grow-18-percent-in-2021>. Form CO, paragraphs 635-639.

¹¹⁰ Minutes of call dated 17 September 2021, Doc ID 291; Minutes of call dated 13 September 2021, Doc ID 346; Minutes of call dated 7 October 2021, Doc ID 569.

¹¹¹ Form CO, paragraphs 7 and 30.

5.2.1.1. The Notifying Party's views

(128) The Notifying Party argues that it would not have the ability or the incentive to foreclose competing healthcare transcription providers by restricting access to its cloud services for the following reasons.

(A) Ability to engage in input foreclosure

(129) The Notifying Party submits that it does not have the ability to foreclose Nuance's rivals with regard to cloud computing solutions because it does not have market power with regard to cloud computing.¹¹² It submits that in the event that Microsoft restricts access to its cloud services, competing transcription providers could switch to other cloud providers such as Amazon, Google and IBM.

(B) Incentive to engage in input foreclosure

(130) The Notifying Party submits that it does not have an incentive to foreclose Nuance's rivals with regard to cloud computing solutions as its Azure platform was built as an open, extensible and neutral cloud platform and that attempts to foreclose rivals would not only result in a direct loss of revenues but also a loss of trust in the platform.¹¹³

5.2.1.2. The Commission's assessment

(A) Ability to engage in input foreclosure

(131) The Commission considers that post-Transaction the merged entity would not have the ability to foreclose Nuance's rivals through either preventing access to its cloud computing services or otherwise degrading the conditions on which it supplies its cloud computing services, for the following reasons.

(132) First, the Commission notes that while Microsoft is an important supplier of cloud computing services, there are other players that will continue to provide cloud services post-Transaction. In particular, in 2019, Microsoft had a worldwide market share of [10-20]% behind Amazon with a market share of [30-40]%, with multiple other providers such as Google ([0-5]%), Alibaba ([0-5]%) and IBM ([0-5]%) also active on the market. In 2020, Microsoft had, according to its own estimate, a worldwide market share of [10-20]% and [10-20]% in the EEA behind Amazon ([30-40]% worldwide and [30-40]% in the EEA, with Google, Alibaba and IBM also active on the market.

¹¹² Form CO, paragraph 563.

¹¹³ Form CO, paragraphs 569-570.

Table 1 - Market shares for cloud computing (IaaS + PaaS), by value – Worldwide and EEA

	2019 - worldwide	2020 - worldwide	2020 - EEA
Microsoft	[10-20]%	[10-20]%	[10-20]%
Amazon	[30-40]%	[30-40]%	[30-40]%
Google	[0-5]%	[5-10]%	[5-10]%
Alibaba	[0-5]%	Parties unable to provide estimate	Parties unable to provide estimate
IBM	[0-5]%	Parties unable to provide estimate	Parties unable to provide estimate
Others	[30-40]%	[40-50]%	[30-40]%

Source: Form CO, Table 23. IDC and Microsoft data.¹¹⁴

- (133) Accordingly, if Microsoft degraded its cloud services to such an extent that Nuance’s rivals would no longer be able to compete effectively, they would have alternative providers to whom they could switch.
- (134) Second, all of the cloud competitors that responded to the market investigation confirmed that they supply cloud services to customers with whom they also compete, with several respondents confirming specifically that they provide cloud services to transcription / speech recognition providers with whom they compete.¹¹⁵ This indicates that indeed, other cloud competitors would be viable alternatives to Microsoft should it adopt a foreclosure strategy, even if those players are also active with regard to the provision of voice recognition software.
- (135) One respondent to the market investigation considered that post-Transaction Microsoft could leverage its advantage in the cloud service market by refusing to offer cloud services to certain voice recognition rivals, or by providing cloud services to certain voice recognition providers on less favourable terms. However, in light of the foregoing reasons and since this respondent provided no arguments to support its position, the Commission takes the view that Microsoft would not have the ability to foreclose competing transcription providers.¹¹⁶

(B) Incentive to engage in input foreclosure

- (136) The Commission considers that post-Transaction the merged entity would not have the incentive to foreclose Nuance’s rivals through either preventing access to its cloud computing services or otherwise degrading the conditions on which it supplies its cloud computing services, for the following reasons.
- (137) First, Microsoft gains revenues from the use of any service running in Azure – whether that service is a Microsoft service or a third-party service. Microsoft thus has the incentive to ensure that as many third-party solutions run on Azure as possible. Adopting a foreclosure strategy would therefore entail loss of revenues in the upstream cloud market from foreclosing specific downstream transcription rivals

¹¹⁴ Form CO, Tables 23 and 23A.

¹¹⁵ Q3 – Questionnaire to competitors for cloud services, replies to questions 17 and 18.

¹¹⁶ Q3 – Questionnaire to competitors for cloud services, reply to question 19.

plus taking into account that Microsoft is active in many different downstream markets, a strategy to foreclose competing transcription providers in healthcare could have a negative impact on its cloud revenues from third parties that compete with Microsoft in other markets. This is in the context of the volume of revenues that Microsoft stands to obtain from deploying Azure in the healthcare sector being materially higher than those from healthcare transcription software are. Microsoft submits that by 2023, the total annual spend in digital transformation (i.e. cloud-based solutions, encompassing cloud PaaS, IaaS and SaaS) across healthcare providers worldwide will amount to [...] ¹¹⁷ with transcription software comprising [Less than [10-20]%] of that market.

- (138) Second, the majority of the respondents to the market investigation did not consider that Microsoft would have the incentive to prevent rival transcription providers from using its cloud services, or otherwise deteriorate the conditions under which it provides these services, noting that: “*Rival transcription software providers have alternatives like Alibaba Cloud and AWS. Microsoft would not be able to benefit itself by preventing them from using its cloud services*”.¹¹⁸
- (139) Third, Microsoft’s internal documents support its argument that its Azure platform was built as an open, extensible and neutral cloud platform. For example, a Microsoft memo to the Board of Directors states that: [...].¹¹⁹ This is also consistent with the findings of the Commission in relation to non-horizontal foreclosure concerns of competing providers of IaaS / PaaS in its *Microsoft / Github* decision: “*Microsoft’s intention is to cater for the needs of developers, first among all openness and freedom of choice*”.¹²⁰

(C) Impact on effective competition

- (140) Given the existence of multiple alternative cloud providers to which transcription software providers could switch, the Commission considers that there would only be a limited impact on effective competition if Microsoft were to pursue a foreclosure strategy.
- (141) This conclusion is consistent with the results of the market investigation, in which the majority of respondents considered that the Transaction would have a neutral effect on their business, including with regard to the supply and purchase of cloud computing services.¹²¹

¹¹⁷ See Form CO, Annex 5.0.37. [MICROSOFT INTERNAL DOCUMENT], as well as the Notifying Party’s response of 16 December 2021 to Q6 of RFI 10

¹¹⁸ Q1 – Questionnaire to competitors for transcription software, replies to question 30; Q3 – Questionnaire to competitors for transcription software, replies to question 19.

¹¹⁹ See Form CO, Annex 5.0.37. [MICROSOFT INTERNAL DOCUMENT].

¹²⁰ Commission decision of 19 October 2018 in case M.8994 - *Microsoft/GitHub*, para. 126.

¹²¹ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to questions 20 and 23; and Q4 – Questionnaire to competitors for communication platforms, replies to question 24.

(D) Conclusion

- (142) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to a possible foreclosure of competing healthcare transcription providers by restricting access to Microsoft’s cloud services and data analytics, regardless of the exact product market definition retained for transcription software, either on a worldwide or EEA-wide basis.

5.2.2. *Possible foreclosure of competing cloud providers by restricting access to Nuance as customer (customer foreclosure)*

5.2.2.1. The Notifying Party’s views

- (143) The Notifying Party submits that it would have neither the ability nor the incentive to engage in a customer foreclosure strategy with regard to cloud computing for healthcare transcription as: (i) [...] the transaction will not cause any rival cloud provider to lose a significant customer]; and (ii) Nuance is not an “important customer” for providers of cloud services pursuant to the Commission’s Non-horizontal Merger guidelines.¹²²

5.2.2.2. The Commission’s assessment

- (144) For the reasons set out below, the Commission considers that post-Transaction the merged entity would have neither the ability nor the incentive to foreclose its cloud rivals by adopting a customer foreclosure strategy.
- (145) First, [the merged entity would not have the ability to foreclose its rivals as [...]. Competitors to Microsoft are therefore not relying today on Nuance as a customer and the merger-specific effects of the Transaction with regard to Nuance as a customer of cloud services are therefore limited].
- (146) Second, the merged entity would not have incentives to foreclose its rivals. Even taking into account the projected shift of healthcare transcription services to the cloud, Nuance would not constitute an important customer for cloud services. In 2020, Microsoft’s Azure revenues from the total services provided to Nuance amounted to [...], which is [0-5]% of Microsoft’s worldwide revenues from Azure cloud services of [...] with a total market size estimated by the Notifying Party to be [...] worldwide and [...] in the EEA. Nuance cannot therefore be considered as an important customer for cloud services and data analytics.
- (147) Third, given that the merged entity is unlikely to have the ability or incentives to engage in a customer foreclosure strategy post-Transaction and [...], the Commission considers that there is unlikely to be a negative impact on competition even if Microsoft were to pursue such strategy.
- (148) In that regard, the majority of competitors in the cloud computing market considered that the Transaction would have a neutral effect on their business¹²³ and specifically

¹²² Form CO, paragraphs 572 – 574 and the Notifying Party’s response to Q12 of RFI 8, submitted on 8 December 2021.

¹²³ Q3 – Questionnaire to competitors for cloud services, replies to question 20

with regard to their ability to supply cloud computing services.¹²⁴ As noted above, one cloud computing customer had concerns regarding this vertical relationship (see paragraph (135)), including that Microsoft may offer Nuance's voice recognition technology to customers under the condition that they must use Microsoft's cloud services, thereby excluding competing cloud service providers. However, in light of the foregoing reasons, and since this respondent provided no arguments to support its position, the Commission does not consider that Microsoft would have the ability or incentive to adopt a strategy to foreclose competing cloud service providers.

- (149) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure practices of competing healthcare transcription providers by restricting access to Nuance as a customer for cloud services and data analytics, regardless of the exact product market definition retained for transcription services, either on a worldwide or EEA-wide basis.

5.2.3. Possible foreclosure effects in relation to Nuance's medical data (input foreclosure)

- (150) Nuance processes speech data, which it uses to train its algorithms and improve the accuracy of its offerings. The data consist of audio recordings and related transcripts. To the Commission's knowledge, there is no market for such data since it is not traded by any company. In any case, Nuance does not make such data available to third parties and is therefore not active on such market if it were to exist.
- (151) Therefore, from a competition perspective, there is no market in relation to Nuance's medical data that could be affected by the Transaction. However, the Commission nonetheless assessed a potential foreclosure strategy by the merged entity following the Transaction.

5.2.3.1. The Notifying Party's view

- (152) The Notifying Party observes that competition concerns may arise when two large, unique and competitively significant datasets are combined. However, the Transaction would entail no such combination. Nuance's customer data consists primarily of medical speech data, which is an area where Microsoft has a very limited presence and access to comparatively little data, as confirmed by [...]. Moreover, as explained further below, the usage that can be made of Nuance's healthcare data is limited by contractual restrictions and data protection regulations.¹²⁵
- (153) [...]. Therefore, the Notifying Party submits that no company depends on that data to compete effectively, and input foreclosure concerns can be excluded.

¹²⁴ Q3 – Questionnaire to competitors for cloud services, replies to question 23

¹²⁵ Form CO, paragraphs 576-578.

5.2.3.2. The Commission's assessment

- (154) The Commission preliminarily observes that, according to paragraph 36 of the Horizontal Merger Guidelines,¹²⁶ a merger can significantly impede effective competition if the merged entity gains such a degree of control over an asset that expansion or entry by rival firms may be more difficult.
- (155) In that respect, as set out in *Apple/Shazam*, the Commission notes that there are certain regulatory limitations to prevent the illegal combination of datasets.¹²⁷
- (156) First, as regards the ability to foreclose the data, the Commission recalls that the processing of personal data is subject to the applicable EU rules dealing with data protection, and most notably to the Regulation (EU) 2016/679 of the European Parliament and of the Council¹²⁸ ("GDPR"). Such rules apply to personal data, that is "*any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person*".¹²⁹
- (157) Pursuant to Article 5(1)(b) GDPR, personal data which has been collected for specified, explicit and legitimate purposes may not be further processed in a manner that is incompatible with those purposes. Data which qualifies as personal data under the GDPR can be transmitted to and processed by a third party only to the extent that there exists a legal basis for the transmission to the third party and a legal basis for the processing by that third party.
- (158) Further, the GDPR requires that individuals concerned by the processing must be informed in a transparent manner on all relevant circumstances of the processing, including on the identity of each controller and the purposes of the processing.¹³⁰
- (159) Finally, to the extent the data processing activities concern health data, Article 9 of the GDPR provides a general, although not absolute, prohibition.¹³¹
- (160) In the light of the above provisions, the Commission observes that use of Nuance's database of personal health data, however valuable it may be for the development of

¹²⁶ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 5.2.2004, p. 5–18

¹²⁷ Commission decision of 6 September 2018 in case M.8788 – *Apple/Shazam*, recitals 225-235.

¹²⁸ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1). In this Decision, the Commission discusses the rules under that Regulation only for the purposes of the assessment the Transaction under the Merger Regulation. The analysis in this Section is therefore entirely without prejudice to the relevant administrative or legal procedures where the Parties' compliance with those rules may be assessed.

¹²⁹ Article 4 of the GDPR.

¹³⁰ Article 5 of the GDPR.

¹³¹ Article 9(1) GDPR provides that "Processing of [...] data concerning health [...] shall be prohibited". However, this general prohibition does not apply, upon the occurrence of one of the exceptions provided for in Article 9(2), including the case where the user has given consent to the data processing.

transcription software or other products and services, may only take place within the boundaries of, and in compliance with, such data protection rules.

(161) In addition, [...].¹³²

(162) Even if such contractual and regulatory provisions were not in place, and the merged entity could freely dispose of such data assets, the market investigation has confirmed that Nuance's database is not an important input in any downstream market where data could be used to develop data-driven technology (e.g. ambient transcription software). In fact, customers of transcription software responding to the market investigation have indicated that they do not rely on Nuance for access to medical data. Some in fact have explained that they receive from Nuance ready-to-use transcription software and do not need any data to install and operate it. Other, who need data to "train" their speech recognition software, obtain such data from their healthcare customers or partners.¹³³

(163) The Commission considers that, as indicated by the Notifying Party, before the Transaction, [...]. Therefore, there is no such party that might be dependent on access to such database and could be potentially harmed by the Transaction. However, even if this would not be the case, the Commission considers that Nuance would lack the ability (including the legal ability) to foreclose such data for the reasons explained above. As to legal ability (i) Nuance's partners would have to obtain their patients' consent (or alternative legal basis under relevant data protection laws) in order to make their medical data available for software development purposes; (ii) the contracts between Nuance and its partners would have to provide for a transfer of data, not only to Nuance, but to third parties Nuance could possibly transfer the data. As to the importance of the input, third parties would need to rely on such medical data for the development of their software (while at the moment they either don't need the data or obtain it from other sources). As the requirements to prove the risk of foreclosure are cumulative, there is no need for the Commission to discuss the merged entity's incentive to engage in foreclosure and the impact on competition thereof.

(164) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to the use of Nuance data and its possible foreclosure.

5.3. Conglomerate relationships

5.3.1. Nuance's transcription software for healthcare and Microsoft's enterprise communication services

(165) These activities give rise to an affected market given that the Parties are active in neighbouring markets and Nuance's market share exceeds 30%:

¹³² Form CO, paragraphs 591-595. [...].

¹³³ Q2 – Questionnaire to customers for transcription services, replies to question 18.

- (a) Nuance's transcription software for healthcare (EEA: [60-70]%; Global: [50-60]%),¹³⁴ and
- (b) Microsoft's enterprise communication services:
 - Enterprise communication services: EEA: [20-30]%¹³⁵; Global: [10-20]%¹³⁶.
 - Enterprise communication services in the healthcare sector: EEA: [5-10]%¹³⁷; Global: [5-10]%¹³⁸.

(166) As noted above in paragraphs (103) and (266) Nuance's transcription software enables doctors to convert their speech into text for example to complete forms and medical records. In partnership with Microsoft, Nuance recently developed DAX. DAX is a cloud-based service that uses sensors around a doctor's office or examination room to passively record doctor-patient conversations and automatically turn them into structured medical notes that can be entered directly into a patient's medical record. It therefore differs from Nuance's existing products which are based on the doctor speaking directly to the transcription software to prepare notes or complete an electronic health record. DAX is currently being launched in the USA and is not currently available in the EEA.

(167) In September 2020, the Parties announced that DAX will be available for integration with Microsoft Teams. A conglomerate relationship therefore exists between Nuance's healthcare transcription activities and Microsoft's enterprise communication services, in particular in relation to providing virtual healthcare visits.

5.3.1.1. Possible foreclosure of competing enterprise communication providers for virtual healthcare visits by restricting or degrading access to Nuance's transcription services for healthcare

(A) The Notifying Party's views

(168) The Notifying Party argues that it would have neither the ability nor the incentive to exclude competing communication service providers from providing virtual

¹³⁴ These market shares are based on installed base and which increases to [60-70]% when considering market shared based on new sales.

¹³⁵ Response to RFI 7, question 9. This represents Teams plus Skype for Business, including both cloud and on-premise solutions.

¹³⁶ Form CO, paragraphs 403-405. Microsoft's global share in enterprise communication services, including both Teams and Skype for Business is [10-20]%, and [10-20]% when Skype for Business On-premises is included. *See* also Form CO, paragraph 385 regarding Microsoft Teams' EEA and worldwide share specifically: Microsoft's best estimate for Microsoft Teams' share in enterprise / unified communication services worldwide is [10-20]%, in Europe [10-20]%. This market share is based on the number of monthly active users of Microsoft Teams against the total number of licenses for enterprise communication services. The Commission has not reached out to the market in order to verify the methodology and computations underlying the market shares provided by Microsoft.

¹³⁷ Response to RFI 7, question 11.

¹³⁸ Response to RFI 7, question 11. This figure represents the market share for the UK + US + Europe which the Notifying Party estimates to represents [80-90]% of global market for enterprise communication services for healthcare applications.

healthcare visits by limiting / preventing integration with Nuance's transcription software for healthcare solutions.

(A.i) Ability to engage in foreclosure

- (169) The Notifying Party submits that post-Transaction it would not have the ability to foreclose rival enterprise communication services providers for the following reasons.
- (170) First, the Notifying Party submits that transcription technology is not a necessary feature for a video communication service provider to compete effectively in healthcare. Rather, factors such as quality of video, security, integration with the physician's workflow are the key drivers of customer choice for virtual consultation platforms.
- (171) Second, the Notifying Party submits that physicians can still use DAX with a competing communication platforms even if there is no full integration (e.g., by placing a device with the mobile application near their PC).
- (172) Third, the Notifying Party considers that sufficient alternatives to DAX exist such as the Amazon Transcribe Healthcare APIs and Suki. Others would have the capability to enter the market, such as 3M/M*Modal and Google, that competing enterprise communication providers could integrate with.

(A.ii) Incentive to engage in foreclosure

- (173) The Notifying Party submits that DAX is core to the Transaction rationale and that it will have the incentive to ensure the wide adoption of DAX by allowing integration with other communication systems. Through the Transaction, it aims to become a trusted partner for physicians and healthcare providers and denying such integration would run counter to the Transaction rationale.
- (174) The Notifying Party also submits that it would not make economic sense to sacrifice DAX revenues in order to drive sales to Teams when Teams already has high adoption rates amongst healthcare providers through incorporation in Office 365 and that the Office 365 suites that include Teams are much cheaper than DAX. While the potential revenue loss from an exclusivity strategy would be significant since DAX is a high-priced product with significant growth potential in the healthcare sector, the potential gains from cross selling of Office 365 would likely be minimal.

(B) The Commission's assessment

(B.i) Ability to engage in foreclosure

- (175) The Commission considers that post-Transaction, the merged entity would not have the ability to foreclose its enterprise communication providers rivals through either preventing access to Nuance's DAX service or otherwise degrading the conditions on which it supplies DAX, for the following reasons.
- (176) Contrary to the submissions of the Parties, the results of the market investigation indicated that the incorporation of a transcription service into a telehealth

communications platform would be important to the competitive success of the telehealth platform.¹³⁹

- (177) This said, [...], both in terms of timeframe and likely adoption rates. Based on information provided by the Parties, [...], [...], the current adoption rates of Nuance's existing medical transcription software in the EEA (around [...]) does not clearly indicate that [...] it would achieve a position that gives Microsoft any ability to foreclose rival telehealth communication providers in any relevant time frame.

(B.ii) Incentive to engage in foreclosure

- (178) The Commission considers that post-Transaction the merged entity would not have the incentive to foreclose its enterprise communication provider rivals through either preventing access to Nuance's DAX service or otherwise degrading the conditions on which it supplies DAX, for the following reasons.
- (179) First, the margins that Microsoft stands to lose by withholding DAX are far higher than the margins that it would gain by increased sales of Teams.
- (180) In the US, DAX is currently sold at approximately [...] with expected margins of c. [...] by FY25. Teams is included with Microsoft/Office 365, which is priced from USD 96 to 684 per user/year in the US and EUR [...] to [...] per user/year in Europe depending on the package. By adopting a foreclosure strategy, Microsoft would lose DAX sales in exchange for the possibility of increasing sales of Microsoft/Office 365, a product that at most generates only [5-10]% the revenue generated by DAX annually. Microsoft therefore has an incentive to ensure DAX works with as many other pieces of specialised healthcare/telehealth software as possible to ensure broad distribution of DAX. This is further reinforced by the revenues that Microsoft would obtain as a result of DAX running on the Azure platform.
- (181) Second, the majority of respondents to the market investigation did not consider that Microsoft would have the incentive to foreclose rival healthcare transcription providers through preventing access to Teams.¹⁴⁰

(B.iii) Impact on effective competition

- (182) Given [...] and the merged entity's likely lack of incentive to engage in such a foreclosure strategy, the Commission considers that there would be a limited impact on effective competition.
- (183) This conclusion is consistent with the results of the market investigation in which the majority of respondents considered that the Transaction would have a neutral effect on their business, including with regard to the supply of enterprise communication software and the supply of communication software for virtual healthcare visits.¹⁴¹

¹³⁹ Q4 – Questionnaire to competitors for communications platforms, replies to question 19.

¹⁴⁰ Q2 – Questionnaire to customers for transcription software, replies to question 22.

¹⁴¹ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to question 20; and Q4 – Questionnaire to competitors for communication platforms, replies to questions 27 and 28.

(B.iv) Conclusion

(184) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure of competing enterprise communication providers for virtual healthcare visits by restricting or degrading access to Nuance's transcription services for healthcare either on a worldwide or EEA-wide basis.

5.3.1.2. Possible foreclosure of competing healthcare transcription providers by restricting or degrading access to Microsoft's enterprise communication services for virtual healthcare visits

(A) The Notifying Party's views

(185) The Notifying Party argues that it would have neither the ability nor the incentive to exclude competing healthcare transcription providers by restricting access to Teams.

(A.i) Ability to engage in foreclosure

(186) First, the Notifying Party submits that Teams is not a leading provider in communication services for virtual healthcare visits and there are multiple competitors, both general communication providers such as WebEx, Zoom and Google Meet as well as specialist telehealthcare providers. Moreover, Amazon and BlueJeans have recently announced the launch of specialist telehealth platforms that include video conferencing.

(187) Second, the Notifying Party considers that competing rivals can integrate into Teams using publicly available APIs without any input from Microsoft.

(188) Third, DAX is the only ambient clinical intelligence provider that integrates with Team pre-Transaction and therefore, the Transaction would not deprive rivals of an integration that exists pre-Transaction.

(189) Fourth, the Notifying Party asserts that the main application of DAX and its rivals will be for in-person visits rather than virtual consultations; therefore, integration with a video platform is not an essential input for commercial success.

(A.ii) Incentive to engage in foreclosure

(190) The Notifying Party submits that it would not have the incentive to foreclose rival competing healthcare transcription providers because when application providers create integrations with Teams, it makes Teams more valuable to its users. Degrading the Teams public APIs to prevent DAX competitors integrating with Teams would undermine one of Teams' central value propositions.

(B) The Commission's assessment

(B.i) Ability to engage in foreclosure

(191) The Commission considers that post-Transaction, the merged entity would not have the ability to foreclose its healthcare transcription rivals through either preventing access to Teams or otherwise degrading the conditions on which it makes Teams' APIs available, for the following reasons.

- (192) First, while Microsoft Teams is an important player in the market for enterprise communication software, this does not necessarily appear to be the case with regard to communication software for virtual healthcare visits. According to the methodology used by the Notifying Party to calculate its market share for enterprise communication services, it has a share of [20-30]% in the EEA¹⁴² and [10-20]% globally.¹⁴³ However, when considering the segment for enterprise communication services in the healthcare sector this percentage drops to [5-10]% in the EEA¹⁴⁴ and [5-10]% globally¹⁴⁵.
- (193) The players offering telehealth platforms include existing enterprise communication providers offering healthcare specific services and subscription plans (like Zoom for healthcare or WebEx for healthcare), other tech companies expanding in this sector at the global level (e.g., Amazon Care), existing telehealth providers (e.g., Teladoc), and new providers and start-ups entering thanks to the increased demand for video consultations generated by the COVID-19 pandemic (e.g., accuRx and eConsult). The Notifying Party indicates that the majority of these, including Amazon, Amwell, BlueJeans, Cisco, Epic, Google, Teladoc, Vidy, Vsee, and Zoom are already active in the EEA.
- (194) Accordingly, alternative developers of transcription software will not be foreclosed as, to the extent that inclusion in a telehealth platform is an important route to market, there are multiple other players with which they could integrate other than Teams.
- (195) Second, Teams APIs are publicly available for third party app developers to be able to interoperate with their healthcare transcription service. The majority of respondents to the market investigation confirmed that it would be possible for a transcription software provider to integrate its software into Microsoft Teams without the assistance of Microsoft.¹⁴⁶

(B.ii) Incentive to engage in foreclosure

- (196) The Commission considers that post-Transaction, the merged entity would not have the incentive to foreclose its healthcare transcription rivals through either preventing access to Teams or otherwise degrading the conditions on which it makes Teams' APIs available, for the following reasons.

¹⁴² Response to RFI 7, question 9. This represents Teams plus Skype for Business, including both cloud and on-premise solutions.

¹⁴³ Form CO, paragraphs 403-405. Microsoft's global share in enterprise communication services, including both Teams and Skype for Business is [10-20]%, and [10-20]% when Skype for Business On-premises is included. See also Form CO, paragraph 385 regarding Microsoft Teams' EEA and worldwide share specifically: Microsoft's best estimate for Microsoft Teams' share in enterprise / unified communication services worldwide is [10-20]%, in Europe [10-20]%. This market share is based on the number of monthly active users of Microsoft Teams against the total number of licenses for enterprise communication services. The Commission has not reached out to the market in order to verify the methodology and computations underlying the market shares provided by Microsoft.

¹⁴⁴ Response to RFI 7, question 11.

¹⁴⁵ Response to RFI 7, question 11. This figure represents the market share for the UK + US + Europe which the Notifying Party estimates to represent [80-90]% of global market for enterprise communication services for healthcare applications.

¹⁴⁶ Q2 – Questionnaire to customers for transcription software, replies to question 20.

- (197) First, the Notifying Party's internal documents evaluating the Transaction indicate [...].
- (198) Second, the majority of respondents to the market investigation did not consider that Microsoft would have the incentive to foreclose rival healthcare transcription providers through preventing access to Teams.¹⁴⁷

(B.iii) Impact on effective competition

- (199) Given the existence of multiple alternative communication platform providers with whom rival healthcare transcription providers could integrate and the lack of incentive to engage in such a foreclosure strategy, the Commission considers that there would be a limited impact on effective competition.
- (200) This conclusion is consistent with the results of the market investigation in which the majority of respondents considered that the Transaction would have a neutral effect on their business, including with regard to the supply of enterprise communication software and the supply of communication software for virtual healthcare visits.¹⁴⁸

(B.iv) Conclusion

- (201) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure of competing healthcare transcription providers by restricting or degrading access to Microsoft's enterprise communication services for virtual healthcare visits.

5.3.2. Nuance's transcription software outside of healthcare and Microsoft's productivity software suite

- (202) These activities give rise to an affected market given that the Parties are active in neighbouring markets and Microsoft's market share exceeds 30%:
- (a) Nuance's transcription software outside of healthcare (EEA: [0-5]%; Global: [0-5]%)¹⁴⁹ and
 - (b) Microsoft's productivity software suite (EEA: [60-70]%¹⁵⁰; Global: [50-60]%¹⁵¹).

¹⁴⁷ Q2 – Questionnaire to customers for transcription software, replies to question 25; and Q4 – Questionnaire to competitors for enterprise communication software, replies to question 23.

¹⁴⁸ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to question 20; and Q4 – Questionnaire to competitors for communication platforms, replies to questions 27 and 28.

¹⁴⁹ Form CO, paragraph 462. The Parties submit that these are conservative estimates as they represent only transcription “software” to the exclusion of transcription “services” which would also include SaaS, online transcription tools and manual transcription and bring its share down to [0-5]%. The Commission has not reached out to the market in order to verify the methodology and computations underlying the market shares provided by Microsoft.

¹⁵⁰ Response to RFI 7, question 9.

¹⁵¹ Form CO, paragraphs 53, 424 and 462.

(203) As noted above in paragraph (3), Nuance’s Dragon P&C integrates with some productivity applications, including Microsoft Word, Excel, Outlook and PowerPoint. The transcription functionality in Office 365 allows users to dictate text using their voice into these applications. This gives rise to a conglomerate relationship between Nuance’s transcription software outside healthcare and Microsoft’s productivity software.

5.3.2.1. Possible foreclosure of competing productivity services providers by restricting or degrading access to Nuance’s transcription software outside of healthcare

(A) The Notifying Party’s views

(204) The Notifying Party argues that it would have neither the ability nor the incentive to exclude competing productivity services providers by restricting access to Nuance’s transcription products.¹⁵²

(A.i) *Ability to engage in foreclosure*

(205) First, according to the Notifying Party, the ability to integrate transcription software does not drive customer-purchasing decisions with regard to productivity services. Instead, the choice of productivity offerings is driven by factors such as ease, reliability, security, and interoperability.¹⁵³

(206) Second, Nuance’s transcription products have certain functionalities, which allow their use with productivity services even in the absence of full integration.¹⁵⁴ Users can dictate into a box in the Dragon application (called the “Dictation Box”) and then transfer the text from the Dictation Box to the application of their choice. The Dictation Box automatically appears when a user attempts to dictate in an unsupported application. For instance, this is how users have been using Dragon P&C with Google Workspace as Nuance does not fully support integration between Dragon P&C and Google Workspace.

(207) According to the Notifying Party, the lack of pre-built integration between Google Workspace and Dragon P&C has clearly not affected Google’s ability to compete in the market for productivity software. Google is reported to have a market share of 44.6% worldwide as of May 2021, and likely ranging between 30-40% in the EEA.¹⁵⁵ According to Statista,¹⁵⁶ Google Workspace paid business customers and organizations significantly increased over time passing from approximately 3 million in 2017 to more than 6 million in 2020, as reported by Google itself.¹⁵⁷ It is apparent that integration with a third-party transcription software like Dragon P&C is not a competitive driver for productivity software.¹⁵⁸

¹⁵² Form CO, paragraph 463.

¹⁵³ Form CO, paragraph 465.

¹⁵⁴ Form CO, paragraph 466.

¹⁵⁵ See Response to RFI 7, question 9.

¹⁵⁶ See <https://www.statista.com/statistics/961008/g-suite-paid-accounts-worldwide>.

¹⁵⁷ See <https://cloud.google.com/blog/products/g-suite/how-google-meet-supports-two-million-new-userseach-day>.

¹⁵⁸ Response to RFI 9, paragraph 28.

(208) Third, the Notifying Party estimates that the number of users of Nuance’s Dragon P&C is just too small to enable the merged entity to foreclose rival productivity software suppliers.¹⁵⁹ On the one hand, Nuance estimates that approximately [...] users worldwide have purchased a Dragon P&C version in the last two years, which is only a fraction of the total number of users of productivity software. Microsoft estimates that there are approximately [...] users of productivity software worldwide, and thus Dragon P&C users represent less than [0-5]% the number of users of productivity software. At the same time, Nuance notes that the Dragon P&C line of business generated approximately [...] in revenue in 2020, and approximately [...] in 2019. Based on an average selling price of [...], approximately [...] users worldwide have purchased a Dragon P&C version (including Law Enforcement and Legal)¹⁶⁰ in the last two years, less than [0-5]% the number of Microsoft Office 365 seats ([...]). Even assuming that users who purchased Dragon outside healthcare in 2018, 2017, and 2016 would still be using it today the overall user base accounts for approximately [0-5]% the number of Microsoft Office 365 seats.¹⁶¹

(A.ii) Incentive to engage in foreclosure

(209) The Notifying Party states that the merged entity would have no incentive to foreclose competing providers of productivity software given that the transcription software integrations actually increase the value of Microsoft’s platform technology. Microsoft would not degrade those integrations.¹⁶²

(210) Furthermore, the Notifying Party submits that it is susceptible to retaliation.¹⁶³ Microsoft relies on integrations with the makers of rival productivity suites in other areas. For example, Microsoft’s Duo smartphone uses Google’s Android OS,¹⁶⁴ and its web browser, Edge, relies on the Google-led Chromium open-source project.¹⁶⁵ There would also be reputational damage to Microsoft in denying relevant integrations to its customers.

(B) The Commission’s assessment

(211) For the reasons set out below, the Commission considers that the Transaction does not lead to credible foreclosure concerns in the market for productivity software, regardless of the precise product and geographic market definitions retained (see Sections 4.5.1.3 and 4.5.2.3 above).

(B.i) Ability to engage in foreclosure

(212) The Commission considers that post-Transaction, while it would be technically possible for the merged entity to change Dragon P&C integration with third party productivity software, Microsoft would not have the ability to foreclose its

¹⁵⁹ Form CO, paragraphs 467-468.

¹⁶⁰ See Form CO, Table 7.

¹⁶¹ For reference, Nuance notes that its Dragon P&C line of business generated USD [...] in 2018, USD [...] in 2017, and USD [...] in 2016. The total revenue over the period 2016-2020 amounts to USD [...]. Based on an average selling price of USD [...], this implies an estimated [...].

¹⁶² Form CO, paragraph 469.

¹⁶³ Response to RFI 9, paragraph 32.

¹⁶⁴ See <https://www.microsoft.com/en-us/surface/devices/surface-duo?activetab=overview>.

¹⁶⁵ See <https://www.theverge.com/2018/12/6/18128648/microsoft-edge-chrome-chromium-browserchanges>.

productivity software rivals through either preventing access to Nuance’s transcription software outside of healthcare or otherwise degrading the conditions on which it supplies these products, for the following reasons.

- (213) First, Nuance has a very limited market share for the provision of non-healthcare transcription software. Nuance’s market share in transcription software outside healthcare was [0-5]% in the EEA and [0-5]% globally in 2020.¹⁶⁶
- (214) Second, as set out above in paragraph (208), Nuance estimates that approximately [...] users worldwide have purchased a Dragon P&C offering in the last two years,¹⁶⁷ which is less than [0-5]% the number of Microsoft/Office 365 users¹⁶⁸ and less than [0-5]% the number of users of productivity software worldwide.¹⁶⁹ Even in a hypothetical scenario in which all of Dragon P&C users were to stop using Microsoft’s rival productivity software, it would be implausible that the loss of fewer than [...] users (of which a certain percentage will have used Office 365 already) worldwide would impact Microsoft’s rivals’ businesses in any meaningful way. In any event, [indication of market positioning and performance of the product].¹⁷⁰
- (215) Third, a wide range of providers populates the market for transcription services. Available solutions range from AI-based online solutions (e.g., Temi) to manual transcription services performed by humans (e.g., GMR transcription, Go Transcript). Nuance’s main competitors include Amazon, Otter AI, Recognosco, VIQ Solutions, Philips (SPS), Scribie, Temi, TranscribeMe and WoltersKluwer.¹⁷¹
- (216) Fourth, a third-party market research report, i.e., the Grand View Research report¹⁷², refers to the following global companies as having “high” market relevance in the (overall) market for transcription services (along with Nuance itself): 3Play Media, Acusis, LLC, AQuity Solutions, Captionmax LLC, CareCLoud, Crystal Hues, GoTranscript, 3M/M*Modal, Rev.com, Robin Healthcare, TranscribeMe, TSG Reporting, and Vitac.
- (217) Fifth, the Commission’s analysis of the Parties’ internal documents has not yielded any results suggesting that Microsoft or Nuance consider the Nuance P&C suite (or any transcription software) as an important input for productivity software giving them a significant degree of market power in the transcription software market. This appears confirmed by third party analysis reports.¹⁷³ For instance, Gartner describes three key areas customers should consider when comparing Google Workspace to Microsoft 365: cost, security, and applications. According to Gartner, interoperability with third-party transcription software is not considered a relevant

¹⁶⁶ Form CO, paragraph 462 and Tables 11 and 11A.

¹⁶⁷ This also includes Legal and Law Enforcement.

¹⁶⁸ Form CO, paragraph 468.

¹⁶⁹ Form CO, paragraph 467.

¹⁷⁰ Response to RFI 9, paragraph 30.

¹⁷¹ Form CO, paragraph 449.

¹⁷² Form CO, Annexes 8 and 9. *See* section 7 of the GVR report for more details on these companies.

¹⁷³ Response to RFI 9, Annex 2, the Gartner report “*How to Decide Between Google Workspace and Microsoft 365*”.

factor and therefore does not drive customers' purchasing decisions in relation to productivity suites.¹⁷⁴

- (218) Finally, the Commission notes that Microsoft publicly commits to building open, accessible and interoperable products. For instance, one of Microsoft's internal documents state: [BUSINESS SECRET].¹⁷⁵ There are some indications that Microsoft Office 365 today supports thousands of integrations with other applications and services, many include Microsoft's competitors.¹⁷⁶
- (219) For the reasons set out above, the Commission considers that the merged entity would not have the ability to engage in a successful foreclosure strategy concerning Nuance's transcription software outside of healthcare products.

(B.ii) Incentive to engage in foreclosure

- (220) The Commission notes that the conditions for a successful foreclosure strategy to occur are cumulative. Since the Commission concluded that the Notifying Party would not have the ability to engage in a successful foreclosure strategy, the Commission considers that the Parties' incentive to foreclose competing productivity software suppliers from accessing Nuance's transcription software outside of healthcare is not decisive. Therefore, the Commission does not have to take a position on the Parties' incentive to engage in input foreclosure.

(B.iii) Impact on effective competition

- (221) Given Nuance's very limited market share in the transcription market (outside of healthcare) and the fact that Dragon P&C represents less than [0-5]% the number of users of productivity software (see paragraphs (213) and (214) above), the Commission considers that there would not be a detrimental impact on effective competition in the productivity software market.
- (222) This conclusion is consistent with the results of the market investigation with the majority of respondents considering that the Transaction would not have a negative effect on their business¹⁷⁷, including concerning respondents' ability to procure non-healthcare transcription services.¹⁷⁸

(B.iv) Conclusion

- (223) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure practices of competing productivity software providers from

¹⁷⁴ Response to RFI 9, Annex 2, the Gartner report "How to Decide Between Google Workspace and Microsoft 365".

¹⁷⁵ Form CO, Annex 5.2.116.

¹⁷⁶ See <https://www.microsoft.com/en-us/store/apps/windows>.

¹⁷⁷ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to question 20; and Q4 – Questionnaire to competitors for communication platforms, replies to questions 27 and 28.

¹⁷⁸ Q2 – Questionnaire to customers for transcription software, replies to questions 32 and 32.1.

accessing Nuance's transcription software outside of healthcare regardless of the exact product market definition retained.

5.3.2.2. Possible foreclosure of competing transcription providers outside of healthcare by restricting or degrading access to Microsoft's productivity suite

(A) The Notifying Party's view

(224) The Notifying Party argues that it would have neither the ability nor the incentive to foreclose competing transcription software providers by restricting access to Microsoft's productivity services (e.g., the Office 365 applications such as Word, Outlook, PowerPoint or Excel).¹⁷⁹

(A.i) *Ability to engage in input foreclosure*

(225) First, the Notifying Party submits that Nuance's main competitors such as Otter AI, Recognosco, and VIQ Solutions do not integrate with Microsoft's Office 365 applications today. By contrast, Otter AI integrates with Google Meet, Zoom and Dropbox.¹⁸⁰ Since Nuance's main competitors do not currently integrate with Microsoft productivity applications, the Transaction cannot result in any meaningful structural change.

(226) Second, according to the Notifying Party, customised integration is not necessary to compete because transcription can be done effectively outside of the relevant productivity software application and then copied into the productivity application (e.g., Microsoft Word). For example, in Otter AI, the relevant transcribed text is available in an online interface for users to view, edit, share, copy into another application, or export in a number of standard formats (i.e., clipboard, txt, docx, pdf, srt).¹⁸¹ Therefore, regardless of the presence of a customised integration, transcribed text can be copied to the applications that users choose to use.¹⁸²

(A.ii) *Incentive to engage in input foreclosure*

(227) The Notifying Party submits that it would not have the incentive to foreclose rival transcription and accessibility software providers outside healthcare. Microsoft already offers productivity software and transcription functionality, and does not seek to prevent third parties from integrating with Office. This would be unchanged by the Transaction. These integrations increase the value of Microsoft's productivity software and Microsoft would not degrade those integrations.¹⁸³

(B) The Commission's assessment

(228) For the reasons set out below, the Commission considers that the Transaction does not lead to credible foreclosure concerns in the market for transcription software outside of healthcare, regardless of the precise product and geographic market definitions retained (see Sections 4.1.1.3 and 4.1.2.3 above).

¹⁷⁹ Form CO, paragraph 471.

¹⁸⁰ Form CO, paragraph 471 and see <https://help.otter.ai/hc/en-us/categories/360003539134-Integrations>.

¹⁸¹ See <https://help.otter.ai/hc/en-us/articles/360047731754>.

¹⁸² Form CO, paragraph 472.

¹⁸³ Form CO, paragraph 473.

(B.i) Ability to engage in foreclosure

- (229) The Commission considers that post-Transaction, while it would be technically possible for Microsoft to restrict access to Microsoft's productivity software, the merged entity would not have the ability to foreclose Nuance's transcription software rivals through either preventing access to Microsoft's Office package or otherwise degrading the conditions on which it supplies these products, for the following reasons.
- (230) None of Nuance's main competitors integrate with Microsoft Office 365 today, so the Transaction would not create any structural change in the market. Furthermore, this conclusion appears consistent with the results of the market investigation given that none of the competing transcription software providers that responded to the market investigation indicated that their transcription software (or speech-recognition APIs) directly interacted with Microsoft's productivity software solutions.¹⁸⁴ In any event, as set out by the Notifying Party in paragraph (226) above, customised integration is not necessary to compete because transcription can be done effectively outside of the relevant productivity software application and then copied into the productivity application.
- (231) For the reasons set out above, the Commission considers that the Notifying Party would not have the ability to engage in a successful foreclosure strategy concerning Microsoft's productivity software.

(B.ii) Incentive to engage in foreclosure

- (232) The Commission considers that post-Transaction the merged entity would not have the incentive to foreclose Nuance's transcription software rivals through either preventing access to Microsoft's productivity software or otherwise degrading the conditions on which it supplies this productivity software, for the following reasons.
- (233) The majority of respondents that took a view on this question believe that the Notifying Party would not have the incentive to restrict access to transcription software providers from integrating with Microsoft's productivity software solutions, or to otherwise deteriorate the conditions for access.¹⁸⁵ One respondent specifically noted that they have no evidence that Microsoft would have such an incentive. On the contrary, according to this respondent, Microsoft currently appears open to integrating third party providers into their platform.¹⁸⁶
- (234) Furthermore, and for completeness, one of the use cases for Nuance's P&C offerings is accessibility. The integration of Dragon P&C with Microsoft's productivity applications (ranging from Microsoft Word, Excel, Outlook to PowerPoint) enables users to control those applications with, and dictate text using, their voice. The Commission notes that Microsoft has made a strong public commitment to creating accessible products: *"We believe that accessible technology is a fundamental building block that can unlock opportunities in every part of society. Our work starts by ensuring that Microsoft's own products are accessible by design, so that as we advance our features and functionality, we can help everyone across the spectrum of*

¹⁸⁴ Q1 – Questionnaire to competitors for transcription software, replies to questions 37 and 37.1.

¹⁸⁵ Q2 – Questionnaire to customers for transcription software, replies to questions 27 and 27.1.

¹⁸⁶ Q2 – Questionnaire to customers for transcription software, replies to questions 27 and 27.1.

*disability be more productive. We will then expand our reach with new tools and data resources to support software development across our industry and by other organizations that create software services for their customers or employees...".*¹⁸⁷ Making Dragon P&C users' experience worse by deprecating integrations with third-party productivity software would conflict with Microsoft's own vision and commitment. There are some indications that today, Microsoft both builds accessibility functionality into Windows, and maintains an open Windows Accessibility API program to ensure third-party accessibility vendors can build Windows applications.¹⁸⁸ More generally, Microsoft has publicly committed to build open, accessible and interoperable products.¹⁸⁹ Accordingly, it would be counterproductive to foreclose rival providers of transcription software in view of Microsoft's objective of building credibility and trust with its customers.

(B.iii) Impact on effective competition

- (235) Given the fact that the Transaction would not create any change in the market (see paragraph (230) above), the Commission considers that there would not be a detrimental impact on effective competition in the transcription software market including outside of healthcare.
- (236) This conclusion is consistent with the results of the market investigation with the majority of respondents considering that the Transaction would not have a negative effect on their business¹⁹⁰, including the respondents' ability to compete as a supplier of non-healthcare transcription services.¹⁹¹

(B.iv) Conclusion

- (237) For the reasons set out above, the Commission concludes that the Transaction does not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure practices of transcription providers outside of healthcare from accessing Microsoft's productivity software products regardless of the exact product market definition retained.

¹⁸⁷ See statement by Brad Smith, President and Vice Chair available at: <https://blogs.microsoft.com/blog/2021/04/28/doubling-down-on-accessibility-microsofts-next-steps-to-expand-accessibility-in-technology-the-workforce-and-workplace/#:~:text=This%20new%20initiative%20will%20bring,enter%20the%20workforce%3B%20and%20building>.

¹⁸⁸ Form CO, paragraph 478.

¹⁸⁹ Form CO, paragraph 443.

¹⁹⁰ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to question 20; and Q4 – Questionnaire to competitors for communication platforms, replies to questions 27 and 28.

¹⁹¹ Q1 – Questionnaire to competitors for transcription software, replies to questions 43 and 43.1; Q3 – Questionnaire to competitors for cloud services, replies to question 22; and Q4 – Questionnaire to competitors for communication platforms, replies to question 26.

5.3.3. *Nuance's transcription software outside of healthcare and Microsoft's PC OS*

- (238) These activities give rise to an affected market given that the Parties are active in neighbouring markets and Microsoft's market share exceeds 30%:
- (a) Nuance's transcription software outside of healthcare (EEA: [0-5]%; Global: [0-5]%)¹⁹² and
 - (b) Microsoft's PC OS (EEA: [70-80]%¹⁹³; Global: [70-80]%¹⁹⁴)¹⁹⁵.
- (239) Nuance's Dragon solutions are designed to run on Windows, i.e., Microsoft's PC OS. This creates a conglomerate relationship between Nuance's transcription software outside of healthcare and Microsoft's PC OS.¹⁹⁶

5.3.3.1. Possible foreclosure of competing PC OS providers by restricting or degrading access to Nuance's transcription software outside of healthcare

(A) The Notifying Party's view

- (240) The Notifying Party argues that it would not have the ability to exclude competing PC OS providers by restricting access to Nuance's transcription software by degrading or withdrawing interoperability with Dragon.¹⁹⁷
- (241) First, Nuance's Dragon is available exclusively on Windows PC OS. As such, any foreclosure concern is not merger-specific.¹⁹⁸
- (242) Second, transcription functionalities are not a key consideration for the vast majority of users when choosing a PC OS. This is all the more so since competing PC OS already offer their own transcription functionalities.¹⁹⁹
- (243) Third, users that need advanced transcription services represent a tiny fraction of the total user base of an OS, which is yet another reason why the merged entity would have no ability to foreclose rival OS.²⁰⁰

(B) The Commission's assessment

- (244) For the reasons set out below, the Commission considers that the Transaction does not lead to credible foreclosure concerns in the market for the supply of PC OS, regardless of the precise product and geographic market definitions retained (see Sections 4.6.1.3 and 4.6.2.3 above).

¹⁹² Form CO, paragraph 462. The Parties submit that these are conservative estimates as they represent only transcription "software" to the exclusion of transcription "services" which would also include SaaS, online transcription tools and manual transcription and bring its share down to [0-5]%.

¹⁹³ Form CO, paragraphs 481.

¹⁹⁴ Form CO, paragraphs 481.

¹⁹⁵ The Commission has not reached out to the market in order to verify the methodology and computations underlying the market shares provided by Microsoft.

¹⁹⁶ Form CO, paragraph 481.

¹⁹⁷ Form CO, paragraph 483.

¹⁹⁸ Form CO, paragraph 484.

¹⁹⁹ Form CO, paragraph 485.

²⁰⁰ Form CO, paragraph 486

(B.i) Ability to engage in foreclosure

- (245) The Commission considers that post-Transaction the merged entity would not have the ability to foreclose its PC OS' rivals through either preventing access to Nuance's transcription software outside of healthcare or otherwise degrading the conditions on which it supplies these products, for the following reasons.
- (246) First, as the Notifying Party has indicated (see paragraph (241) above), Nuance's transcription software is currently only available on Microsoft's PC OS. Therefore, any foreclosure concern in this regard cannot be merger-specific.
- (247) Second, as set out in paragraphs (238) and (213) above, Nuance has a very limited market share for the provision of non-healthcare transcription software. Nuance's market share in transcription software outside healthcare was [0-5]% in the EEA and [0-5]% globally in 2020.²⁰¹ When considering an overall market for transcription software, Nuance's market share was [0-5]% in the EEA and [0-5]% globally in 2020.²⁰²
- (248) Third, the Notifying Party reports that there are currently more than 1.3 billion devices running Windows 10²⁰³ and Statista reports that in 2019 there were approximately 1.5 billion internet users using Windows OS worldwide.²⁰⁴ The estimated [...] users who purchased Dragon P&C in the last two years therefore represent only a tiny fraction of the overall user base of Windows. In any event, [description of market positioning and performance of the product].²⁰⁵
- (249) Fourth, as already set out above in paragraphs (215) and (216), a wide range of providers populates the market for transcription services. Available solutions range from AI-based online solutions (e.g., Temi) to manual transcription services performed by humans (e.g., GMR transcription, Go Transcript).²⁰⁶
- (250) Therefore, for the reasons set out above, the Commission considers that the Notifying Party would not have the ability to engage in a successful foreclosure strategy concerning Nuance's transcription software outside of healthcare products.

(B.ii) Incentive to engage in foreclosure

- (251) The Commission notes that the conditions for a successful foreclosure strategy to occur are cumulative. Since the Commission concluded that the Notifying Party would not have the ability to engage in a successful foreclosure strategy, the Commission considers that the Parties' incentive to foreclose competing PC OS providers from accessing Nuance's transcription software outside of healthcare is not decisive. Therefore, the Commission does not have to take a position on the Parties' incentive to engage in input foreclosure.

²⁰¹ Form CO, paragraph 462 and Tables 11 and 11A.

²⁰² Form CO, Tables 11 and 11A.

²⁰³ See <https://news.microsoft.com/bythenumbers/en/windowsdevices>.

²⁰⁴ See <https://www.statista.com/statistics/543185/worldwide-internet-connected-operating-systempopulation/>.

²⁰⁵ Response to RFI 9, paragraph 45.

²⁰⁶ Form CO, paragraph 449.

(B.iii) *Impact on effective competition*

- (252) Given Nuance’s very limited market share in the transcription market (outside of healthcare) (see paragraph (213) above) and the fact that Nuance’s Dragon product is currently only available on Microsoft’s PC OS already, the Commission considers that there would not be a detrimental impact on effective competition in the PC OS’ market.
- (253) This conclusion is consistent with the results of the market investigation with the majority of respondents considering that the Transaction would not have a negative effect on their business²⁰⁷, including concerning respondents’ ability to procure non-healthcare transcription services.²⁰⁸

(B.iv) *Conclusion*

- (254) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure practices of competing PC OS providers from accessing Nuance’s transcription software outside of healthcare regardless of the exact product market definition retained.

5.3.3.2. Possible foreclosure of rival transcription software providers outside of healthcare by restricting or degrading access to Microsoft’s PC OS

(A) The Notifying Party’s view

- (255) First, the Notifying Party argues that there is no real conglomerate relationship between the transcription software outside healthcare and the PC OS. The only link is that, like any application, the transcription application must be installed on the OS. Therefore, the only potential action Microsoft could theoretically take in this space would be to deny rival transcription software providers the ability to build a Windows application.²⁰⁹
- (256) Second, focusing on the transcription software with accessibility functions (which must be able to interoperate with the OS to command and control the OS), the Notifying Party submits that would not have an incentive to foreclose Nuance’s rival transcription software providers outside healthcare by preventing these from integrating their transcription solutions with accessibility functions with the Windows OS such that they would no longer be used to command the Windows OS.²¹⁰
- (257) The Notifying Party submits that the consequence on Microsoft’s reputation of denying access to an accessibility solution that seeks to help people with disabilities would be disastrous and at odds with Microsoft’s accessibility strategy. Microsoft recently announced an ambitious five-year plan in which it pledges to “*create and*

²⁰⁷ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to question 20; and Q4 – Questionnaire to competitors for communication platforms, replies to questions 27 and 28.

²⁰⁸ Q2 – Questionnaire to customers for transcription software, replies to questions 32 and 32.1.

²⁰⁹ Response to RFI 8, paragraph 48.

²¹⁰ Form CO, paragraph 487.

open doors to bigger opportunities for people with disabilities” not merely technologically, but also in the workforce and in the workplace.²¹¹ This is also in line with Microsoft’s ongoing efforts in supporting the development of accessibility solutions via Windows Accessibility, a service that helps Windows developers design accessible applications, assistive technology developers build tools such as screen readers and magnifiers, and software test engineers create automated scripts for testing Windows applications. As part of Windows Accessibility, Microsoft also offers its Windows Automation open API service for user interface accessibility.²¹² Microsoft has never deprived, [...], Windows users of third-party accessibility solutions.²¹³

(B) The Commission’s assessment

- (258) For the reasons set out below, the Commission considers that the Transaction does not lead to credible foreclosure concerns in the market for transcription software outside of healthcare, regardless of the precise product and geographic market definitions retained (see Sections 4.1.1.3 and 4.1.2.3 above).

(B.i) Ability to engage in foreclosure

- (259) The Commission considers that post-Transaction the merged entity would not have the ability to foreclose Nuance’s rival transcription software outside of healthcare suppliers by either preventing access to or otherwise degrading the conditions on which it supplies its PC OS.
- (260) The Commission notes that Microsoft maintains an open Windows API program to ensure third-party vendors can build Windows applications: *“Using the Windows API, you can develop applications that run successfully on all versions of Windows while taking advantage of the features and capabilities unique to each version”*.²¹⁴ Since this is an open API, Nuance’s rivals can use it to build their software to run on Windows.

(B.ii) Incentive to engage in foreclosure

- (261) The Commission considers that post-Transaction the merged entity would not have the incentive to foreclose its transcription software outside of healthcare rivals by either preventing access to or otherwise degrading the conditions on which it supplies its PC OS, for the following reasons.
- (262) First, the Notifying Party specifically designed Windows to be an open OS. Microsoft has never prevented rivals from developing a Windows application. In addition, Microsoft already offers certain transcription functionalities as part of Microsoft 365 and it has not sought to engage in any foreclosure strategy. There is no reason why the acquisition of Dragon P&C, [...], would change Microsoft’s incentives.

²¹¹ See <https://blogs.microsoft.com/blog/2021/04/28/doubling-down-on-accessibility-microsofts-next-steps-to-expand-accessibility-in-technology-the-workforce-and-workplace/>.

²¹² See <https://docs.microsoft.com/en-us/windows/win32/winauto/windows-automation-api-portal>.

²¹³ [...].

²¹⁴ See <https://docs.microsoft.com/en-us/windows/win32/apiindex/windows-api-list>.

(263) Second, the majority of respondents do not know or do not believe that Microsoft would have the incentive to restrict access to transcription software providers from integrating with Microsoft's PC OS, or to otherwise deteriorate the conditions for access.²¹⁵ One respondent specifically noted that they have no evidence that Microsoft would have an incentive to restrict access to the Windows platform for other software providers.²¹⁶

(B.iii) Impact on effective competition

(264) The Commission considers that there would not be a detrimental impact on effective competition in the transcription software market including outside of healthcare. This conclusion is consistent with the results of the market investigation with the majority of respondents considering that the Transaction would not have a negative effect on their business²¹⁷, including the respondents' ability to compete as a supplier of non-healthcare transcription services.²¹⁸

(B.iv) Conclusion

(265) For the reasons set out above, the Commission considers that the Transaction will not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure practices of competing transcription software providers outside of healthcare by restricting access to the Windows PC OS environment regardless of the exact product market definition retained.

5.3.4. Bundling of Nuance's healthcare transcription software and Microsoft's cloud services

(266) One respondent to the market investigation, who is a distributor of Nuance's products, raised concerns about a potential bundling of Nuance's transcription software with Microsoft's cloud services. The respondent suggested that post-Transaction, Nuance's services would no longer be made available as an on-premise solution and would only be offered together with the purchase of Microsoft Azure cloud services. That would make Nuance products more expensive for customers that currently use an on-premise solution.²¹⁹

(267) The Commission does not consider this to present a significant risk to competition. As stated in the Non-Horizontal Merger Guidelines²²⁰, "[t]ying and bundling as such are common practices that often have no anticompetitive consequence". Only in

²¹⁵ Q1 – Questionnaire to competitors for transcription software, replies to questions 40 and 40.1; Q2 – Questionnaire to customers for transcription software, replies to questions 29 and 29.1.

²¹⁶ Q2 – Questionnaire to customers for transcription software, replies to questions 29 and 29.1.

²¹⁷ Q1 – Questionnaire to competitors for transcription software, replies to questions 41 and 41.1; Q2 – Questionnaire to customers for transcription software, replies to questions 30 and 30.1; Q3 – Questionnaire to competitors for cloud services, replies to question 20; and Q4 – Questionnaire to competitors for communication platforms, replies to questions 27 and 28.

²¹⁸ Q1 – Questionnaire to competitors for transcription software, replies to questions 43 and 43.1; Q3 – Questionnaire to competitors for cloud services, replies to question 22; and Q4 – Questionnaire to competitors for communication platforms, replies to question 26.

²¹⁹ Q2 – Questionnaire to customers for transcription services, replies to questions 27, 29, 30 and minutes of call dated 3 December 2021, Doc ID 582.

²²⁰ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18 October 2008, p. 6.

certain circumstances, these practices are considered to have a negative impact on competition and that is when they “*may lead to a reduction in actual or potential rivals’ ability or incentive to compete*”.

- (268) As the markets for transcription software in healthcare and cloud services are vertically affected, the Commission has already assessed whether the Transaction would allow the merged entity to foreclose its competitors either on the upstream or downstream market (see Sections 5.2.1 and 5.2.2). For the reasons set out in these Sections, the Commission concluded that the Notifying Party does not have the ability to foreclose its competitors on these markets and that a potential foreclosure strategy would only have a limited impact.
- (269) For the same reasons as set out in these Sections, increasing the extent to which Nuance’s transcription software is bundled with Microsoft’s cloud services would not lead to a reduction in actual or potential rivals’ ability or incentive to compete. Therefore, any potential price increase by bundling additional products would not be merger specific.

5.3.5. *Restricting access to data transcribed by Nuance’s transcription software in healthcare*

- (270) The same respondent to the market investigation also raised concerns about a potential restriction of access to data transcribed by Nuance’s transcription software in healthcare. This respondent noted that STT software is important in the medical industry and that Nuance is the market leader in this market. The next industry development will be the interaction of STT software with software that structures and analyses transcribed text to become able to give doctors feedback and input on decisions such as diagnosis and a proposed course of treatment. The respondent suggested that post-Transaction, the merged entity could restrict access to transcription data created by Nuance’s products and prevent the use of this data by software from other players in the healthcare segment.²²¹
- (271) This concern is, however, not credible. Nuance already has a high share in the market for the transcription services for healthcare which is unaffected by the Transaction. Moreover, to the extent that software with NLU capabilities helps doctors’ decision-making, this is already being developed by the Parties together through the DAX partnership (see Section 5.3.1 below). Furthermore, all data relevant for other software will be stored in the EHR system. The Parties have no control over access to data stored in the EHR system as these systems are offered by independent third parties. For an assessment specifically relating to a foreclosure of competing CRM software providers, see Section 5.3.6.
- (272) These findings are supported by the internal documents of Microsoft, for example in an email evaluating the Transaction underlining that Nuance needs to remain neutral with regard to other players in the healthcare sector such as providers of electronics healthcare record providers: [...].²²²

²²¹ Q2 – Questionnaire to customers for transcription services, replies to questions 27, 29, 30 and minutes of call dated 3 December 2021, Doc ID 582.

²²² Form CO, Annex 5.0.31.

(273) For the reasons set out above, the Commission concludes that the Transaction does not raise serious doubts as to the compatibility with the internal market with respect to restricting access to data transcribed by Nuance's transcription software in healthcare.

5.3.6. *Possible foreclosure of rival CRM suppliers by denying or restricting access to Nuance's transcription software in healthcare*

(274) Another complainant raised concerns that the merged entity would have the ability and incentive to use Nuance's voice recognition software, more specifically DMO, to foreclose rival providers of healthcare software in general and rival healthcare CRM suppliers in particular by denying or restricting access to Nuance's speech data generated by DMO (e.g., via bundling, technological tying and degradation of interoperability). Microsoft's alleged goal would be to create a closed, Microsoft-only ecosystem, as opposed to a system whereby European healthcare providers have a free choice where they obtain their productivity, EHR, CRM, business intelligence and other (healthcare) software, choosing the 'best of breed' supplier in each category.²²³ The complaint further argues that Microsoft could create unique data-driven and AI-driven patient insights and feed them directly into its own cloud or CRM products instead of or in addition to the EHR software. This would give its own products a competitive advantage since the data captured by Nuance would be broader and richer than the data made available to the EHR software.

(275) The Notifying Party submits that this complaint is without merit.²²⁴ First, DMO and the data it generates is used by only a fraction of healthcare providers, while the healthcare space itself only represents 15-20% of the global CRM market. Therefore, DMO cannot be used to foreclose rival CRM suppliers. Second, the Parties do not own or control any EHR and therefore cannot prevent rival CRM suppliers from accessing the data in EHRs. Third, [...]. It also represents only a small fraction of the patient's medical data, with the vast majority not captured by DMO and residing in the EHR. Fourth, the Commission found in *Microsoft/LinkedIn* that switching CRM provider is uncommon due to the efforts required. Finally, none of the documents the Parties provided to the Commission suggest that Microsoft might be able to use Nuance's speech data to foreclose the CRM market.

(276) With regard to the possible foreclosure of rival CRM suppliers, the Commission does not consider this concern credible for the following reasons.

5.3.6.1. *Ability to engage in foreclosure*

(277) The Commission considers that post-Transaction, the merged entity would not have the ability to foreclose its CRM supplier rivals²²⁵ by denying or restricting access to Nuance's transcription software in healthcare, for the following reasons.

(278) First, there is no direct link between transcription and CRM software. The information dictated by doctors using DMO is stored in an EHR system, which is accessible to any software that integrates into the IT system of the respective

²²³ Submission of a software provider targeting European healthcare providers of 6 December 2021.

²²⁴ Response to CRM complaint of 9 December 2021, paragraph 2.

²²⁵ This relates to the overall CRM software market, but the Commission's assessment also applies to the potential narrower markets as set out in Section 4.7 above.

healthcare provider, including rival CRM systems. This EHR system stores a patient's entire medical record, including but not limited to the medical notes that a physician dictates using DMO. The Parties do not own or control any EHR, and therefore cannot prevent third-party software, including rival CRM providers, from accessing the data in these third-party EHR systems.²²⁶ Under these circumstances, the merged entity does not have the ability to foreclose other software providers in general or CRM software providers specifically from accessing data that has been transcribed using Nuance software.

- (279) Second, as regards the claim that the data available to Nuance is extremely broad and rich patient data that can inform and train complex AI algorithms and make recommendations to clinicians, the Commission considers that for the purposes of other software integrating into the healthcare provider's IT system, the data in the EHR is broader and richer. While it could be stated that the healthcare transcription software has access to more data than the one that is contained in its output (e.g. potential amendments or revisions, pauses, background sounds, differences in voice modulation, see also Section 5.2.3), it is the core feature of transcription software to reduce all this data into to the most relevant information, *i.e.*, the transcribed text. This output is then passed-on to the EHR and available for other software programs. The EHR, to the contrary, has much broader and richer data of relevant information. It contains the most relevant information not only from transcription software, but from all relevant software components used by the respective healthcare provider (e.g., electronically transmitted laboratory results or data from health insurance companies) as well as all information that has been manually entered into the EHR without using transcription software. In this regard, it has to be noted that the EHR is designed to be the central place for all data that is considered relevant and important by the respective healthcare provider. Additional information that might be available to individual software components that is not transferred into the EHR is most likely of no or very limited relevance for the healthcare provider. In addition, as submitted by the Notifying Party, [...].²²⁷ Therefore, it seems unlikely that access to such additional data could give the Notifying Party competitive advantage.
- (280) Third, Microsoft is a very small player in the CRM market with a 2019 share of [0-5]% worldwide and [0-5]% in the EEA.²²⁸ In a potential EEA-wide healthcare CRM market, Microsoft estimates this share would decrease to around [0-5]% and similarly, it would be below [0-5]% worldwide.²²⁹ As set out in the Commission's *Microsoft/LinkedIn* decision²³⁰, the market for CRM software solutions is fragmented and characterised by a large number of different providers. In this fragmented competitive landscape, there are a number of competitors including major players, all of which have higher EEA and worldwide CRM market shares²³¹ than Microsoft, such as Salesforce, SAP, Oracle, and Adobe.²³² For instance, Salesforce is the clear market leader with an EEA market share of [10-20]% and a

²²⁶ Response to CRM complaint of 9 December 2021, paragraph 2.

²²⁷ See Section 5.2.3.

²²⁸ Response to CRM complaint of 9 December 2021, paragraph 2.

²²⁹ Response to CRM complaint of 9 December 2021, paragraph 34.

²³⁰ Commission decision of 6 December 2014 in case M.8124 – *Microsoft/LinkedIn*, para.193.

²³¹ Form CO, Table 22.

²³² Form CO, paragraph 556.

worldwide market share of [20-30]%.²³³ In *Microsoft/ LinkedIn*²³⁴ the Commission also found that CRM customers have a tendency not to change easily the provider of their CRM software solutions. Limiting the integration of Nuance with EHR software may risk that hospitals look for a different provider of transcription services rather than switching to Microsoft's CRM.

- (281) Finally, the Commission notes that in case the use of transcription software in the EEA in general and the use of Nuance's transcription software in particular were to increase over the coming years, with the effect that the overall percentage of physicians using Nuance's software products would become more significant, competing CRM software providers would have the ability to undertake effective and timely counterstrategies. Even though Nuance is currently the market leader in transcription software, there are other transcription software providers that compete with Nuance's products. In the EEA, there are two competitors with market shares between [10-20]%. In addition, 3M/M*Modal has only a limited market share for transcription software in healthcare in the EEA but has a high market share between [30-40]% on a worldwide level (see paragraph (104) above). If transcription software becomes more important for offering CRM services, competing CRM providers could start collaborating with transcription software providers that are competing with Nuance. In particular if Microsoft were to engage in a foreclosure strategy, it can be assumed that certain customers, in particular within the group of customers that today follow a "best in breed" approach and deploy software from different companies, would resist such attempts and prefer transcription as well as CRM software providers that allow full interoperability with third-party software.

5.3.6.2. Incentive to engage in foreclosure

- (282) The Commission considers that post-Transaction, the merged entity would not have the incentive to foreclose its CRM supplier rivals by denying or restricting access to Nuance's transcription software in healthcare, for the following reasons.
- (283) First, the Notifying Party's internal documents indicate that [explanation of Microsoft possible strategy in the healthcare sector].²³⁵ This view seems to be shared by current partners: one of the leading EHR providers in the US considered that the Transaction would have a positive impact on their business.²³⁶
- (284) Second, and expanding on the above (see paragraph (283)), Nuance's speech data that is generated using DMO [...]. DMO only captures the spoken words dictated by a physician and transcribes them into a formatted written note in the EHR. It is the EHR system that defines the structure, organizes the data and puts such notes into context. CRM systems connect to EHRs to provide service agents with relevant information for their interaction with patients. Once the CRM software is integrated with the EHR, the CRM software can access data in the EHR, including any relevant

²³³ Form CO, Table 22.

²³⁴ Commission decision of 6 December 2014 in case M.8124 – *Microsoft/LinkedIn*, para.201.

²³⁵ Form CO, Annex 5.2.116.

²³⁶ Q4 – Questionnaire to competitors for communications platforms, replies to question 24.

data dictated using DMO. However, there is no integration between CRM systems and Nuance's healthcare transcription products, including DMO. [...].²³⁷

5.3.6.3. Impact on effective competition

- (285) The Commission considers that there would be no or limited impact on effective competition.
- (286) Even though Nuance is the market leader in healthcare transcription software (as set out above in Section 5.1.1), the use of such software in the EEA is not yet common. While Nuance's market share in the EEA is [60-70]%, the penetration rate of transcription software is only between [10-20]%.²³⁸ Thus, about [10-20]% of all physicians in the EEA use Nuance. A potential foreclosure strategy would only affect such limited part of the transcription software for healthcare market, regardless of the exact geographic market definition.

5.3.6.4. Conclusion

- (287) For the reasons set out above, the Commission concludes that the Transaction does not raise serious doubts as to the compatibility with the internal market with respect to possible foreclosure of rival CRM suppliers by denying or restricting access to Nuance's transcription software in healthcare.

6. CONCLUSION

- (288) For the above reasons, the European Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation and Article 57 of the EEA Agreement.

For the Commission

(Signed)

*Margrethe VESTAGER
Executive Vice-President*

²³⁷ Response to CRM complaint of 9 December 2021, paragraph 16.

²³⁸ Form CO, Table 9 and paragraphs 370-371. Note that EU penetration rates are expected to increase in line with the general trend towards greater digitisation of the healthcare sector in Europe, which will in turn likely also attract new competitors, as already evidenced by the recent entry of players such as Recognosco, Dictate.IT, Epro, 3M/M*Modal and Vocalis.