

Statement of Issues

AlphaTheta/Serato

7 February 2024

Introduction

1. On 10 October 2023, the Commerce Commission registered a clearance application (the Application) from AlphaTheta Corporation (ATC) seeking clearance to acquire 100% of the shares of Serato Audio Research Limited (Serato) (the Proposed Acquisition).¹
2. To clear an application, we must be satisfied that the acquisition will not have, or would not be likely to have, the effect of substantially lessening competition in a market in New Zealand.
3. This Statement of Issues (Sol) sets out the potential competition issues we have identified following our initial investigation. This is so the parties and other interested parties can provide us with submissions relating to those concerns.
4. In reaching the preliminary views set out in this Sol, we have considered information provided by the parties and other industry participants. We have not yet made any final decisions on the issues outlined below (or any other issues) and our views may change, and new competition concerns may arise, as the investigation continues.
5. The Commission will give clearance if it is satisfied that the Proposed Acquisition will not have, or would not be likely to have, the effect of substantially lessening competition in a market in New Zealand.

The concerns we are continuing to investigate

6. Based on the evidence currently before us, we are not satisfied that the Proposed Acquisition would not be likely to substantially lessen competition in one or more relevant markets.
7. Specifically, we are not currently satisfied that the Proposed Acquisition would not substantially lessen competition due to unilateral effects for the supply of DJ software because the evidence currently suggests that:

7.1 AlphaTheta and Serato compete closely for the supply of DJ software;

¹ A public version of the Application is available on our website at: <https://comcom.govt.nz/case-register>.

- 7.2 it is unclear whether competition from the remaining competitors in the market would be sufficient to constrain the merged entity; and
- 7.3 entry or expansion within the industry appears unlikely to sufficiently constrain the merged entity.
8. We are also not currently satisfied that the Proposed Acquisition would not substantially lessen competition due to vertical effects for DJ hardware. Based on the evidence currently before us, it appears that the merged entity may have the ability and incentive to foreclose rival hardware providers through its control of an important input, Serato's DJ software, and any foreclosure may be likely to substantially lessen competition.
9. At this stage, we have limited concerns in relation to vertical effects for DJ software if that market is considered in isolation. However, we continue to assess whether the merged entity may have the incentive to foreclose rival software providers as part of a broader foreclosure strategy to foreclose rival DJ hardware providers.
10. At this stage, we are not currently satisfied that the Proposed Acquisition would not substantially lessen competition for the supply of DJ hardware due to the merged entity's access to sensitive information of rivals. We consider that:
- 10.1 ATC may gain access to sensitive information through the integration process of DJ hardware with Serato's DJ software such as upcoming innovations or customer information; and
- 10.2 this could reduce the constraint that rivals impose because:
- 10.2.1 rivals may be less incentivised to innovate if there is a risk that a major competitor (ATC) could appropriate those ideas; and
- 10.2.2 rivals may react by no longer working with Serato which would make their products less attractive.

The issues that do not currently raise concerns

11. We are currently of the view that the Proposed Acquisition would not be likely to cause a substantial lessening of competition due to coordinated effects in any relevant market. The Proposed Acquisition may result in the merged entity getting access to sensitive information, which can increase the risk of coordination. However, we consider that other factors mean the overall effect of the Proposed Acquisition is unlikely to materially increase the risk of coordination. For example, post-merger there will be significant differences in size and structure between the remaining competitors in both the DJ hardware and DJ software markets. This makes it less likely that the market participants will have aligned incentives to coordinate.
12. We do not discuss coordination further in this Sol but welcome submissions on this.

Process and timeline

13. We have agreed with ATC an extension of the period in which to make a decision from the initial 40 working day statutory timeframe until **8 March 2024**.
14. We would like to receive submissions and supporting evidence from ATC, Serato and other interested parties on the issues raised in this Sol. We request responses by close of business on **21 February 2024**, including a confidential and a public version of any submission made. All submissions received will be published on our website with appropriate redactions.² All parties will have the opportunity to cross-submit on the public versions of submissions received from other parties. Cross-submissions should be received by close of business on **28 February 2024**.
15. If you would like to make a submission but face difficulties in doing so within the timeframe, please ensure that you register your interest with us at registrar@comcom.govt.nz so that we can work with you to accommodate your needs where possible.

The Parties and the Proposed Acquisition

16. ATC and Serato (each a Party and together, the Parties) are both present in the DJ segment of the music industry. ATC supplies DJ hardware and DJ software and Serato supplies DJ software. DJ software can be used to create various effects when mixing different songs and for organising music ahead of mixing (for example, creating playlists and preparing tracks to be exported). DJs use software in conjunction with various forms of DJ hardware (such as mixers and controllers).
17. ATC is a global company headquartered in Japan. Relevant to the Application, ATC develops, manufactures and sells DJ hardware under the Pioneer DJ brand and DJ software under the rekordbox brand. Pioneer DJ hardware and rekordbox software are available worldwide.
18. Serato is a DJ and music production software company that was founded in New Zealand. Serato's DJ software is available worldwide and is integrated with over 90 pieces of DJ hardware made by various brands, including Pioneer DJ.
19. Under the Proposed Acquisition, ATC will acquire 100% of the shares in Serato.

Market definition

20. We define markets in the way that we consider best isolates the key competition issues that arise from the Proposed Acquisition. In many cases this may not require us to precisely define the boundaries of a market. A relevant market is ultimately

² Confidential information must be clearly marked (by highlighting the information and enclosing it in square brackets). Submitters must also provide a public version of their submission with confidential material redacted. At the same time, a schedule must be provided which sets out each of the pieces of information over which confidentiality is claimed and the reasons why the information is confidential (preferably with reference to the Official Information Act 1982).

determined, in the words of the Commerce Act, as a matter of fact and commercial common sense.³

21. We have yet to reach any definitive views on the relevant markets for assessing the Proposed Acquisition. However, for the purposes of the Sol we have analysed the competitive effects of the Proposed Acquisition in relation to:
 - 21.1 the national market for the supply of DJ software (the DJ software market); and
 - 21.2 the national market for the supply of controllers and all-in-one systems (the DJ controller market).⁴
22. We invite submissions on our current approach to market definition and for parties to provide us with further direct evidence on the scope of the relevant markets.

The DJ software market

23. The Applicant submitted that the relevant market is the supply of DJ software to end users.⁵ According to the Applicant, the market includes:
 - 23.1 all types of specialist DJ software solutions including laptop applications (applications) and mobile apps written for iOS (Apple) and Android systems, that are designed to be used on a mobile or tablet (apps); and
 - 23.2 both DJ and music production software.
24. ATC considers that the supply of DJ software takes place on a global basis, however for the purposes of its assessment of the Proposed Acquisition in the Application it focused on a national market (New Zealand).⁶
25. We consider that the relevant market for DJ software is limited to laptop applications and excludes apps and music production software. We agree that the Proposed Acquisition should be assessed on a national basis.

Separate markets for laptop applications and apps

26. At this stage, apps do not appear to be sufficiently close substitutes for laptop applications to be included in the relevant product market. Although apps are likely to impose some constraint on laptop applications, and there is some evidence to suggest certain apps may be providing innovation contributions to the wider

³ Section 3(1A). See also *Brambles v Commerce Commission* (2003) 10 TCLR 868 at [81].

⁴ As we describe in further detail below, a controller is a portable device that has jog wheels and other controls used to play and mix music. A controller must be connected to a device (such as a laptop, mobile or tablet) to access music. The music on the connected device is organised using DJ software such as Serato. An 'all-in-one' system incorporates all the features of a controller but also includes other functionality such as the ability to access music using embedded DJ software. For ease we refer to both these devices as being part of the "controller market".

⁵ The Application at [5.22].

⁶ *Ibid*, at [5.30].

industry,⁷ for the reasons set out below we consider it appropriate to exclude these products from the relevant market. We will still take into account any constraint from apps as part of the overall assessment.

27. Firstly, on the demand side, market feedback indicates that apps are targeted at a different type of customer than laptop applications.⁸ The feedback suggests that apps are focused on beginners whereas laptop applications are focused on more advanced users.
- 27.1 Apps tend to have fewer features than laptop applications.⁹ Apps are designed for smaller screens, which reduces the range of features they can display.¹⁰ While it is difficult to say how meaningful these differences are, users of laptop applications may be unwilling to switch to a product that offers an inferior experience.¹¹
- 27.2 Apps cannot be used with all controllers. Many DJ hardware products have been designed for laptop applications and are not pre-mapped for apps. DJs that use controllers may therefore be reluctant to switch to apps which may not work on their controller or offer an inferior experience to a pre-mapped application.
28. Secondly, at this point, we have seen limited evidence to suggest that the rise in the sale of apps has materially affected sales of laptop applications in a way that would suggest apps impose a strong constraint on laptop applications. According to the Application, app usage has experienced significant growth.¹² If that growth had come from users of laptop applications, we might expect to see the growth of those products slow or their price falling. At this point, the evidence is mixed on this.
- 28.1 [].¹³ Serato's prices for its primary products remained stable over that period, although this would imply a fall in real prices.¹⁴

⁷ For example, [], a DJ software provider, told us that Algoriddim competes in terms of technology development as Algoriddim was one of the first to release Stems (song separating technology). [] (Commerce Commission interview with []).

⁸ Commerce Commission interviews with [], [] and [].

⁹ See for example NERA Economic Consulting "AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm" at Table 2.4.

¹⁰ Commerce Commission interview with [].

¹¹ For example, [] believed that no one mixing on a desktop wants an app. Commerce Commission interview with [].

¹² The Application at [5.11].

¹³ See for example [].

¹⁴ NERA Economic Consulting "AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm" at [152].

- 28.2 One DJ software provider was not sure how much the growth of Algoriddim had impacted its sales but believed it was probably small.¹⁵ The market participant suggested that the success of Algoriddim may be due to its ability to reach beginners that want to use mobile devices.¹⁶ Some apps are free (or relatively cheap) and the market participant suggested that those customers may later switch to a laptop application when they are ready to pay for software. That is, the growth of apps may be reaching new customers rather than becoming a substitute for laptop applications.
29. Thirdly, there is unlikely to be strong supply side substitution between apps and laptop applications. Laptop applications and apps are written to different operating systems, meaning that producing one or the other would require starting afresh. The Application recognises there is "limited technology cross-over" between laptop applications and apps although argues that there are some laptop application providers that also offer an app.¹⁷ At this point, we are not satisfied that there is sufficient supply side substitution between apps and laptop applications to justify including them in the same market.
30. We invite parties to provide us with further evidence on the above; in particular on:
- 30.1 the extent to which apps are viewed as a close substitute for laptop applications by users and the extent to which those users would likely switch to apps if the price of laptop applications increased;
- 30.2 the ease with which software written for one platform (eg, iOS/Android) can be transferred to another platform; and
- 30.3 evidence of laptop application providers' sales and strategies being affected by the growth of apps.

Unlikely separate customer markets for different types of users

31. At this stage, we do not consider it necessary to delineate the market between types of users such as 'professionals' (users that get paid to DJ) and 'hobbyists' (users that do not get paid to DJ). While professional users are likely to require greater functionality, it is unclear whether suppliers can clearly delineate between these different types of customers. There is no simple means to separate between the customer groups, and the grouping may change over time as customers graduate from hobbyist to professional, ie, while a hobbyist may be more likely to use a free (lite) software, there could be a significant proportion of hobbyists using a paid for (pro) software and vice versa.¹⁸

¹⁵ Commerce Commission interview with [].

¹⁶ Commerce Commission interview with [].

¹⁷ The Application at [5.24].

¹⁸ Even within these groupings there are likely to be a vast range of skill levels. For example, hobbyists might include beginners through to experienced DJs. Some users that are primarily hobbyists might occasionally get paid for DJing.

Likely separate markets for DJ software and music production software

32. We currently consider that the relevant market is likely to be limited to DJ software.
33. Music production software does not appear to be a close substitute for DJ software and likely falls into a separate market. On the demand side, music production software has different functionality to DJ software. Music production software is used to create music through the ability to combine individual inputs such as instrumentals, vocals and effects. While in principle it may be possible to use the music production software to perform DJ sets, we have received no evidence to suggest that any significant numbers of DJs are doing so, or would do so if the price of DJ software increased.¹⁹

National geographic market

34. For the purposes of our analysis, we have assessed competition within a national market. However, we recognise that competition for DJ software in New Zealand will be strongly affected by global competition.²⁰ We will take this into account in our assessment.

DJ hardware market

35. DJ hardware consists of the following equipment (see the Appendix for examples of these):
- 35.1 DJ player – enables DJs to play digital music. Has embedded software so can be played simply with USB sticks with music on them.
 - 35.2 Mixer – used to control and manipulate music from multiple sources. Used with DJ players and turntables to mix music.
 - 35.3 Controller – portable device normally containing two jog wheels and controls to enable mixing music. Must be connected to a device (such as a laptop, mobile or tablet) to access music.
 - 35.4 All-in-one DJ system – combines DJ players and mixers into a single device. All-in-ones include all the features of a controller but also include functionality of the connected device including the ability to access music and its own DJ software. All-in-ones can operate as a controller if connected to a device with DJ software.
 - 35.5 Turntable – used to play vinyl records.

¹⁹ The Digital DJ Tips 2023 DJ Census shows that only a small number of survey respondents said they used music production software Ableton Live to DJ. See Digital DJ Tips “Global DJ Census 2023” <https://www.digitaldjtips.com/here-are-the-results-from-our-2023-census-the-biggest-dj-survey-in-the-world/>.

²⁰ We consider that an alternative approach to market definition would be to define a global market and then assess effects on a national basis. We consider that in this case it will not affect the overall assessment.

- 35.6 Audio interface – used to convert a source of audio from one type to another, for example converting an analogue signal from a vinyl record into a digital signal that can be received by a laptop.
36. The Applicant submitted that the relevant market is the supply of DJ hardware.²¹ The Applicant submitted that:
- 36.1 many categories of DJ hardware are substitutable (such as a DJ player, all-in-one systems and controllers); and
- 36.2 the technological difference between the different categories is becoming smaller.
37. We consider that the relevant market could be defined more narrowly to include certain types of hardware.
- 37.1 On the demand side, there are some limits to substitution between different setups as they are often used in different scenarios. For example:
- 37.1.1 The choice of high-end clubs and festivals will be driven by the DJs who play at those venues (typically professionals) who will normally seek a DJ player/mixer set up as it does not require them to bring a laptop to access their music. These customers are unlikely to view controllers as substitutable.
- 37.1.2 Controllers are relatively cheap. They are portable and may be used for weddings and parties. It may not be practical to switch to a DJ player/mixer setup for that purpose.
- 37.1.3 All-in-one systems have more functionality than controllers but are more expensive. They are more portable than a DJ player/mixer set up. Some customers that use controllers may view all-in-one systems as substitutable due to their portability and because they can be used as a controller with a connected device.
- 37.2 On the supply side, existing suppliers of controllers may have the technical knowledge to build DJ players.²² However, [] believed it may be difficult to enter the market given Pioneer’s existing position in the market.²³ [] claimed that inMusic had attempted to compete with Pioneer but had limited success.²⁴
38. For the purposes of our analysis, we have assessed the Proposed Acquisition on markets for separate DJ hardware devices. Specifically, we have used a product

²¹ The Application at [5.22].

²² For example [] said that it could build a DJ player with its existing knowledge. Commerce Commission interview with [].

²³ Commerce Commission interview with [].

²⁴ Commerce Commission interviews [] and [].

market that includes controllers and all-in-ones (which for ease we refer to as “the DJ controller market”) but excludes DJ players and other types of DJ hardware. The reason for this is that the main focus of our analyses below are users of DJ software. DJ software is primarily used with controllers and, as such, this is our starting point for market definition. We have also included “all-in-ones” in our market as (for reasons identified in paragraph 37.1.3) they may be substitutable for some users of controllers. We have excluded DJ players and mixers at this point as we think they are not sufficiently close substitutes to controllers. We remain open to the possibility that the market could be defined more broadly, for example, to include DJ players and mixers. However, as we explain below, this is unlikely to affect our overall conclusion.

39. For the purposes of our analysis, we have assessed competition on a national market. However, we recognise that the extent of competition for DJ hardware in New Zealand will be strongly affected by global competition.²⁵ We will take this into account in our assessment.

With and without scenarios

40. Assessing whether a substantial lessening of competition is likely requires us to:
- 40.1 compare the likely state of competition if the Proposed Acquisition proceeds (the scenario with the merger, often referred to as the factual) with the likely state of competition if it does not (the scenario without the merger, often referred to as the counterfactual); and
 - 40.2 determine whether competition is likely to be substantially lessened by comparing those scenarios.

The factual

41. With the Proposed Acquisition, ATC will acquire 100% of the shares in Serato. ATC submitted that it intends for Serato to continue to operate as a separate business based in New Zealand.²⁶
42. In the Application, ATC states that the terms of the sale and purchase agreement (SPA) it has entered into with Serato preclude ATC from refusing to allow Serato to partner with other DJ hardware providers or making Serato’s DJ software less attractive for the providers to partner with.²⁷ The Parties submit that these clauses should be taken into account when considering the competition impact of the Proposed Acquisition and that it is appropriate for the Commission to consider them

²⁵ We consider that an alternative approach to market definition would be to define a global market and then assess effects on a national basis. We consider that in this case it will not affect the overall assessment.

²⁶ The Application at [1.3].

²⁷ Ibid, at [1.5](c).

as forming part of the with-the-merger scenario.²⁸ These clauses last for a period of [].

43. At this stage, we consider that with the Proposed Acquisition, the contractual obligations between ATC and Serato set out in the SPA would become binding. However, as set out in more detail in the vertical effects analysis at paragraphs 984-1088 we are still assessing the extent to which these provisions would preclude a substantial lessening of competition occurring in the market over time. In particular, we are still considering whether:
- 43.1 the contractual obligations, as drafted, are adequate to constrain ATC's ability to frustrate DJ hardware manufacturers from partnering with Serato to create new products in a commercially viable and timely fashion;
 - 43.2 the Parties could elect in future to amend these clauses or waive the need for ATC to comply with its contractual obligations []. Such an action may not be readily observable to the industry;
 - 43.3 the merged entity could engage in conduct that harms rivals that would not technically amount to a breach of its contractual obligations;
 - 43.4 the provisions would guarantee the same rate of innovation from Serato as the counterfactual, or whether ATC would have the ability and incentive to delay innovation; and
 - 43.5 the software/hardware integration process would provide the merged entity with access to sensitive information of hardware rivals (such as access to upcoming innovations or customer information) that could substantially lessen competition for the supply of DJ hardware, and whether sufficient safeguards exist to prevent this happening.
44. The clauses last for a period of []. We are also considering whether the merged entity would have an ability and incentive to foreclose once the clauses are no longer in effect and whether this would amount to a substantial lessening of competition.
45. We invite further submissions and evidence on these points.

The counterfactual

46. In the Application, ATC submitted that the relevant without-the-merger scenario is one where Serato continues to operate as it does currently, [] with ATC continuing to partner with Serato.²⁹
47. For the purposes of this Sol, we have assessed the Proposed Acquisition against a counterfactual where Serato remains independently owned, ie, ownership is either retained by Serato or a third party that continues to operate Serato independently.

²⁸ Ibid, at [7.23].

²⁹ The Application at [3.12].

Unilateral effects – the supply of DJ software

Introduction

48. Unilateral effects arise when a firm merges with a competitor that would otherwise provide a significant competitive constraint (particularly relative to remaining competitors) such that the merged firm can reduce quality or profitably increase price above the level that would prevail without the merger without the profitability of that increase being thwarted by rival firms' competitive responses.³⁰
49. Our approach to assessing whether unilateral effects are likely to arise from the Proposed Acquisition is to consider:
- 49.1 closeness of competition: the degree of constraint the parties impose upon one another in the market for DJ software;
 - 49.2 remaining competitive constraints: the degree of constraint that existing competitors would impose on the merged entity; and
 - 49.3 entry and expansion: how easily rivals could enter and/or expand.³¹
50. The Proposed Acquisition would combine:
- 50.1 Serato's DJ software, which appears to have historically been the leading DJ software; and
 - 50.2 rekordbox, which is swiftly growing in uptake and appears to be becoming an increasingly strong player in the DJ software market.
51. At this stage, we consider that the Proposed Acquisition raises concerns that Serato's DJ software and ATC's rekordbox compete closely and that the loss of competition between them would be significant. We also consider that the remaining existing competitive constraints in the market and the possibility of entry and expansion of rivals would be insufficient to constrain the merged entity.

Closeness of competition between the merging parties

Our current views

52. The evidence we have gathered shows that the merging parties appear to compete closely for customers and that they impose a significant degree of constraint on one another.

Internal documents

³⁰ Commerce Commission *Mergers and Acquisitions Guidelines* (May 2022) at [3.62].

³¹ We have also considered whether customers have countervailing power in our assessment of unilateral effects. Given the ultimate customers are individual DJs, we consider they are unlikely to have significant countervailing power and do not consider this further in our analysis. However, we invite submissions on this.

53. Internal documents from both parties suggest that [].

53.1 Internal documents from Serato state:

53.1.1 []³²

53.1.2 [];³³ and

53.1.3 Serato and rekordbox [].³⁴

53.2 Internal documents from ATC state:

53.2.1 [];³⁵ and

53.2.2 [].³⁶

54. There is also evidence to suggest that ATC may be one driver of Serato’s innovation. For example, []³⁷.

55. In its report in support of ATC’s Application, NERA submitted that Serato DJ and rekordbox are closely-positioned as they have a similar pricing structure and both appear to be positioned as “premium” products.³⁸

Market share estimates

56. In its report, NERA submitted an estimate of market shares (based on monthly active users (MAU)) of the global DJ software market if mobile-only providers are

³² []

³³ []

³⁴ []

³⁵ []

³⁶ []

³⁷ []

³⁸ NERA Economic Consulting “AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm” (27 November 2023) at [71].

excluded.³⁹ (For clarity, NERA submitted that the merged entity would be constrained by mobile apps.) These figures show []. These numbers will likely underestimate the market share of the Parties on a laptop application only market, since the figures for some players (such as djay) will include app users.

Table 1: NERA estimate of Global DJ market share (excluding app only providers)

Product	Software type	Estimated market share
djay	Application and app	[]
Serato DJ	Application	[]
rekordbox/WeDJ	Application and app	[]
CrossDJ/Mixvibes	Application and app	[]
VirtualDJ	Application	[]
Traktor	Application	[]
Engine Prime	Application	[]
Ableton Live	Application	[]
DJUCED	Application	[]

57. We have sought data on revenue and MAU over time from software providers which has allowed us to calculate approximate, although incomplete, market shares for DJ software. These figures also indicate [].

58. First, in looking at MAU over time the below graphs show that Serato’s DJ software and rekordbox are [].⁴⁰ The graphs appear to show that [].

³⁹ NERA analysis of ATC estimates using the 2023 Global DJ Census (DJ Census 2023) and publicly available online subscription data (found here: <https://www.data.ai/en/>) (data.ai) as at December 2022. NERA Economic Consulting “AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm” at Table 2.1.

⁴⁰ [] have not been willing to provide MAU data so the picture is incomplete.

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59. Second, we set out in the table below market shares based on revenue for the 2022 calendar.⁴¹ We consider the market shares based on revenue may be an important indicator of market power. Whereas MAU may pick up a large number of customers who are trialling products, revenues may better reflect the number of customers that are actually willing to pay for the product. These are the customers that are of most value to DJ software providers. We estimate that the merged entity would have a high market share based on revenue:

59.1 on a global basis up to []; and

59.2 on a New Zealand basis up to [].

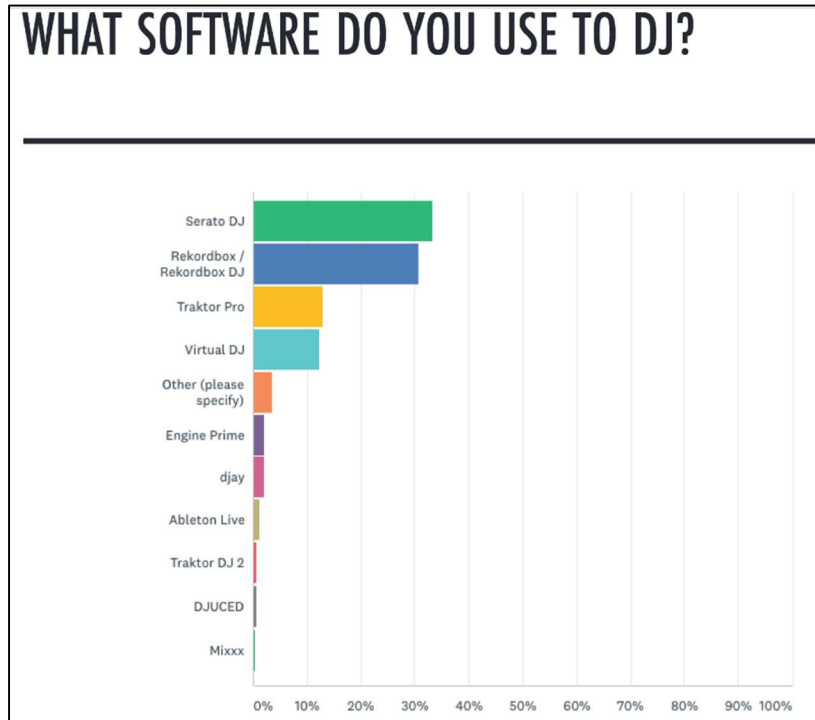
Table 2: Estimates of DJ software market shares based on revenues (CY2022)

Name	Global (%)	New Zealand (%)
Serato	[
ATC (rekordbox)		
<i>Merged entity</i>		
Native Instruments (Traktor)		
Algoriddim (djay)		
inMusic		
VirtualDJ		
Total]

Source: Information provided by market participants.

⁴¹ Based on figures provided (by the relevant owners) for []. These figures are an upper bound because we do not have figures for all software providers. However, these appear to be the main providers of subscription-based DJ software services. Furthermore, some firms were not able to provide revenues at a country level so were unable to provide New Zealand-specific revenues.

60. The Digital DJ Tips Global DJ Census 2023 results also suggest that the parties compete closely.⁴² The census surveyed nearly 20,000 DJs and is a snapshot of the industry and preferences of those DJs. The 2023 results show that Serato and rekordbox are the most popular brands of DJ software, with approximately 60% of respondents using either Serato’s DJ software or rekordbox to DJ:



Source: Digital DJ Tips 2023 Census.

61. It is unclear if the results of this census are a representative sample of DJ preferences (especially for New Zealand customers). However, we consider that the results give some indication of the popularity of the various DJ software products on offer in the market.

[

].^{43 44}

Views of market participants

62. In general, the evidence from market participants suggests Serato is the market leader and that rekordbox is a close competitor.
63. Feedback from some market participants is consistent with Serato and rekordbox being close competitors for the supply of DJ software. Serato’s DJ software is seen as

⁴² Digital DJ Tips “Global DJ Census 2023” <https://www.digitaldjtips.com/here-are-the-results-from-our-2023-census-the-biggest-dj-survey-in-the-world/>.

⁴³ For example, nearly 40% of survey respondents were from the US. We have heard anecdotally that Serato is popular in the US market given the popularity of hip hop music there and Serato’s historic links to that genre.

⁴⁴ Commerce Commission interview with [].

a market leader, especially in clubs, and has been described as “industry standard” and “stable”.⁴⁵ rekordbox was identified as a major competitor.

- 63.1 [] told us that the most popular DJ software is Serato, rekordbox and djay Pro AI, and that rekordbox is a now a competitor to Serato’s DJ software.⁴⁶
- 63.2 [] told us that if Serato’s DJ software was unavailable, people would use rekordbox. He also said that both types of software allow users to locate, organise, store and select music.⁴⁷
- 63.3 [] told us that if someone was using Serato, they would probably see rekordbox as their next best alternative.⁴⁸
64. Many of the submissions we received on the AlphaTheta/Serato Statement of Issues suggested that Serato is the market leader in DJ software although did not suggest that the same was true of rekordbox.⁴⁹ For example, submitters mentioned that:
- 64.1 Serato’s “track record as technology innovator is undisputed” and that it has “repeatedly redefined the DJ industry”.⁵⁰
- 64.2 Serato is “known for their excellence in software design and usability”.⁵¹
- 64.3 Serato’s software is “world class”, that it is the “world leader in DJ software”, and that competition in the market for DJ software is “small with only a handful of similar software (at [Serato’s] level)”.⁵²
65. However, some market participants suggested that Serato and rekordbox do not compete closely as the two have different uses (with Serato’s DJ software being more for performance and rekordbox more for preparation).⁵³
66. Overall, we consider that both Serato and rekordbox users are likely to benefit from the constraint the parties impose upon one another in the supply of DJ software to customers. The Proposed Acquisition will eliminate the existing competitive constraint that the parties impose on one another, including the constraint that rekordbox potentially will impose as it grows. This could impact on price and non-price aspects of competition such as reduced innovation.

⁴⁵ Commerce Commission interviews with [], [], [], [] and [].

⁴⁶ Commerce Commission interview with [].

⁴⁷ Commerce Commission interview with [].

⁴⁸ Commerce Commission interview with [].

⁴⁹ These customers noted Pioneer was the market leader in DJ hardware and identified potential innovations that combining these two market leaders could bring.

⁵⁰ Anonymous submission on Statement of Preliminary Issues (1) (8 November 2023).

⁵¹ Anonymous submission on Statement of Preliminary Issues (3) (8 November 2023).

⁵² Anonymous submission on Statement of Preliminary Issues (8 November 2023).

⁵³ Commerce Commission interviews with [] and [].

67. We invite submissions on the extent to which the Parties impose a competitive constraint on one another.

Constraint from existing rivals

Views of the Applicant

68. In the Application, ATC submitted that it will continue to be constrained by vigorous competition from other DJ software solutions (including DJ software apps and laptop applications) as well as other options that are available to users outside of the DJ software market.⁵⁴
69. In its report in support of ATC's Application, NERA submitted that competing laptop software providers such as djay, Mixvibes, Traktor and VirtualDJ are likely to continue to provide constraint on the merged entity's pricing and quality.⁵⁵ NERA submitted that differentiation between laptop software providers is typically on pricing and competing providers would be able to re-price and re-position their products to compete with rekordbox/Serato.⁵⁶

Our current view

Unclear if constraint from existing rivals is sufficient to replace the lost competition

70. We are currently not satisfied that the constraint from other DJ software providers would be sufficient to prevent an exercise of market power by the merged entity in the supply of DJ software.
71. Post-acquisition, the main competitors to the merged entity would be VirtualDJ and Traktor (laptop applications), Algoriddim's djay Pro AI (an app) and inMusic's Engine DJ (embedded software). However, it is unclear that these providers have the level of hardware integration or reputation to replace the lost competition.

71.1 Market participants told us that:

71.1.1 VirtualDJ was viewed as matching Serato on features, but some believed it faced the "stigma" of being consumer level software and having an entry-level focus.⁵⁷

[
].⁵⁸

71.1.2 Traktor has fallen behind the competition, doesn't have the functionality of other providers and used to be popular many years

⁵⁴ The Application at [6.1].

⁵⁵ NERA Economic Consulting "AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm" at [60].

⁵⁶ Ibid, at [83].

⁵⁷ Commerce Commission interviews with [] and [].

⁵⁸ Commerce Commission interview with [].

ago but has since lost a lot of market share.⁵⁹
 []⁶⁰
 [] Traktor software has “lost contact” with feature
 developments of competitors over the last five years such as Stems.⁶¹
 [] considered that Traktor competes head-to-head
 with Serato.⁶²

71.1.3 Engine DJ is currently locked to inMusic hardware and is not
 compatible with other hardware brands. inMusic said
 []
].⁶³

71.1.4 Algoriddim’s djay Pro AI app is considered more entry-level focused.⁶⁴
 [] told us that these products
 are aimed at beginners/consumers whereas [] products that are
 integrated with Serato’s DJ software are aimed at professionals.⁶⁵
 Algoriddim told
 []
].⁶⁶ Algoriddim noted that
 []
].⁶⁷

71.2 Hardware providers also indicated that Serato’s DJ software is the most
 important software to integrate their hardware products with. [] told us
 that Serato is the [] none of the other
 software alternatives have the same quality and adoption rate.⁶⁸ [] told us
 that an estimated [] of its users use its hardware with Serato – as such,
 Serato integration is important due to its level of popularity.⁶⁹ [] told us
 that products with Serato sell better, and that the strong sales are worth the
 long and expensive integration process.⁷⁰ [] told us that there are no

⁵⁹ Commerce Commission interviews with [], [], and [].

⁶⁰ Commerce Commission interview with [].

⁶¹ Commerce Commission interview with [].

⁶² Ibid.

⁶³ Commerce Commission interview with [].

⁶⁴ Commerce Commission interviews with [] and [].

⁶⁵ Commerce Commission interview with [].

⁶⁶ [].

⁶⁷ Ibid.

⁶⁸ [].

⁶⁹ Commerce Commission interview with [].

⁷⁰ Commerce Commission interview with [].

other software companies it would partner with.⁷¹

71.3 [] highlighted the importance of Serato, noting that customers will ask for a Serato controller, not a Pioneer DJ or Roland controller.⁷²

71.4 An internal document from Serato noted that [].⁷³

72. However, an internal document from Serato suggested that []⁷⁴

73. The merged entity may face some constraint from these software providers. However, our current view is that this is unlikely to sufficiently replace the competition lost from the Proposed Acquisition to such an extent that the Proposed Acquisition would be unlikely to substantially lessen competition.

Apps are not likely to sufficiently constrain the merged entity

74. In the Application, ATC submitted that DJ software apps are a credible alternative and are rapidly gaining market share and providing an increasingly strong competitive constraint on DJ software.⁷⁵ ATC further submitted that DJ software apps will become the preferred software for all types of DJing within the next five years.⁷⁶

75. NERA submitted that apps will continue to provide a competitive constraint on the merged entity because:⁷⁷

75.1 there is little quality difference between laptop only software and apps in terms of essential features;

75.2 the cost of a user switching between app and laptop only DJ software (or vice versa) is likely to be minimal; and

75.3 app only developers could switch and offer a laptop software option.

⁷¹ Commerce Commission interview with [].

⁷² Commerce Commission interview with [].

⁷³ []

⁷⁴ []

⁷⁵ The Application at [1.4(b)].

⁷⁶ Ibid, at [6.13].

⁷⁷ NERA Economic Consulting “AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm” at [2.3].

76. The evidence before us currently suggests that apps may not be a sufficient constraint on the merged entity and are likely to be primarily an option for beginner/learner DJs rather than all DJs.⁷⁸
77. [] told us that apps have a place in the consumer segment of the market but are not present in the professional segment.⁷⁹ [] considered that apps are getting better but laptop applications go deeper and allows users to do more.⁸⁰ [] as it is not well developed or widely used – it also noted that customers are not “screaming out for apps”.⁸¹ Some market participants we spoke to considered that the more professional a DJ is, the less likely they would be to DJ using an app.⁸²
78. We consider it may be a lower quality experience for a DJ to go from using a laptop application to an app, given the smaller screen size and typically lower computing power of a tablet or phone.
79. However, [] considers that apps are used by all types of DJs, are capable of running all of the major features and special functions of most DJ hardware and that the small screen size of a phone or tablet is not an impediment, as the DJ is interacting with the DJ hardware, not the laptop, phone or tablet.⁸³ Further, a number of the submissions we received in response to the Statement of Preliminary Issues referenced the wide range of software options DJs now have, specifically mentioning that this included apps.⁸⁴

Music production software is not likely to sufficiently constrain the merged entity

80. At this stage, we consider that music production software is likely to provide a limited constraint on the merged entity. Market participants told us that it would be possible to use music production software to DJ, but no one does it, or purchases music software to DJ⁸⁵ and that music production software would never compete with DJ software as it has a different usage.⁸⁶ In our view, music production software will only act as a constraint if the software includes the functionality needed to DJ and if the user is already familiar with music production software (ie, it is unlikely that a new DJ will choose music production software to start DJing with, whereas an

⁷⁸ Commerce Commission interviews with [], [], [] and [].

⁷⁹ Commerce Commission interview with [].

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Commerce Commission interviews with [], [], [] and [].

⁸³ Commerce Commission interview with [].

⁸⁴ See Anonymous Statement of Preliminary Issues submissions dated 7 November 2023, 8 November 2023 (3), 9 November 2023 and 10 November 2023.

⁸⁵ Commerce Commission interviews with [] and [].

⁸⁶ Commerce Commission interview with [].

existing music producer might use the software they currently use to make music to DJ).

81. We invite submissions on the extent to which existing software providers, apps and music production software would impose a competitive constraint on the merged entity. For example, we would be interested in finding out from DJs:
- 81.1 If the price of Serato's DJ software went up, how likely would you be to switch to DJing using a different form of DJ software? If you are likely to switch, which piece of software would you likely switch to?
- 81.2 If the price of Serato's DJ software went up, how likely would you be to switch to DJing using an app? If you are likely to switch, which app would you likely switch to?
- 81.3 If the price of Serato's DJ software went up, how likely would you be to switch to DJing with music production software? If you are likely to switch, which music production software would you likely switch to?

Barriers to entry and expansion

Views of the Applicant

82. In the Application, ATC submitted that barriers to entry and expansion are low, particularly for producers of music production software and DJ software apps.⁸⁷
83. In its report in support of ATC's Application, NERA submitted that at a general level, barriers to entry and expansion into the DJ software market are likely to be low due to:⁸⁸
- 83.1 switching costs for end users being relatively low, and switching not generally requiring a user to switch away from their existing hardware;
- 83.2 the nature of the product meaning that brand/reputation, while being an important dynamic in the market, is unlikely to constitute an economic barrier to entry; and
- 83.3 the costs of developing laptop DJ software being relatively low, with NERA estimating between [] to port (translate from one system to another) existing mobile software and [] to develop from scratch.⁸⁹

Our current view

84. We are not currently satisfied that entry by new DJ software providers or expansion by existing DJ software providers would be sufficient to prevent an exercise of market power by the merged entity in the supply of DJ software. We assess whether

⁸⁷ The Application at [6.1(d)].

⁸⁸ NERA Economic Consulting "AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm" at [2.1].

⁸⁹ Ibid, at [2.1.3].

entry by new competitors or expansion by existing competitors is likely to be sufficient in extent in a timely fashion to constrain the merged firm and prevent a substantial lessening of competition. This is referred to as the ‘LET test’. We are of the view that there appear to be significant barriers to entry and expansion, including time, cost and convincing customers to switch software providers. That is, we do not consider the LET test is satisfied.

85. The evidence currently before us does not support ATC’s assertion in the Application that DJ software can be developed relatively quickly.⁹⁰ Estimates from market participants on the time it takes to develop DJ software ranged from one to nine years,⁹¹ with some market participants telling us that software develops over time and new iterations of software are built upon previous iterations.⁹²
86. We also understand there can be significant fixed and sunk costs in developing DJ software. For example, inMusic told us it spends [] on R&D per year, with probably a “good segment” of that going towards Engine DJ.⁹³ Internal documents from Serato show that in the financial year 2022 alone it spent over [] on research and development, with the value of its R&D spend growing continuously over time.⁹⁴ It may be difficult for market participants that do not currently have a DJ software product to justify the cost of establishing one, particularly given the potential difficulties with securing sufficient scale (ie, sufficient customers switching from Serato’s DJ software or other software providers) to justify the investment.⁹⁵
87. Some market participants also described difficulties with convincing DJs to switch software providers:
- 87.1 [] told us that while it could spend time making its own software, the market wouldn’t want it, as customers just want Serato’s DJ software.⁹⁶
- 87.2 [] told us that there is a “huge inertia” in the DJ software market, as DJs are reluctant to try new software.⁹⁷ This reluctance to switch software providers appears to be due to familiarity with how the software works and not wanting to risk something going wrong when performing if an alternative software is used. [] told us that trying to recreate Serato’s DJ software

⁹⁰ The Application at [6.25(d)].

⁹¹ Commerce Commission interviews with [], [], [] and [].

⁹² Commerce Commission interviews with [], [] and [].

⁹³ Commerce Commission interview with [].

⁹⁴ [].

⁹⁵ It is difficult to say what level of scale would be necessary to justify entry, as it depends on how much the company wishes to invest. However, as an indication, Serato’s annual investment of R&D is around [] of its revenues (that is, [] R&D spend for FY2022 compared to [] revenue). If an entrant wished to make a comparable product to Serato and invest in R&D at a similar level, it would need to reach [] of the size of Serato just to cover R&D costs and would need a much larger share to earn a reasonable margin.

⁹⁶ Commerce Commission interview with [].

⁹⁷ Commerce Commission interview with [].

isn't enough – a provider must come up with something new to be able to win customers.⁹⁸

87.3 [] stated that DJs tend not to change the platform (software) they use for DJing, but they will upgrade the hardware.⁹⁹

87.4 This was echoed by some of the DJs we spoke with, who said that DJs tend to continue to use the software they started DJing on and prefer to stick with what they are comfortable using.¹⁰⁰

88. However, Serato told us that

[

].¹⁰¹ Internal documents show

[

While we continue to assess this evidence,

[

]

].¹⁰²

89. The combination of the above factors means that we are not yet satisfied that new entry or expansion is likely to be sufficient in extent, or would occur in a timely fashion, to constrain the merged entity.

90. We invite submissions on the conditions of entry and expansion for new and existing DJ software providers.

Vertical effects – DJ hardware

Introduction

91. A merger between suppliers (or buyers) who are not competitors but who operate in related markets can result in a substantial lessening of competition due to vertical effects. This can occur where a merger gives the merged entity a greater ability and/or incentive to engage in conduct in a market that raises rivals' costs in a related market and prevents or hinders rivals from competing effectively in that market (which we refer to as "foreclosing rivals").¹⁰³ Foreclosure strategies can include refusing to supply competitors an important input that is essential for them to compete (total foreclosure) or raising the price it charges competitors to access that input or reducing the quality of that input supplied to competitors (partial foreclosure).

⁹⁸ Commerce Commission interview with [].

⁹⁹ Commerce Commission interview with [].

¹⁰⁰ Commerce Commission interviews with [] and [].

¹⁰¹ Commerce Commission interview with [].

¹⁰² []

¹⁰³ Commerce Commission *Mergers and Acquisitions Guidelines* (May 2022) at [5.1]-[5.15].

92. Our approach to assessing whether vertical effects are likely to arise from the Proposed Acquisition is to consider whether:
- 92.1 the merged entity has the ability to foreclose competitors:
 - 92.1.1 through having market power at one or more levels of the supply chain; and
 - 92.1.2 having a mechanism through which to raise the costs of its rivals in a related market;
 - 92.2 the merged entity has the incentive to foreclose competition (because it is more profitable to foreclose than to continue to supply those rivals in the same way); and
 - 92.3 the lost competition from the foreclosure amounts to a substantial lessening of competition.
93. At this stage, we consider that the Proposed Acquisition raises concerns that the merged entity would have the ability and incentive to use its market power in the DJ software market to foreclose its rivals in the DJ hardware market, and that such conduct could substantially lessen competition.¹⁰⁴ As noted earlier, ATC states that the terms within the SPA preclude ATC from refusing to allow Serato to partner with other DJ hardware providers. These clauses last for []. We are investigating whether the Proposed Acquisition may be likely to substantially lessen competition within the next [] (the period when the clauses apply) as well as the period beyond that.

Ability to foreclose

Whether the merged entity has market power for the supply of DJ software

94. We set out below our assessment on whether the merged entity would have market power for the supply of DJ software.

Views of the Applicant

95. The Applicant submitted that Serato does not have the ability to foreclose rivals due to the alternatives available in the market. NERA's report in support of ATC's Application set out that its main findings are that the merged entity is unlikely to have the ability to foreclose since:¹⁰⁵

¹⁰⁴ Our analysis has focused on whether the merged entity could foreclose rivals through refusing to supply Serato DJ software or raising the price of Serato software. However, if the merged entity has the ability and incentive to foreclose, there are many mechanisms through which that foreclosure could take place. This could include bundling products (offering ATC hardware and Serato software at a discount) or tying (only allowing customers to use Serato software if they purchase Pioneer DJ hardware). We continue to assess all these possible mechanisms.

¹⁰⁵ NERA Economic Consulting "AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm" at [1(4)(c)(i)].

- 95.1 there are many substitutes for Serato;
- 95.2 barriers to entry appear low; and
- 95.3 Serato’s royalties from hardware sales [] and Serato’s pricing has been falling in real terms.

Views of Serato

96. In its submission on the Commission’s Statement of Preliminary Issues, Serato said that it does not have the ability to foreclose rivals as it is not a “must have” product.¹⁰⁶ Serato argues that this means that any attempt by ATC to foreclose competitors would be ineffective and counterproductive. In support of this, Serato noted that:

96.1 software products other than Serato are commonly used and endorsed by high-profile DJs;¹⁰⁷

96.2 Serato is [], as it does not have an iOS or Android app and has been unable to secure music streaming integration for its software from major music streaming platforms such as Spotify, Apple or Amazon;^{108 109}

96.3 [],¹¹⁰

96.4 many companies have successfully released new hardware with no Serato association;¹¹¹

96.5 hardware providers’ ability to create embedded software options has reduced their reliance on third party software providers;¹¹² and

96.6 [].¹¹³

Our current views

97. We currently consider that the merged entity may have the ability to foreclose its competitors. The evidence suggests that Serato is viewed as an essential trading partner by ATC’s main rivals due to its popularity with consumers and professional

¹⁰⁶ Serato “Submission on Statement of Preliminary Issues” (9 November 2023) at [4].

¹⁰⁷ Ibid, at [6].

¹⁰⁸ Ibid, at [7].

¹⁰⁹ We note that no software provider has music streaming integration for Spotify or Apple, and only inMusic has secured integration with Amazon.

¹¹⁰ Serato “Submission on Statement of Preliminary Issues” (9 November 2023) at [10].

¹¹¹ Ibid, at [16].

¹¹² Ibid, at [17].

¹¹³ Ibid, at [19]-[20].

DJs. Our unilateral effects analysis already sets out some of this evidence in paragraphs 52-80. In summary:

- 97.1 ATC's internal documents [].¹¹⁴ The data we have is consistent with showing [].
- 97.2 ATC's main rivals for controllers (including inMusic, Reloop, and Roland) []. Serato-integrated controllers account for [] of their sales. This is also reflected in the fact that the [].
- 97.3 [] told us that there are no other good alternatives for Serato's DJ software. While some hardware providers produce devices that integrate with other DJ software such as Algoriddim, the evidence suggests this is to target a different market segment rather than a substitute for Serato's DJ software.¹¹⁵ rekordbox might have been an attractive DJ software for DJ hardware providers to partner with but would not be an option under a foreclosure strategy.

Whether there is a mechanism to foreclose rivals

What ATC submitted

98. The Applicant submitted that the merged entity would not be able to foreclose rivals because:
- 98.1 users can integrate their hardware with Serato's DJ software by 'MIDI mapping' (described below at paragraph 1011), which does not require an arrangement between the hardware manufacturer and Serato;¹¹⁶
- 98.2 as set out above at paragraph 432, the terms of the SPA preclude ATC refusing to allow Serato to partner with other DJ hardware brands or making Serato's DJ software less attractive to partner with;¹¹⁷ and
- 98.3 the Proposed Acquisition would not give ATC the ability to undermine competitors by using their commercially sensitive information.¹¹⁸

Summary of our views

99. We consider there is likely to be a range of potential mechanisms which the merged entity could use to foreclose rivals by raising their costs. For example, this could include:

¹¹⁴ [].

¹¹⁵ Commerce Commission interview with [].

¹¹⁶ The Application at [7.6].

¹¹⁷ Ibid, at [7.20]-[7.24].

¹¹⁸ Ibid, at [7.25]-[7.33].

- 99.1 raising the cost of the licence fee (and other engineering fees);
 - 99.2 refusing to integrate, delaying integration or integrating less effectively (such as only allowing certain features to work with a controller); and
 - 99.3 tying or bundling products.¹¹⁹
100. The possible mechanisms through which foreclosure could occur may not be limited to those listed above. We are still considering this and invite submissions on this point.

Unclear whether ‘MIDI-mapping’ bypasses the need for integration

101. ATC submitted that it would be unable to prevent consumers from using Serato’s DJ software with a rival hardware product, as a user can ‘MIDI-map’¹²⁰ Serato software to that device, so long as the device has a Serato supported sound card.¹²¹ MIDI mapping is where a DJ manually assigns buttons, faders and knobs on their hardware to control features in the software. ATC states that generally, the most popular DJ hardware has a Serato-supported sound card.¹²² However, inMusic submitted that Serato-supported sound cards are only found in ‘official’ Serato certified accessories, meaning customers can only MIDI map Serato’s DJ software to DJ hardware that is already compatible with Serato software.¹²³
102. Some market participants we have spoken with have stated that MIDI mapping is not likely to be a substitute for full integration as it does not allow for in depth integration of all of the functions and provides a lower quality outcome for the user.¹²⁴ [] also noted that Serato’s DJ software is particularly challenging to MIDI map, and that there are some features of Serato’s DJ software that customers cannot MIDI map.¹²⁵
103. At this point, we are not satisfied that the ability of hardware providers to MIDI map software would prevent the ability of the merged entity to foreclose rivals. However, we invite submissions on this topic.

¹¹⁹ The Proposed Acquisition could raise rivals’ costs through accessing sensitive information. Rivals may react to the acquisition by no longer providing information to Serato in advance of device release. This will raise rivals’ costs because the devices may be less attractive to customers without the development and integration Serato. We assess access to sensitive information separately in paragraphs 1366-146.

¹²⁰ Musical Instrument Digital Interface (MIDI). According to the Application at [5.16], MIDI serves as a universal protocol connecting electronic instruments, computers and audio devices to communicate with each other for playing, editing and recording music.

¹²¹ The Application at [7.6] and Serato “Submission on Statement of Preliminary Issues” (9 November 2023) at [2].

¹²² The Application at [7.6].

¹²³ inMusic “inMusic’s Response to Serato Audio Research Limited’s Submission in Support of AlphaTheta Corporation’s Clearance Application to Acquire Serato” at [II.c].

¹²⁴ Commerce Commission interviews with [], [] and [].

¹²⁵ inMusic “inMusic’s Response to Serato Audio Research Limited’s Submission in Support of AlphaTheta Corporation’s Clearance Application to Acquire Serato” at [II.c] and Commerce Commission interview with [].

- 108.1 the enforceability of the SPA clauses, the incentives on ATC to comply with them, and the sellers to monitor and enforce them; and
- 108.2 the options available to hardware manufacturers to ensure ATC continues to offer them the integration of Serato software products.

Incentive to foreclose

What ATC submitted

- 109. The Applicant submitted that ATC would have no incentive to refuse to partner with other DJ hardware brands and/or make Serato's DJ software less attractive to rival DJ hardware brands.¹²⁹
- 110. As noted above, NERA did not consider that the merged entity would have the ability to foreclose but nevertheless included an assessment on whether it would have the incentive to foreclose. NERA's main conclusions were that:¹³⁰
 - 110.1 hardware margins are larger than software margins (which 'mechanically' indicates a high incentive to foreclose);
 - 110.2 the margins differed between expensive and inexpensive hardware, meaning the incentive to foreclose was higher for expensive hardware and lower for inexpensive hardware; and
 - 110.3 there is less likely to be an ability to foreclose high-end hardware since it often comes with embedded software. Moreover, as Pioneer DJ equipment is relatively expensive compared to other hardware providers, Serato customers using inexpensive hardware are more likely to switch software than buy more expensive hardware.

Our views

- 111. A firm will only rationally foreclose competitors if it is profitable to do so. If the merged entity attempted to foreclose rival DJ hardware providers, it creates a trade-off. If the merged entity attempted to foreclose rivals by refusing to allow Serato to integrate with other DJ hardware providers, it would have the following effect:
 - 111.1 the merged entity would lose profits from selling fewer Serato software licences to rival DJ hardware providers; but
 - 111.2 the merged entity would gain profits from all those customers that switched from buying a controller from rival DJ hardware providers to purchasing an ATC controller.

¹²⁹ The Application at [7.15]-[7.19].

¹³⁰ NERA Economic Consulting "AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm" at [1(c)(ii)].

112. The merged entity would have an incentive to foreclose if the expected profits gained in the controller market from foreclosing rival DJ hardware providers exceeds the expected profits lost in the DJ software market.
113. One means to test this is to use what is known as ‘vertical arithmetic’.¹³¹ There are two steps to the analysis.
- 113.1 By using the relevant margins for DJ hardware and software providers, one can calculate how many customers would need to switch from rival DJ hardware providers to ATC hardware to make foreclosure worthwhile (this is referred to as the ‘critical diversion ratio’). A high critical diversion ratio means that many customers would need to switch to make foreclosure worthwhile and vice versa.
- 113.2 Having calculated the critical diversion ratio, one then assesses whether the actual diversion ratio will exceed the critical diversion ratio. That is, we ask whether enough customers would in fact switch from rival DJ hardware providers to make foreclosure worthwhile.
114. At this stage we consider that the evidence indicates the merged entity may have an incentive to foreclose. The main reasons for this are that:
- 114.1 margins for DJ hardware are high compared to margins for DJ software (which means the potential gains are high compared to the potential losses); and
- 114.2 there may be many customers of the rival DJ hardware providers that would be willing to switch to ATC’s Pioneer DJ products because Serato software is so profitable (which increases the likelihood that the merged entity would realise the potential gains).
115. NERA’s report in support of ATC’s Application includes a model that calculates the critical diversion ratios using the merging parties’ data.¹³² NERA’s initial model estimated that the critical diversion ratio including all hardware was moderate at []. However, the critical diversion ratio differed significantly between the types of equipment. For example, the critical diversion ratio was:
- 115.1 relatively small at [] for more expensive hardware such as ‘all-in-ones’ (that is, indicating a higher incentive to foreclose); and
- 115.2 relatively large at [] for less expensive hardware such as a controllers (that is, indicating a lower incentive to foreclose).
116. Our view is that these estimates may overestimate the critical diversion ratios. NERA’s approach for most parts of the model seem reasonable. However, our view is

¹³¹ See for example Simon Bishop and Mike Walker *The Economics of EC Competition Law: Concepts, Applications and Measurement* (Sweet and Maxwell, 2010).

¹³² NERA Economic Consulting “AlphaTheta Corporation/Serato: unilateral effects and foreclosure theories of harm” at [Table 3.4].

that the expected margins for DJ software that the model uses are overstated. For example, we consider that the expected margins should take into account that some buyers of DJ hardware will not purchase a subscription to Serato Pro but will only use Serato DJ Lite.¹³³

117. Taking this into account reduces the estimated critical diversion ratio, the extent of which depends on the proportion of Serato DJ Lite customers that upgrade to Serato Pro. We believe that [] proportion would be likely to do so.¹³⁴ This means the critical diversion ratios for products that only come with Serato DJ Lite are likely to be []. For example, if one assumes that around [] of customers that use Serato DJ Lite will be converted to a paid subscription, NERA's model appears to estimate a critical diversion ratio for an ATC controller of [].¹³⁵
118. Having estimated the critical diversion ratios, the next step is to test whether the actual diversion ratio will exceed the critical diversion ratio. As noted, the diversion ratio is the number of customers that would switch from rival DJ hardware providers to ATC if Serato's DJ software no longer worked with the rival DJ hardware. A customer is more likely to switch if:
- 118.1 they are eager to continue to using Serato's DJ software; and
- 118.2 ATC can offer DJ hardware that is sufficiently attractive to the customer.
119. It is difficult to know what the actual diversion ratio is, since it requires data on where customers of rival DJ hardware providers would switch to if they switched way from the rival products. However, at this point, we consider the actual diversion ratio could exceed reasonable estimates of the critical diversion ratio, such as the [] estimated above for an ATC controller.
- 119.1 First, Serato's DJ software is highly popular with customers of DJ hardware and the evidence shows that there is strong customer inertia (see paragraph 867). Serato's revenues have [].¹³⁶ Therefore, a large proportion of customers of rival DJ hardware providers may seek to continue using Serato's DJ software.
- 119.2 Second, ATC supplies the leading brand of DJ hardware (Pioneer DJ). We estimate Pioneer DJ has a [] share of the controller market (around []) and has products at a wide range of price points. We consider that many

¹³³ Following feedback, NERA provided updated figures setting out a range of critical diversion ratios that depended on the proportion of customers that upgrade to Serato Pro. As noted, we consider that the evidence suggests a [] proportion of customers take up Serato Pro and therefore the critical diversion ratios are likely to be towards the [] bound of the range that NERA estimated.

¹³⁴ This is because []

¹³⁵ []

¹³⁶ See for example []

customers of rival DJ hardware providers will view ATC's products as a good alternative to their existing products.

120. NERA submitted that customers that purchase non-ATC hardware with Serato DJ Lite are unlikely to switch to ATC hardware because Serato DJ Lite is targeted at beginner DJs who use inexpensive hardware and these customers are unlikely to switch to ATC hardware which is more expensive.¹³⁷ However, we are unsure that this conclusion can be drawn.

120.1 At this point, we do not think one can assume that users of Serato DJ Lite do not strongly value being able to use that software. Even though it is free, users may develop a preference for using Serato and therefore upon their next purchase will seek a DJ hardware device that can be used with Serato.¹³⁸ Users may also desire to use Serato DJ Lite as they may have ambitions to start playing in clubs, at which time they will subscribe to Serato Pro.

120.2 Pioneer DJ offers products at a wide range of price points, including products towards entry level.¹³⁹ Furthermore, given Pioneer DJ's popularity (as illustrated by its market share), many customers that purchase entry-level hardware may well be willing to pay any extra required to buy a Pioneer DJ controller. We note that based on the critical diversion ratios only a small number of customers would need to make such a choice to make foreclosure worthwhile.

Adverse effect on competition

121. The ultimate question is whether the competition lost from potentially foreclosed competitors is sufficient to have the likely effect of substantially lessening competition in light of the remaining constraints. We are still assessing this point.

122. First, we are considering whether there are any counterstrategies that rivals could employ to defeat the foreclosure. At this point, it is unclear that any effective counterstrategies exist.

122.1 It is unlikely that hardware rivals would be able develop their own software in the short term due to the barriers to entry and expansion. This is discussed earlier in the Sol, but in summary:

122.1.1 Serato's DJ software has been developed over many years. It is likely that developing an equivalent software would be costly and time

¹³⁷ []

¹³⁸ If the customer switches DJ hardware at the end of the life of their existing device, the customer will not incur any additional financial cost from switching compared to continuing with the same DJ hardware brand.

¹³⁹ For example, the Pioneer DDJ-200 is currently retailing at \$399 at the Rockshop. See <https://www.rockshop.co.nz/pioneer-ddj-200-professional-performance-dj-controller-for-rekordbox-dj-ddj200> as at 5 January 2023.

consuming, without any guarantee that customers will accept the software.

122.1.2 Market participants have indicated that DJs are reluctant to switch between software providers.

122.2 It is unlikely that rivals would be able to compete effectively by supporting or acquiring another software provider. As noted above, the evidence does not suggest there are any other software providers that have the same brand strength as Serato's DJ software. rekordbox might have been an attractive DJ software for DJ hardware providers to partner with but would not be an option under a foreclosure strategy.

123. Second, we are considering whether there are any efficiencies or new innovations that could emerge that would offset the harm to competitors. For example, the merger might enable the merged entity to reduce prices (through the elimination of double marginalisation) or integrate products more effectively. While we will continue to assess these, efficiencies are rarely of the type, magnitude or credibility to place significant weight on.¹⁴⁰ Given we have concerns over unilateral effects, it is unclear any efficiencies would be passed on.
124. Third, we are considering whether there are any other factors that may constrain the merged entity from engaging in foreclosure. For example, any impact that foreclosure may have on ATC's credibility or reputation in the market, or any legal requirements on ATC to continue to supply Serato's DJ software to rivals.
125. We are also still considering the extent to which any foreclosure would affect consumers. For example, [] noted that if Serato's DJ software was no longer compatible with other DJ hardware products, given the existing strength of the Pioneer DJ and Serato brands, some consumers may not be affected at all.¹⁴¹ [] did however go on to note that for some consumers, foreclosure would remove personal preferences and choices.¹⁴² Consumers would also be affected if the loss of competition reduced innovation in the market.
126. We invite submissions on the ability and incentive the merged entity would have to foreclose DJ hardware competitors, as well as the likely effect such foreclosure would have on competition.

Vertical effects – DJ software

127. For DJ software, we have considered whether the merged entity:

¹⁴⁰ Commerce Commission *Mergers and Acquisitions Guidelines* (May 2022) at [3.119]

¹⁴¹ [].

¹⁴² *Ibid.*

- 127.1 would have the ability and incentive to make ATC's DJ hardware exclusive to Serato's DJ software and rekordbox software,¹⁴³ and, if so
- 127.2 whether such conduct would be likely to substantially lessen competition by reducing the ability of rivals to compete in the markets for the supply of DJ software.
128. At this stage, we consider that the Proposed Acquisition is unlikely to raise concerns that the merged entity would have the ability and incentive to foreclose its rivals in DJ software market, if this market is considered in isolation. However, we continue to consider whether foreclosure of rival DJ software providers would be rational as part of a strategy to foreclose rival DJ hardware providers.

What ATC submitted

129. ATC submitted that the Proposed Acquisition would not give it any greater ability or incentive to foreclose competition in the DJ software market than it has currently. ATC stated that:¹⁴⁴
- 129.1 it already has its own DJ software products, and if it was profitable (and possible) to refuse to allow rival DJ software to be used with its DJ hardware, it would do so; and
- 129.2 the ability to MIDI map (as discussed above) would allow consumers to use rival DJ software products with ATC's DJ hardware products.
130. NERA's report in support of ATC's Application conducted vertical arithmetic and found it was unlikely the merged entity would have the incentive to implement a foreclosure strategy.

Ability and incentive to foreclose

131. ATC is a significant competitor for the supply of DJ hardware products. Table 3 below sets out our estimate of global market shares for the supply of DJ controllers and all-in-one units.

¹⁴³ This could be considered either as input or customer foreclosure. For example, access to ATC hardware might be viewed by DJ software providers as a necessary input. On the other hand, it could be considered customer foreclosure on the basis that it may eliminate a potential sales channel for DJ software providers. Regardless of how the foreclosure is described the potential effect is the same. As such we do not consider it necessary to conclude on the type of foreclosure.

¹⁴⁴ The Application at [7.35-7.36].

Table 3 – sales of DJ controllers and all-in-one units

Name	CY2020		CY2021		CY2022	
	# units ('000)	Market share (%)	# units ('000)	Market share (%)	# units ('000)	Market share (%)
ATC	[
inMusic						
Reloop						
Roland						
Native Instruments						
<i>Total</i>]

*Source: Information provided by the market participants.
Note: Individual figures may not add to total due to rounding.*

132. We consider that ATC may have market power in the market for the supply of DJ hardware because of its [] market share and strong brand recognition. (We would reach a similar conclusion if the DJ hardware market was widened to include DJ players and mixers). We also understand that it may be technically feasible for ATC to prevent software integration.

132.1 [] noted that DJ hardware manufacturers can implement technical measures to restrict access of third-party software developers.¹⁴⁵ [

].¹⁴⁶

132.2 [] said that DJ hardware providers could insert an artificial block such as an encryption that would prevent integration of its software with the provider's DJ hardware, although providers could not encrypt hardware devices that use MIDI integration.¹⁴⁷

133. On balance, we consider that ATC is likely to have the ability to foreclose rival DJ software competitors. However, if this market is considered in isolation, it is unclear whether ATC would have the incentive to foreclose its DJ software competitors. This is because the margin on DJ hardware sales is high when compared to that of DJ software, so a large proportion of customers would need to be recaptured by ATC to make software foreclosure profitable.

¹⁴⁵ [].

¹⁴⁶ Ibid.

¹⁴⁷ Commerce Commission interview with [].

134. However, we are still considering whether ATC would be incentivised to foreclose to support a strategy to foreclose rival DJ hardware providers.
- 134.1 A means through which rival DJ hardware providers could try to avoid the foreclosure described earlier may be to partner with a DJ software provider or to form a vertically integrated hardware-software company.
- 134.2 There is a high fixed and sunk cost involved in developing software. An important means to get the scale required to achieve a sufficient return on that cost is to ensure software is available to as many DJs as possible. ATC could raise barriers to entry by refusing to interoperate its hardware with the software of rivals. Those rival DJ software providers may then be prevented from reaching scale to become a viable competitor, denying rival DJ hardware providers an option to partner with.
135. We invite submissions on the ability and incentive the merged entity would have to foreclose DJ software competitors, as well as the extent to which ATC would be incentivised to foreclose these competitors as part of a broader strategy to foreclose DJ hardware rivals.

Access to sensitive information

136. A merger that results in an acquirer accessing sensitive information from rivals could cause a substantial lessening of competition. Accessing this information could adversely affect the incentives of rivals to compete aggressively or facilitate coordination.
137. At this stage, we consider that the Proposed Acquisition raises concerns that the merged entity's access to sensitive information of rivals could substantially lessen competition for the supply of DJ hardware. As we explain below:
- 137.1 ATC may gain access to sensitive information such as upcoming innovations or customer information; and
- 137.2 this could reduce the constraint that rivals impose because:
- 137.2.1 rivals may be less incentivised to innovate if there is a risk that a major competitor (ATC) could appropriate those ideas; and
- 137.2.2 rivals may react by no longer working with Serato, which would make their products less attractive.

Views of the Applicant

138. ATC submitted that the Proposed Acquisition would not give it access to sensitive information that it could or would use to undermine its competitors. ATC submitted

that the only information Serato currently has access to (and therefore what ATC potentially would have access to with the Proposed Acquisition) is:¹⁴⁸

138.1 the hardware specification documents of the relevant hardware product;

138.2 the fee paid to Serato per unit; and

138.3 hardware and compiled firmware prior to release of the hardware product.

139. ATC submitted that none of this information would enable it to act in a way that it cannot already by reverse engineering its competitors’ DJ hardware specifications or estimating its competitors’ Serato royalties.¹⁴⁹

140. ATC also submitted that Serato will enter into confidentiality protocols with hardware partners designed to ensure that confidential information is only shared with certain Serato employees. ATC states that this information will not be able to be shared outside of these employees, including with ATC.¹⁵⁰

Proposed Acquisition may give ATC access to competitors’ sensitive information

141. The information we have received suggests that Serato appears to receive sensitive information through the hardware integration process. This includes (but may be not limited to) the following information.

141.1 []¹⁵¹

141.2 []¹⁵²

142. The extent of information that Serato currently accesses will differ depending on level of integration being sought and the point in the product release lifecycle the individual piece of hardware is at. For example, []¹⁵³

¹⁴⁸ The Application at [7.26]-[7.27].

¹⁴⁹ Ibid, at [7.28].

¹⁵⁰ Ibid, at [7.31].

¹⁵¹ Commerce Commission interviews with [] and [].

¹⁵² Commerce Commission interviews with [] and [].

¹⁵³ Commerce Commission interview with [].

143. ATC has submitted that it will put in place protocols to prevent information being shared between Serato and ATC’s DJ hardware operations. At this point we are not satisfied that there are sufficient safeguards in place to prevent the information being shared. For example,
 [
]¹⁵⁴
 [
]¹⁵⁵

Impact of access to sensitive information on competition

144. At this stage, we have concerns that the potential access to the sensitive information could adversely affect competition.
- 144.1 Innovation appears to be an important source of competition in the hardware and software markets. Rival DJ hardware providers appear to work closely with Serato and may share concepts many months in advance of release. [] concerned that Serato may share details of new innovations with Pioneer DJ [] and adversely affect their ability to compete on innovation.¹⁵⁶ The risk of ATC appropriating these ideas may reduce the incentive to innovate.
- 144.2 The risk of ATC accessing sensitive information may result in rivals not wishing to work with Serato (at least until the product has been launched). Given the importance of integration with Serato (discussed further at paragraph 977) this could make rivals’ products less attractive to customers and materially affect the ability of rivals to compete against ATC in the DJ hardware market.
145. ATC appears to hold a strong position in the DJ hardware market. The potential access to sensitive information may significantly inhibit the ability of rivals to compete against ATC and therefore reduce competition in the DJ hardware market.

Conclusion

146. At this point, we are concerned that the Proposed Acquisition would give the merged entity access to commercially sensitive information of its rivals and that this would adversely affect competition. We invite further submissions on this, including:
- 146.1 on the level of commercially sensitive information the merged entity would receive from hardware providers;

¹⁵⁴ Commerce Commission interview with [].

¹⁵⁵ Commerce Commission interview with [].

¹⁵⁶ Commerce Commission interviews with [] and [].

- 146.2 whether there are ways that could eliminate or reduce the risk of sensitive information being shared between Serato and ATC post-merger; and
- 146.3 the extent to which competition could be adversely affected if rivals did not share information with Serato until after a product's launch.

Next steps

147. We are currently scheduled to decide whether or not to give clearance to the Proposed Acquisition by **8 March 2024**. However, this date may change as our investigation progresses.¹⁵⁷ In particular, if we need to test and consider the issues identified above further, the decision date is likely to extend.
148. As part of our investigation, we are identifying and contacting parties that we consider will be able to help us assess the issues identified above.

Making a submission

149. We are continuing to undertake inquiries and seek information from industry participants about the impact of the Proposed Acquisition. We welcome any further evidence and other relevant information and documents that the parties or any other interested parties are able to provide regarding the issues identified in this Sol.
150. If you wish to make a submission, please send it to us at registrar@comcom.govt.nz with the reference "AlphaTheta/Serato" in the subject line of your email, or by mail to The Registrar, PO Box 2351, Wellington 6140. Please do so by close of business on **21 February 2024**.
151. If you would like to make a submission but face difficulties in doing so within the timeframe, please ensure that you register your interest with us at registrar@comcom.govt.nz so that we can work with you to accommodate your needs where possible.
152. Please clearly identify any confidential information contained in your submission and provide both a confidential and a public version. We will be publishing the public versions of all submissions on the Commission's website.
153. All information we receive is subject to the Official Information Act 1982 (OIA), under which there is a principle of availability. We recognise, however, that there may be good reason to withhold certain information contained in a submission under the OIA, for example in circumstances where disclosure would be likely to unreasonably prejudice the commercial position of the supplier or subject of the information.

¹⁵⁷ The Commission maintains a clearance register on our website at <https://comcom.govt.nz/case-register> where we update any changes to our deadlines and provide relevant documents.

Appendix: examples of DJ hardware

DJ controllers	 <p>Pioneer DDJ-FLX10</p>
Mixer	 <p>Pioneer DJM-S11</p>
CDJs/DJ Players	 <p>Pioneer DJ CDJ-3000</p>
All-in-one DJ systems	 <p>Pioneer XDJ-RR</p>
Turntable	 <p>Technics SL1200M7L</p>
Audio Interface	 <p>Denon DJ DS1</p>