PUBLIC VERSION

NOTICE SEEKING CLEARANCE OF A BUSINESS ACQUISITION PURSUANT TO SECTION 66 OF THE COMMERCE ACT 1986

6 October 2023

The Registrar
Business Acquisitions and Authorisations
Commerce Commission
PO Box 2351
Wellington

Pursuant to s66(1) of the Commerce Act 1986 notice is hereby given seeking **clearance** of a proposed business acquisition.

1. **EXECUTIVE SUMMARY**

- 1.1 AlphaTheta Corporation (ATC) seeks clearance to acquire 100% of the shares of Serato Audio Research Limited (Serato) pursuant to an agreement for the sale and purchase of shares (the Proposed Transaction).
- 1.2 ATC and Serato both operate in the DJ segment of the music industry. They both supply DJ software to end-users. ATC also manufactures and supplies DJ hardware products globally and to New Zealand. DJ software and DJ hardware can generally be used as standalone DJ tools or in conjunction with each other: DJs can choose to "DJ" (i.e., to mix pre-recorded tracks) using either just DJ software (i.e. using a DJ software application on a laptop, a DJ software App on a mobile/tablet or web-based software), just DJ hardware (e.g. with an all-in-one system), or a combination of DJ hardware and DJ software, depending on their individual preferences.
- 1.3 The Proposed Transaction will primarily allow ATC to benefit from Serato's experience in music production for its planned expansion into this segment of the music industry (ATC already supplies some music production hardware). The sale of Serato to ATC will also allow Serato's founders to retire in the knowledge that ATC intends for Serato to continue to operate as a separate business based in New Zealand.
- 1.4 The Proposed Transaction will not have the effect, or likely effect, of substantially lessening competition in the market for the supply of DJ software to end-users in New Zealand because:
 - (a) the parties' combined share of the global DJ software market is approximately [], which is well below any level that could potentially raise any competition concerns;
 - (b) the DJ software industry is highly dynamic and evolving rapidly, which will create opportunities for new entrants and existing competitors to expand. In particular, DJ software Apps have emerged as credible and viable alternatives to legacy DJ software applications and stand-alone DJ hardware. DJ software Apps are rapidly gaining market share and present a significant competitive threat, which will continue to increase post-Proposed Transaction;
 - (c) there is vigorous competition in the DJ software market from a multitude of other DJ software providers which will continue to constrain ATC post-Proposed Transaction. These other suppliers include larger DJ software providers such as edjing mix, djay, DiscDJ3D, CrossDJ, Traktor and VirtualDJ as well as a multitude of smaller providers;
 - (d) barriers to entry and expansion for the supply of DJ software are low and therefore ATC will also be constrained by the threat of new entry;
 - (e) ATC will continue to be constrained by other options available to DJs, including the ability for DJs to perform using only DJ hardware (such as CDJs or all-in-one systems); and
 - (f) the Proposed Transaction will not increase the risk of co-ordinated effects.
- 1.5 The Proposed Transaction will also not give rise to any vertical competition concerns because:
 - (a) the Proposed Transaction will not give ATC the ability or incentive to foreclose competition in the DJ hardware market by refusing to allow Serato to operate with rival DJ hardware given that (amongst other things):

- (i) rival DJ hardware end users can choose to acquire one of the numerous other DJ software products in the market that match or better Serato's features;
- (ii) rival DJ hardware manufacturers already have, or can develop, their own DJ software;
- (iii) Serato branding or perceived compatibility is not a material driver of DJ hardware sales in New Zealand or globally, and it is not a 'must have' to compete;
- (iv) Serato's brand is, in any event, declining as DJ software Apps increase in popularity; and
- ATC would in any event have limited technical ability to prevent end-users from using Serato in its current state with rival DJ hardware which has a Seratosupported sound card;
- (b) there is no incentive for ATC to refuse to allow Serato to partner with other DJ hardware brands or make Serato less attractive for other DJ brands to partner with because terminating Serato's partnerships would lead to an immediate loss of revenue and making Serato less attractive to its partners is likely to result in them partnering with one (or more) of the numerous other DJ software products in the market;
- (c) ATC's contractual commitments under the SPA preclude ATC from refusing to allow Serato to partner with other DJ hardware brands or making Serato less attractive to partner with; and
- (d) ATC will not have the ability or incentive to use competitively sensitive information held by Serato about its hardware partners to undermine their ability to compete, as (amongst other things) there is minimal sensitive information supplied to Serato by ATC's competitors under their partnership arrangements, using such information would cause significant reputational damage, Serato has contractual commitments to protect its partners' confidential information and Serato will continue to operate as a standalone business post-Proposed Transaction. ATC will, in any event, put in place a range of measures after closing to provide Serato's partners with additional comfort that there is no risk that sensitive information will be shared by Serato with ATC.

2. APPLICANT AND OTHER PARTIES

The Applicant

- 2.1 This notice seeking clearance is given by ATC.
- 2.2 Contact details for ATC are:

Postal address: Yokohama i-Mark Place 6th Floor, 4-4-5 Minatomirai, Nishi-ku,

Yokohama, Kanagawa 220-0012 Japan

Physical address: Yokohama i-Mark Place 6th Floor, 4-4-5 Minatomirai, Nishi-ku,

Yokohama, Kanagawa 220-0012 Japan

Telephone: +81-45-522-5400

Web address: https://alphatheta.com/en/

Contact person: []

2.3 ATC is majority owned by Noritsu Koki Co., Limited.

2.4 All correspondence and notices in respect of this application should be directed in the first instance to:

MinterEllisonRuddWatts Level 22, PwC Tower 15 Customs Street West Auckland 1010

Jennifer HambletonApril PaynePartnerSenior Associate+64 9 353 9794+64 9 353 9946

jennifer.hambleton@minterellison.co.nz april.payne@minterellison.co.nz

The other party

- 2.5 The other party is Serato.
- 2.6 Contact details for Serato are:

Postal address: Level 2, 8 Brown Street, Ponsonby, Auckland, 1011, New Zealand Physical address: Level 2, 8 Brown Street, Ponsonby, Auckland, 1011, New Zealand

E-mail: []

Web address: https://serato.com/
Contact person: Bruce Johnson (CFO)

2.7 All correspondence and notices in respect of this application should be directed in the first instance to:

Avid.Legal Limited Level 2 32 Blair Street Wellington 6011 PO Box 11677 Wellington 6142

Bruno Bordignon Tony Davis

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3. TRANSACTION DETAILS

The proposed transaction

- 3.1 ATC proposes to acquire 100% of the shares of Serato pursuant to an Agreement for Sale and Purchase of Shares dated 11 July 2023 (**SPA**). A copy of the confidential SPA, together with two amendment letters, are included as Confidential Annexures 1-3.
- 3.2 The initial consideration for the sale of the fully diluted share capital of Serato under the Proposed Transaction is approximately US\$65million (subject to customary post-closing adjustments). The SPA also contains a significant contingent consideration mechanism which is based on the future performance of Serato, which is expected to represent a material

portion of the consideration. Under this mechanism, two uncapped contingent consideration payments may be payable to the sellers based on Serato's financial performance during the financial years ending [] (the **Relevant Period**).

3.3	As a consequence,	the SPA	imposes	several	post-compl	etion	obligations	on ATC	that	are
	designed to ensure	that ATC	continues	s to allov	v the Serato	busii	ness []:			

- (a) $[]^1$;
- (b) $[]^2;$
- (c) $[]^3$.
- 3.4 The SPA is conditional on the receipt of regulatory approvals (including receipt of clearance from the Commerce Commission). ATC received approval from the Overseas Investment Office on 7 September 2023.
- 3.5 The parties expect completion to occur as soon as practicable when all conditions precedent have been satisfied.
- 3.6 The change in organisational structure upon completion of the Proposed Transaction is set out in the diagrams below.

[]

[]

The rationale for the transaction

- 3.7 The Proposed Transaction will result in the combination of ATC's and Serato's largely complementary businesses.
- 3.8 From ATC's perspective, the key driver for the Proposed Transaction is that it will enable ATC to benefit from Serato's experience in the music production segment of the music industry to expand its presence in this fast-growing market. ATC has taken the first steps in this direction by designing, manufacturing, and beginning to sell its music production hardware under the brand name, TORIAZ. ATC intends to utilise Serato's music production knowledge and experience, learning from the music production side of its business. The global music production industry is much bigger than the global DJ music industry and presents significant opportunities for growth. []. ATC has partnered with Serato for more than 10 years and knows its products well.
- ATC intends to continue to operate Serato as a standalone business based in New Zealand. ATC will bring much needed capital to the Serato business to enable it to continue to compete in the DJ industry particularly with regard to rapidly growing DJ software App competitors, given that Serato does not currently offer a standalone App, and reduce its reliance on New Zealand Government grants. The Proposed Transaction will also result in the continuance and likely expansion of stable employment opportunities for Serato staff as Serato's existence as a standalone business in New Zealand continues and likely grows.

¹ Schedule 11, cl 6.2.4. [].

² Schedule 11, cl 6.2.9.

³ Schedule 11, cl 6.1

3.10 From Serato's perspective, the Proposed Transaction came about due to []. One of the key reasons why Serato's shareholders accepted ATC's bid was [].

Counterfactual

- 3.11 Absent the Proposed Transaction, it is likely that Serato would be [].
- 3.12 ATC does not have any visibility of [], and whether they would continue to operate Serato as it is currently, including from New Zealand. Given this, ATC has proceeded on the assumption that, in the counterfactual, Serato will continue to operate as it does currently [] and ATC will continue to partner with Serato as it has done for more than 10 years.
- 3.13 Serato [] in the counterfactual will face the same competitive challenges as it will under ATC ownership in the factual. In particular, Serato will need to respond to the emergence of DJ software Apps, which are growing in popularity amongst DJs of all types. Serato's current owners see ATC as being in a position to fund the additional capital investment required to meet this competitive challenge, whereas there is a risk that this would not be the case [] in the counterfactual.

Other competition agencies that are being notified

3.14 []. No competition agencies in other jurisdictions have been or will be notified of the Proposed Transaction.

4. THE ACTIVITIES OF THE PARTIES TO THE TRANSACTION

The Applicant

- 4.1 ATC, formerly Pioneer DJ Corporation, is a global company with its registered office in Yokohama City, Japan. ATC develops, manufactures, and sells DJ software and hardware and audio hardware. It also sells music production hardware (such as samplers) and provides DJ classes and events in some international markets.
- 4.2 ATC employs approximately 470 employees and is a majority owned subsidiary of Noritsu Koki Co., Limited, a Japanese holding company listed on the Tokyo Stock Exchange. Noritsu Koki Co., Limited acquired ATC in April 2020.

DJ Software

4.3 ATC supplies its DJ software, rekordbox and WeDJ, directly to end-users.

rekordbox

4.4 rekordbox is a DJ software application and App available for download on PCs, laptops, and mobile/tablet devices. The key features of the rekordbox software application and App are:

(a) music management (users can organise tracks in different playlists, set cue points⁴ and loops⁵ and upload tracks and playlists to the "cloud" which are then accessible from each device signed into the same rekordbox account);

⁴ Cue points are markers that are used in DJ software to highlight a specific part of the track.

⁵ Looping is where a user selects a section of a track and tells the software to play it over and over again.

- (b) music analysis (rekordbox can detect and analyse the beats-per-minute, key and phrases in a track to assist with mixing, and on various plans can also detect and display the vocal position of a track on-screen); and
- (c) track-mixing (rekordbox allows users to mix different recorded tracks together).
- 4.5 The rekordbox software application (but not the App) also allows users to export tracks and playlists for use on DJ hardware (without needing to be connected to rekordbox) during performances.
- 4.6 rekordbox can be used as standalone DJ software or can also be used with DJ hardware.
- 4.7 The rekordbox software application can be purchased by end-users on the following plans through a monthly or yearly subscription (note that the rekordbox software App has differently priced weekly, monthly and yearly subscription plans):⁶
 - (a) <u>Professional</u>: Allows users to sync their rekordbox library via the cloud with unlimited cloud storage, provides full access to all music analysis features, allows software to be controlled with DJ hardware and can be activated on up to 8 devices (laptops, computers, mobile/tablet devices).
 - (b) <u>Creative:</u> Allows users to sync their rekordbox library via the cloud (but without unlimited cloud storage), provides full access to all music analysis features, allows software to be controlled with DJ hardware and can be activated on up to 4 devices.
 - (c) <u>Core:</u> Allows limited use of cloud library sync, same music analysis features as Professional/Creative except vocal position detection and display is unavailable and edited tracks and sequences cannot be saved. Allows software to be controlled with DJ hardware and can be activated on up to 2 devices.
 - (d) Free: Allows limited use of cloud library sync and standard beats-perminute/key/phrase detection but cannot control software using DJ hardware. If a "Hardware unlock device" is purchased (these are certain ATC players, all-in-one DJ systems, mixers, interfaces) some "Core" plan features can be used also.
- 4.8 [] under all plans, users are required to separately download rekordbox. All paid rekordbox plans (Core, Creative and Professional) are sold separately (not bundled) to ATC's hardware.
- 4.9 ATC's total revenue generated from New Zealand-based rekordbox subscribers in the 2022 calendar year was approx. []. ATC's total software revenue in the 2022 calendar year was approximately [] globally (based on yen132.43 to US\$1, an average yearly TTS exchange rate for the calendar year 2022).

WeDJ Mobile/Tablet Software App

- 4.10 ATC also supplies a mobile/tablet-only DJ software App called "WeDJ". WeDJ can be used for beginner DJs who want to start mixing tracks and mobile DJs who want to DJ on the go. WeDJ offers similar core features as rekordbox to mix music. The key features of WeDJ are:
 - (a) the ability to access downloaded tracks available on the mobile/tablet device and through paid music subscription services;

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⁶ rekordbox "Plans & pricing" < https://rekordbox.com/en/plan/>.

- (b) music analysis (analysing beat positions, beats-per-minute, key and waveforms);
- (c) track mixing and additional performance features such as reverb, filter and echo; and
- (d) allows for users to record DJ performances.
- 4.11 The App can be used with some of ATC's DJ hardware, such as the Pioneer DDJ-200, DDJ WeGO4, and DDJ WeGO3 DJ controllers and, although ATC does not provide any user support for the use of the App with other DJ hardware products, it can be used with other DJ hardware.
- 4.12 The basic version of WeDJ is free for iPhone, and US\$4.99 for iPad. Users can make additional purchases in-App to access more features such as effects and auto mixes for US\$14.99.

DJ Hardware

- 4.13 ATC sells its DJ hardware products (DJ mixers, controllers, all-in-one DJ systems, players etc) and audio hardware products (headphones, and monitors) under the Pioneer DJ brand through a single wholesaler to New Zealand based retailers. The New Zealand based retailers that supply ATC's DJ hardware are:
 - (a) Rockshop (https://www.rockshop.co.nz);
 - (b) Mix Foundation (https://www.mixfoundation.co.nz/);
 - (c) Rubber Monkey (https://www.rubbermonkey.co.nz/); and
 - (d) Music Hood (https://www.musichood.co.nz/).
- 4.14 New Zealand consumers may also acquire ATC DJ hardware through other international retailers who deliver to New Zealand, including Amazon. ATC does not supply its DJ hardware direct to consumers in New Zealand.
- 4.15 ATC, as a Serato partner, sells some of its hardware products branded with the "Serato" name together with its own brands (i.e., "Pioneer DJ", "rekordbox" etc) for marketing purposes. Of its Serato-branded DJ hardware, newer models are sold with free access to (i.e., bundled with) Serato DJ Pro (which costs US\$249 for a perpetual licence if purchased separately).
- 4.16 ATC's total revenue from New Zealand DJ hardware sales⁷ (across all products) in the 2022 calendar year was approximately [], and units sold was []. Set out below is a breakdown of ATC's New Zealand DJ hardware sales revenue (in USD) and units sold by category.

Category	Total Revenue	Revenue from sales of hardware with Serato Brand		Revenue from sales of hardware with Serato DJ Pro		
Controllers	[]	[]	[]	[]	[]	
Players	[]	[]	[]	[]	[]	
All-in-one DJ systems	[]	[]	[]	[]	[]	

⁷ This figure does not include sales to New Zealand consumers by retailers that are not based in New Zealand, such as Amazon

Mixers	[]	[]	[]	[]	[]
Monitors	[]	[]	[]	[]	[]
Headphones	[]	[]	[]	[]	[]
Total	[]	[]	[]	[]	[]

Category	Total Units Sold	Units Sold with Serato Brand		Units Sold with Serato DJ Pro	
Controllers	[]	[]	[]	[]	[]
Players	[]	[]	[]	[]	[]
All-in-one DJ systems	[]	[]	[]	[]	[]
Mixers	[]	[]	[]	[]	[]
Monitors	[]	[]	[]	[]	[]
Headphones	[]	[]	[]	[]	[]
Total	[]	[]	[]	[]	[]

4.17 The table below sets out the number of DJ hardware models sold to ATC's New Zealand distributor in the 2022 calendar year with either Serato branding or bundled with Serato DJ Pro.

Category	Total number of models	Models with Sera		Models offered with Serato DJ Pro	
Controllers	[]	[]	[]	[]	[]
Players	[]	[]	[]	[]	[]
All-in-one DJ systems	[]	[]	[]	[]	[]
Mixers	[]	[]	[]	[]	[]
Monitors	[]	[]	[]	[]	[]
Headphones	[]	[]	[]	[]	[]
Total	[]	[]	[]	[]	[]

4.18 [].

Music production hardware

4.19 ATC also sells music production equipment, such as its Multitrack Sampler and Analog Synthesizer, including its new "TORIAZ" range of professional products aimed at live performers and DJs as well as studio producers (the TORIAZ range includes a sampler, synthesizer and sequencer). These products are used for the generation and shaping of sounds through soundwaves. ATC is still in the early stages of establishing a presence in the music production industry and, as explained earlier, the Proposed Transaction will assist ATC with its expansion into this industry.

Other information

- 4.20 Further information about ATC can be found at https://alphatheta.com.
- 4.21 We provide, in Confidential Annexure 4, ATC's total sales revenues and volumes in New Zealand in relation to its DJ software and DJ hardware products for the past three financial years. We have not provided capacity data as this information is not relevant to the Proposed Transaction.
- 4.22 A copy of ATC's most recent annual report, audited financial statements and management accounts for the financial year ended on 31 December 2022 is provided at Confidential Annexure 5.
- 4.23 Confidential documents prepared for or seen by ATC's Board since January 2021 which refer to industry conditions, market conditions and competitors were provided to the Commission on 28 August 2023.
- 4.24 A list of all trade or industry associations in which ATC participates is set out in Annexure 7.

The other party

- 4.25 Serato is a music software business based in Auckland, New Zealand. It provides DJ software and music production software to end-users and hardware manufacturers in approximately 190 countries globally.
- 4.26 Approximately []% of Serato's global revenue is derived from sales to end-users/subscribers (either directly from Serato or through its retail channels, and the remaining []% is derived from partnering arrangements with DJ hardware manufacturers.
- 4.27 Serato's DJ software products comprise:
 - (a) Serato DJ Pro: this product is marketed as Serato's flagship professional DJ software which caters to DJs of all levels, from hobbyists to professionals. Serato DJ Pro allows users to mix audio digital files in an environment akin to what DJs were doing in the traditional days of vinyl DJing. The main features of Serato DJ Pro are music management, music analysis, and playing and mixing music. It easily facilitates the creation of instrumentals, smooth transitions and inventive mashups by isolating the vocals, melodies, basslines, and drums. Serato DJ Pro can be bought outright for US\$249 or purchased on a rolling monthly subscription for US\$9.99 monthly;
 - (b) <u>Serato DJ Suite:</u> this product is an all-in-one suite of expansion packs to Serato DJ Pro that provide enhanced functionality. Purchasing Serato DJ Suite gives the user access to Serato DJ Pro and all expansion packs including Serato Play (allows DJing without hardware), Serato DVS (allows DJs to connect turntables or media players such as CDJs to laptops and use them to control Serato DJ Pro), Serato DJ Club Kit (plug-and-play access to a number of supported mixers), Serato Video (allows DJs to incorporate visual effects), Serato FX (access to custom sound effects), Serato Flip (allows DJs to make edits and remixes directly in Serato DJ Pro) and Serato Pitch 'n Time DJ (time-stretching and pitch-shifting technology). Serato DJ Suite can be bought outright for US\$449 or purchased on a rolling monthly subscription for US\$14.99 monthly;
 - (c) <u>Serato DJ Lite:</u> this product is marketed as Serato's introductory DJ software for learning and serves as Serato's "freemium" offering which may result in users upgrading to one of the paid versions described above. It comes with a practice mode

that does not require any hardware, making it an accessible entry point for aspiring DJs. Serato DJ Lite can be downloaded for free. Users cannot record DJ mixes using this free software; and

- (d) <u>Serato Remote</u>: this product is a basic iOS App designed to integrate with Serato DJ Pro. Essentially, the App serves as an extension of the laptop software, allowing users to control specific functions from their mobile or tablet device. This app does not function as standalone DJ software; instead, it can only be used when connected to a laptop running Serato DJ Pro.
- 4.28 Serato music production software comprises:
 - (a) <u>Serato Studio:</u> this is an audio editing solution that helps DJs and music producers generate remixes and mashups on a single platform;
 - (b) <u>Serato Sample:</u> a sampler plugin which allows producers to quickly find, chop, keyshift and time-stretch samples;
 - (c) <u>Serato Pitch 'n Time:</u> a plugin which provides time-stretching and pitch-shifting technology; and
 - (d) <u>Serato Visualizer</u>: an online tool for creating visual content to accompany music.
- Serato's DJ hardware manufacturer partners include ATC, InMusic, Hercules, Reloop and Roland. Under its partnership arrangements Serato grants the manufacturer a non-exclusive licence to distribute hardware bearing Serato's branding⁸ and access to Serato's DJ software (in some cases with a "plug and play" licence to use that particular piece of hardware with Serato DJ Pro, without the end-user needing to purchase a separate Serato DJ Pro licence to use that hardware with Serato DJ Pro, and in other cases access to Serato DJ Lite), in return for a fixed per-unit fee for each piece of partnered hardware sold (which varies from product to product). Prior to any partnered hardware being marketed as being "officially supported" by Serato, Serato will ensure that all of the relevant software features are fully compatible with that hardware and will work immediately with the hardware once the software is downloaded (without the need for further configuration). As explained at paragraph [7.6(a)] below, Serato is MIDI compatible and therefore it is also possible to "map" Serato to all DJ hardware devices which either contain a Serato-supported sound card or are connected to another hardware device that has a Serato-supported sound card.
- 4.30 Serato also sells vinyl records and other merchandise to music retailers. It does not manufacture or supply DJ or music production hardware.
- 4.31 Serato's global revenue from all sources in FY23 was just over []. Serato's total New Zealand revenue for sales direct to end-users (across all products including DJ software) for 1 April 2022 to 31 March 2023 was only [].
- 4.32 We provide in Confidential Annexure 8 Serato's total sales revenues and volumes in New Zealand in relation to its DJ software for the past three financial years.

⁸ The specific branding and promotional requirements differ between partners. In some instances, the manufacturer must ensure the hardware prominently displays Serato's branding and the manufacturer will promote Serato as the software of choice in relation to that hardware (but other DJ software products will remain compatible and may be marketed as alternative options). In other instances, the manufacturer will promote its own DJ software, but will hold out Serato as an alternative option (often alongside other third-party DJ software products).

4.33 Serato is a member of the National Association of Music Merchants (NAMM), a US organisation which arranges an annual trade show. Serato does not participate in any other trade or industry associations.

Horizontal overlap between the parties

- 4.34 ATC and Serato both operate in the DJ segment of the music industry. The area of overlap is in relation to the supply of DJ software (encompassing both (i) software applications, and (ii) Apps) to end-users.
- 4.35 The proposed transaction will not result in any horizontal aggregation in relation to the supply of DJ hardware, music production hardware or music production software.

5. INDUSTRY CONTEXT AND RELEVANT MARKETS

Industry overview

- 5.1 The term "DJ" (Disc Jockey) is used to describe someone who mixes pre-made recorded music from any source (historically vinyl records, cassettes, CDs, or nowadays digital audio files stored on a USB stick, laptop or the Cloud, or streamed) to play for people at clubs, parties and other events (or at home, for hobbyists). There are no strict DJ categories; however, generally DJs can be grouped into one or more of the following:⁹
 - (a) <u>Club DJs:</u> Club DJs mix music for sets (a "set" is a complete performance by a DJ) at night clubs. Generally, Club DJs select tracks to play on the spot and mix the tracks together to match the dynamic of the crowd, using (among other things) beatmatching. As a result, Club DJs need to know how to mix songs in real-time.
 - (b) Event/Mobile DJs: Event DJs play for specific events (e.g., weddings, corporate events) and may be required to play specific records upon customer request (conversely, Club DJs generally have more creative freedom in this regard, although they may also be expected to play music within a specific genre).
 - (c) <u>Touring DJs:</u> Touring DJs are DJs who have become popular enough to tour and play at festivals or concerts. Examples of touring DJs include David Guetta, Diplo and Tiesto. It is not uncommon for touring DJs to also work as music producers and produce their own tracks for DJing.
 - (d) <u>Bedroom/hobby DJs:</u> This includes beginner DJs (often called "bedroom DJs") and DJs who DJ only as a hobby and do not DJ for profit. Whilst the term "bedroom DJ" suggests a lack of skill, there is a degree of skill required by all DJs especially when learning how to use DJ software and hardware regardless of whether they are intended to DJ only as a hobby or trying to progress into DJing as a career.¹⁰
- 5.2 The basic key requirements to DJ are:
 - (a) access to recorded tracks for DJing (either by purchasing music or accessing it through music streaming services);

⁹ Andrew Siemon "What's the Difference Between A Music Producer And A DJ" Producer Society < <a href="https://producersociety.com/difference-between-music-producer-between-music-

dj/#:~:text=A%20producer%20uses%20software%20and,%2C%20parties%2C%20and%20other%20gatherings.>.

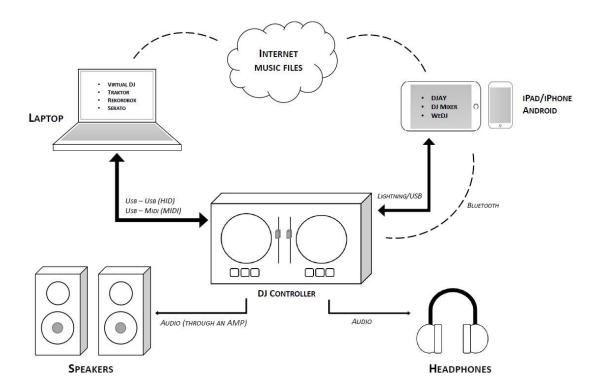
¹⁰ Dex Jones "The Ultimate DJing Guide: How To Start DJing from Your Bedroom" DJ Tech Reviews < https://djtechreviews.com/djtips/djing#:~:text=Essentially%2C%20bedroom%20DJing%20is%20the,practice%2C%20and%20hone%20their%20skills.>.

- (b) the ability to mix recorded tracks (using DJ hardware such as mixers, all-in-one systems, or controllers, mobile devices, or virtually using DJ software); and
- (c) headphones and/or speakers to hear and play the tracks.
- 5.3 DJ software has two main features: mixing¹¹ music and editing or remixing¹² music. Before DJ software was developed and became prominently used, a DJ needed DJ hardware to access recorded tracks (originally through vinyl records played on turntables and later on CDs) and mix tracks (using DJ mixers).
- 5.4 DJ hardware, alone, can "mix" music (including adding effects or altering speed) but cannot edit or remix it. With the advent of DJ software and digital audio files, DJs can now:
 - (a) access and "mix" tracks virtually, using their PC/laptop or mobile device (such as a phone or tablet), without the need for DJ hardware; and
 - (b) "edit" and "remix" music to be mixed later.
- 5.5 DJs can simply plug their laptop into or connect their mobile device (e.g., via Bluetooth or an AUX cable) to a speaker and perform using DJ software to mix and play music.
- 5.6 Most professional DJs such as Tour and Club DJs, however, perform sets using DJ hardware (with the manufacturer's embedded software) in combination with USB sticks (containing music which may have been pre-edited using DJ software).

¹¹ Mixing refers to playing two or more tracks at the same time and blending them.

¹² A remix is created when a producer (remixer) alters the music stems in terms of tempo, beat, effects, etc to essentially create a new track. https://www.musicgateway.com/blog/how-to/the-importance-of-a-remix

5.7 The most common set up for other DJ categories for DJing is to use a laptop or mobile device running DJ software, which is plugged into DJ hardware for easy control. The following diagram shows a simplified version of how laptops/mobiles/tablets can be used in conjunction with DJ hardware (at a minimum, a DJ controller or 2 CDJs and a mixer, or an all-in-one system) in order to DJ live and the other basic hardware required for these live sets (namely, headphones and speakers). This is only one of the ways that DJs may choose to DJ, and paragraphs 5.5 and 5.6 above describe the other ways.



DJ Software

- 5.8 Complete DJ software allows users to analyse digital tracks, virtually "mix" them, edit them to add additional special DJ effects and store the new remixed track on a computer or mobile device/tablet. This type of DJ software successfully emulates the traditional way in which DJs remixed tracks with a physical DJ mixing deck (a "deck" refers to DJ turntables) and vinyl records but also allows DJs to edit/remix music, which takes DJ software beyond the capabilities of traditional DJ hardware. DJ software providers may license their software for free¹³ or via a monthly or yearly subscription or sell perpetual licences.
- 5.9 There are also software developers who create applications intended to work alongside music production and DJ software which carry out a specific task or effect. These applications are often used by DJs in conjunction with DJ software; however, they would not be considered "complete" forms of DJ software as they do not allow users to access, mix, edit and listen to tracks.

¹³ Most 'free' software will serve advertising to their users or have locked features which a user needs to purchase.

- 5.10 The DJ software industry is dynamic and highly competitive with many DJ software applications (which are used on computers, either through downloading applications or accessing web-based software 14) and Apps (which are used on mobile phones and tablets) available in the market, providing DJs with significant choice. There are a range of DJ software applications and Apps, from 'basic' software applications/Apps that have limited functionality though to more complex applications/Apps with many features and enhanced functionality.
- 5.11 While previously DJ software applications were preferred by DJs, improved capabilities on mobile devices such as phones and tablets and improved processing power means that DJ software Apps have become increasingly popular, driving significant growth in App usage. A review of the estimated monthly active user (MAU) data on data.ai shows that a significant number of DJ sessions are carried out by DJs using their mobile phone or tablet not only to DJ at home, clubs and events, but also to prepare for DJing instead of using a laptop or desktop computer.
- 5.12 Like many other software industries, DJ software developers need to continually innovate to remain competitive. Developers regularly introduce new features and functionality, and seek to improve the usability of their product to attract and retain users. For example, Stems (a term used in the audio industry to denote different audio sources) is a relatively new feature introduced by developers in DJ software. Traktor first implemented the idea in the DJ software context in 2015. djay released a software algorithm to dynamically separate the stems in 2020 called Neural Mix, and virtual DJ and Serato followed in 2022 (virtual DJ released its Realtime Stems Separations and Serato released (Stems)). rekordbox introduced its stems function called "Track separation" in 2023.
- 5.13 ATC releases several minor updates of rekordbox every year and major updates of rekordbox every two to three years. The product life cycle of Apps is even shorter than that of application software. edjing for example has released 7 versions of its app in the last 9 years amounting to one update every 1.3 years.
- 5.14 An end-user can always choose which DJ software to acquire and use it with their chosen hardware because DJ software is sold separately to end-users.
- While the use of DJ software is optional for certain DJ hardware devices (namely, 5.15 players/CDJs with a mixer and all-in-one systems which are manufactured with software already embedded), DJs can elect to use third party DJ software on a laptop or other device which is then connected to these DJ hardware devices which act as DJ controllers. Embedded software (the proprietary software of the hardware manufacturer) has all the features it needs for DJ performances. It is visible on screens or jogs that are part of the hardware and allows users to perform the same core tasks that they can undertake using DJ software. However, DJ software has additional features such as export and edit features that are not relevant when performing but are useful tools for performance preparation. DJ software is also more user-friendly for less experienced DJs, enabling them to produce more sophisticated and complex sounds (like professional DJs). Many professional DJs still prefer to use only the DJ hardware which has embedded software while performing (and not separate DJ software), since it eliminates any performance interruption that may be caused by connection issues, and software freezes, as well as giving them the convenience of showing up to a club with one set of gear (DJ hardware) and data in a USB stick (audio files).
- 5.16 Generally, DJ software sold directly to users is intentionally designed to be used with any DJ hardware regardless of manufacturer, despite some DJ hardware being marketed as specifically 'compatible' with certain DJ software. This universal compatibility is made

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¹⁴ For example, Beatport which markets itself as the world's first web based DJ software (https://dj.beatport.com/home).

possible through adherence to the same universal music industry technical standard, Musical Instrument Digital Interface (**MIDI**). MIDI serves as a universal protocol connecting electronic instruments, computers and audio devices to communicate with each other for playing, editing and recording music. This interoperability can be likened to the way an MP3 can be played on a range of audio output devices regardless of their make or model. Where DJ hardware is sold with software or marketed as compatible with certain software, it can be used immediately with full functionality. Where hardware is not explicitly marketed as compatible with certain software, users may need to perform some additional configuration (commonly referred to as "mapping") but can still be made to work. There are, however, some exceptions to this general rule.

- 5.17 ATC is now aware that Serato software has a unique requirement in that a Serato-supported sound card is required to activate the software. This configuration primarily reflects a strategic position taken by Serato by allowing it to ensure sound quality and, with it, the reputation of its software. However, this approach has competitive downside. For example, it can mean there is a delay before Serato software is available for use in association with newly released hardware. Accordingly, in both the factual and counterfactual there will be ongoing consideration of whether Serato software should be reconfigured to reflect an open design, which may increase uptake of the software (at least in the short term), but risks compromising the quality of the user experience, which may have adverse consequences for the brand over the medium or longer term.
- 5.18 Further to the above, the advanced paid versions of Engine DJ and DJUCED appear to be "hardware locked" to their own DJ hardware products.
- 5.19 The MIDI standard is a well-established and a long running feature of the music industry. It would be unthinkable for ATC to no longer support the MIDI standard on future hardware products because ATC's hardware products communicate digitally with other DJ hardware (i.e., effectors, samplers, and more) and DJ software (i.e., rekordbox, Serato or others) for seamless communication that the standard provides. If products (hardware and software) are claimed to be compatible, the necessary mapping has already been completed unless there are coding bugs. If they are not explicitly marketed as compatible, additional mapping may be required. Even if software is locked to particular hardware products, the hardware will likely need to be able to communicate the digital music from the software over the MIDI standard with other hardware products that are not locked.

DJ Hardware

5.20 DJ hardware comprises the following types of equipment:

Product	Description
DJ mixers Pioneer DJM750K MK2 Pro Audio 4 Ch DJ Mixer with Effects & Midi	DJ mixers are a type of audio mixing console used to control and manipulate different audio signals which are then played through speakers or other audio devices. DJ mixers are often used to make transitions from one song to another when playing records. To "mix" audio signals, DJ mixers need an audio input/source which can range from record turntables, compact cassettes, CDJs to DJ software (on a laptop, a mobile or a tablet). DJ mixers allow the DJ to use headphones to preview the next song before playing it to the audience. DJ mixers do not need a computer or DJ software to run.

Product	Description
	·
DJ controllers Pioneer DDJ-FLX10	A DJ Controller is a portable all-in-one device containing two turntables purpose built to control DJ software (on a laptop, a mobile or a tablet). Once a DJ controller is connected to a relevant device, DJs can control the DJ software to drag and drop MP3 music files "onto" each turntable. DJ controllers enable a DJ to emulate the traditional DJ mixer and turntables on a single piece of equipment. Some DJ controllers have a built-in mixer, others use the connected laptop or computer as the "mixer". DJ controllers are, in general, seen as affordable in price compared to CDJs, and all-in-one systems, but some controllers (those that come with a lot of features) can be quite expensive.
Piolieei DD3-FLX10	
CDJs/DJ Players	CDJs are a specialised digital music player for Djing which were originally designed to play music from CDs but can now play digital music. Since proprietary software is embedded, with more features when compared with controllers, CDJs simply require USB sticks in order to play and mix songs, and do not need a laptop or other external device (e.g. tablet) with DJ software. Multiple CDJs can be connected into a DJ mixer. CDJs tend to have more features when compared with controllers. CDJs can also act as a DJ controller to play music stored on a laptop, a PC, a mobile or a tablet. CDJs, together with all-in-one DJ systems,
Pioneer DJ CDJ-3000 Professional Multiplayer	are most popular amongst touring and club DJs and hence, considered the professional DJ standard around the world. Professional DJs often use two to four CDJ/DJ players in a clubset up to have access to two to four turntables. CDJs are also typically much more expensive than controllers.
All-in-one DJ systems Pioneer XDJ-RR All-in-One DJ Systems for rekordbox	All-in-one DJ systems are essentially, the mixers and CDJs combined. Therefore, the systems simply require USB sticks to play and mix songs, and do not require an external device with DJ software. The systems can also act as DJ controllers if connected to an external device with DJ software. Often additional CDJs, turntables and beat pad machines are connected to the all-in-one system through the extra channels and ports available. All-in-one DJ systems may come with embedded software (see paragraph [5.15]) which has some of the same functionality as separate DJ software.
DJ Monitor Pioneer VM-80	DJ Monitors are speakers for use with a DJ set, that are focussed on producing sound that is as close to how the original recording was produced as possible.

Product	Description
DJ Headphones	DJ headphones are specifically designed for use by DJs. They have a special swivelling mechanism that allows them to either be
	worn on both ears or just one ear. This is an important feature for DJs as it lets them interact with the crowd without losing track of what they are playing. In addition, DJ headphones allow DJs to play two different tracks in each ear which makes it easier to cue up a track while listening to the current one.
Pioneer HDJX10K	

Relevant markets

- 5.21 Serato and ATC are both active in the development and global supply of DJ software to endusers. While ATC is also active in the manufacture and wholesale supply of DJ hardware (amongst other things), Serato is not. DJ hardware is complementary to DJ software: DJ software is often used together with DJ hardware (although DJ software can be used without DJ hardware, and vice versa).
- 5.22 ATC is not aware of any public decision from the Commission or an overseas competition regulator concerning market definition in the DJ software or hardware industry. Based on the area of overlap between the parties, and the complementary nature of DJ software and DJ hardware, ATC considers the relevant markets for the purpose of assessing the Proposed Transaction are:
 - (a) the supply of DJ software to end-users; and
 - (b) the supply of DJ hardware.

DJ software market

Product dimension

- 5.23 ATC considers the DJ software market to include all types of specialist DJ software solutions, including laptop/computer-based DJ software applications, mobile/tablet Apps, web-based solutions, "free" software (which often includes options for users to make additional purchases while using the software) and paid software with a full suite of features.
- 5.24 On the supply side, although there is limited technological cross-over in the development process for DJ software amongst applications, Apps and web-based products, there are a number of DJ software application providers that also offer a DJ software App, including ATC (with its rekordbox and WeDJ products). For example, Algoriddim (djay), and Mixvibes (Cross), who initially started as "application" developers based on mac OS (2007 for Algoriddim, and 2008 for Mixvibes), both developed a DJ App within a few short years of the initial iPhone release in about 2007. Algoriddim released djay for the iPad (iOS) in December 2010 and djay for the iPhone in March 2011 (approximately 4 months later), and Mixvibes released its CrossDJ (App) for the iPad in May 2012, and its App for the iPhone in January 2013. Today, Algoriddim and Mixvibes both offer DJ software applications (mac OS and windows OS) and Apps (iOS and android). Historically witnessed distinctions between laptops and mobile devices (especially tablets) in platforms are becoming more and more blurred

(e.g., laptops with touch-screen, and tablets with either attachable and or bluetooth keyboards and mouses).

- 5.25 However, on the demand-side, the core functionality of specialist DJ software applications, Apps and web-based products (both 'free' and paid versions) is the same, and there is therefore a high degree of demand-side substitutability between them. All these options allow users to DJ with or without DJ hardware, connect to third-party music streaming services, allow for music analysis and mixing, and provide access to key DJ tools such as cross-fades. looping, pre-cueing, and pitch-bending (among others). For example, while DJ software Apps were traditionally considered "lite" in terms of features and functionality, this is no longer the case. The increased (and in some cases, more advanced) processing power of mobile devices has allowed the introduction of (1) many auto mix features enabling users to DJ more complex and sophisticated mixing, and (2) seamless editing and modification of audio signals over cloud on the go in between tours, and event performances. Many DJs of all types now choose to use their mobile device (such as an iPad) pre-, during, and post-DJing, instead of a laptop. The credibility of DJing with software Apps was demonstrated at the DMC World DJ Championships, a global DJ competition hosted by the Disco Mix Club since 1985. This championship is regarded as the most prestigious event of its kind worldwide. Notably, K-Swizz, a prominent New Zealand DJ and a former Serato user, won the 2022 championship using mobile app-based software. 15 Further, Laidback Luke, a world-renowned DJ who headlines music festivals such as Tomorrowland, plays live sets using DJ software apps. 16 These examples conclusively demonstrate that even the world's top DJs can rely solely on DJ software Apps for their performances.
- A DJ's selection of DJ software will depend on a number of factors including (i) the particular 5.26 features of a solution; (ii) the type of DJ (professional / amateur / tour); and (iii) the occasion. ATC considers that it would be inappropriate, arbitrary and meaningless to attempt further segmentation of the market for DJ software by reference to the functionality of products, occasion and the types of end-users as, in practice, demand for functionality is fluid across categories of end-user and is not consistent across neatly defined categories of customer. Many DJs will use a mix of different solutions to suit their individual needs; perhaps choosing to mix music and perform using a DJ software application, whilst also having an App for onthe-go. As discussed further below, there is a high degree of substitutability and, in some circumstances complementarity, between DJ software applications and Apps which will depend on the characteristics and desire of each individual end-user. While professional and tour DJs may utilise a number of DJ software products, either alone or connected to DJ hardware, an amateur or bedroom DJ may only require a DJ software App. However, an amateur DJ could also decide to use a number of different solutions, in a similar way to a professional, if desired.
- 5.27 Furthermore, while music production software is not designed primarily for use by DJs, Ableton Live, a music production software application, has the same core DJ software functionality as specialist DJ software products which allows users to DJ live with a variety of audio effects that can be personalised according to preference. Ableton Live is becoming increasingly popular for performing DJs. ¹⁷ There is therefore demand-side substitution between specialist DJ software and music production software that has DJing capabilities. While for the purposes of this application ATC has focused on a narrower market for the supply of specialist DJ software, given the popularity of Ableton Live for DJing, ATC has included Ableton Live within the relevant market to the extent that it is used for DJing. ATC

¹⁵ K-Swizz' performance can be viewed here: https://www.youtube.com/watch?v=UL5yQVpANao

¹⁶ https://www.youtube.com/watch?v=2SXdECH-3b0

¹⁷Seehttps://pirate.com/en/blog/djing-with-ableton-live/#:~:text=Ableton%20Live%20is%20one%20of,into%20a%20pair%20of%20decks.

- notes that there are other providers of music production software that could relatively easily and quickly expand into the DJ software market as discussed further below.
- 5.28 Annexure 9 is a table prepared by the parties which outlines the functionalities offered by the ATC, Serato and a non-exhaustive range of their competitors. As this table shows, there is significant overlap in the core functionalities offered by both DJ software applications and Apps.

Geographic dimension

- 5.29 The supply of DJ software is a global industry. The same DJ software is distributed to users all over the world. Indeed, Serato, as a New Zealand based company, supplies its Serato DJ software products to all countries where the Serato website is accessible via an internet connection, and there are no differences in the functionality it makes available to users in each of those markets. Similarly, ATC's rekordbox can also be downloaded in all countries where the rekordbox website is accessible via an internet connection, and the functionality is the same regardless of the location of the user. Users can access software by downloading it from the internet or from their mobile device App store.
- 5.30 However, given the Commerce Act requires an assessment of the competitive effects of the Proposed Transaction on markets in New Zealand, ATC has focused in this application on the market for the supply of DJ software to end users in New Zealand.

Functional dimension

5.31 Both parties supply software at the retail level to end-users and therefore this is the appropriate functional dimension.

<u>Customer dimension</u>

- 5.32 The Commission distinguishes markets by customer group where the requirements for certain customers differ significantly from others.¹⁸
- 5.33 While it may theoretically be possible to distinguish separate markets by reference to: (i) the occasion for the use of DJ software used by the same customer (i.e. use during a club event or for a hobby); or (ii) the life-stage of those DJs (professional or amateur / recreational), ATC nevertheless does not consider this would be appropriate or meaningful because DJs in each segment have a range of preferences and there is no single type of software product (or set of features) that all DJs in a particular segment use.

5.34 By way of example:

- (a) With regards to Touring and Club DJs, their demand for software and hardware products may or may not change as they become more experienced.
- (b) More experienced performers may tend to use CDJs with a mixer or an all-in-one system during their live performances (without DJ software). For their preparation of next live events (e.g. trying out new effects, and editing & remixing music), they use DJ software without controllers. The DJ software they use may also depend on whether these DJs are on the go or not and the DJ could decide to use an application or App depending on their individual preference for a laptop or mobile device.

¹⁸ H.J.Heinz (New Zealand) Limited and Cerebos Pacific Limited [2018] NZCC 2 at [52].

- (c) Event / mobile DJs can use controllers connected to an external device with DJ software (application or App), or just a mobile device (with an App) with no controller during their live performances, as well as when they prepare for live events.
- (d) Beginner DJs may simply use a DJ software application (with laptop), or Apps (on a mobile device) with no DJ hardware, or, if they can afford to purchase the DJ hardware, may DJ with a controller connected to an external device (laptop or mobile device) with DJ software.
- (e) Experienced retired Tour and Club DJs who become bedroom / hobby DJs are more likely to DJ with CDJs with a mixer, or an all-in-one system. Although they are no longer required to prepare for live events on the go, since they have more time to play around with new or modified effects, to edit, and to remix music, they tend to use either software applications or Apps to edit, and to test out their edited music, before they import them into DJ hardware either with USB sticks or via Wi-Fi for private performances.
- 5.35 As a result, demand for types of solutions and specific functionalities is fluid across various types of end-users and in, most cases, highly specific to the individual's requirements and does not fit neatly into defined categories. Suppliers are also unable to engage in price discrimination based on the occasion or experience of the DJ given there is no ability to identify users in a particular customer group based solely on the features that they use. As described in paragraphs [6.12] to [6.13] below, the market is highly dynamic and rapidly evolving; where in the past DJs may have needed hardware with vinyl records, CDs or USB sticks to perform live, due to the increasing sophistication and functionality of both DJ software and mobile devices, they may now only require a laptop, or a mobile device and a speaker. ATC therefore considers it would be inappropriate, arbitrary and meaningless to further segment the market by reference to the end-user and / or occasion, as the lines become increasingly blurred.

DJ hardware market

- 5.36 ATC does not consider it necessary to draw a distinction between the different categories of DJ hardware. While certain DJ hardware products are not substitutable (e.g., headphones and mixers), they are often acquired and used together. Further, many of the categories of DJ hardware are substitutable. For example, a DJ may choose to use only a CDJ or a controller with DJ software or an "all-in-one" system. While in the past, CDJs with a mixer and/or all-in-one systems were considered more superior than controllers, the technological standard of controllers is catching up rapidly. Accordingly, CDJs with a mixer, all-in-one systems, and controllers are becoming more synonymous. Most DJ hardware suppliers supply several categories of DJ hardware, therefore there is supply-side substitutability between the different types of hardware.
- 5.37 ATC considers that there are also substitutes on the demand-side for DJ hardware. For example, many DJs mix music without DJ hardware using only DJ software on a mobile device or laptop are substitutable to the extent that DJ software is used to "mix" music and add effects in real time. However, DJ hardware, along with its embedded software, does not offer a consumer the ability to edit music or remix their own songs. The 'mixing' functionality of all DJ products (hardware and software) are homogenous in this regard as the mixing function is readily available on most free versions of DJ software. It is the 'editing' and other features where software competitors try to differentiate themselves and compete most vigorously and DJ hardware operates as a complement to DJ software in this regard.

- 5.38 A few models of DJ hardware, such as a basic DJ controller, may be as cheap as a perpetual licence fee for DJ software (approximately a hundred dollars to a few hundred dollars), however, if the cost to purchase either a laptop or a mobile device is not taken into account, most DJ hardware tends to be significantly more expensive than software. For example, DJ hardware may be priced at between several hundreds of dollars for a more expensive DJ controller (which have more customisation options, such as effects) to above ten thousand for a set of players with a mixer.
- 5.39 Therefore, although there is some degree of substitutability between DJ hardware and DJ software, for present purposes, ATC has focussed on the DJ hardware market for its competition analysis as a distinct market from the DJ software market. However, as discussed further below, the ability for DJs to perform using only DJ hardware without DJ software is a competitive constraint on the DJ software market.
- 5.40 ATC considers the functional dimension of the market to be the manufacturing and wholesale supply of DJ hardware. ATC supplies its hardware products to a distributor in New Zealand. That distributor supplies ATC's hardware to retailers, who on-sell to consumers. ATC does not itself supply DJ hardware directly to end consumers.
- 5.41 The supply of DJ hardware (like DJ software) occurs globally. However, given the Commerce Act requires an assessment of the competitive effects of the Proposed Transaction on markets in New Zealand, ATC has focused in this application on a national market for the wholesale supply of DJ hardware, as DJ hardware is imported into New Zealand and distributed nationally.

Competitors

5.42 In addition to ATC and Serato, there are an abundance of other DJ software products available to end-users in New Zealand (both big and small). ¹⁹ Table 1 below is a non-exhaustive list of DJ software products available to New Zealand users (in no particular order), including information on whether they offer a software application, App, web-based solution or a combination of these.

Table 1: DJ software competitors

#	Software competitor	Software Brand	Website	Software App	Software application	Web based solution
1	Serato	Serato	https://serato.com/		Yes	
2	AlphaTheta Corporation	rekordbox, WeDJ	https://www.pioneerdj.c om/en/product/software /wedj-for-android/dj- app/overview/	Yes	Yes	
3	Atomix Productions	VirtualDJ	https://www.virtualdj.co m/		Yes	
4	Algoriddim	Algoriddim djay	https://www.algoriddim. com/	Yes	Yes	
5	Native Instruments	Traktor DJ	https://www.native- instruments.com/en/	Yes (iOS)	Yes	
6	PCDJ	PCDJ Dex 3	https://pcdj.com/		Yes	
7	MVM	edjing Mix	https://www.edjing.com/	Yes		

¹⁹ This includes software that can be purchased online using a New Zealand IP address, however this may not capture the full range of international websites and platforms that New Zealand consumers could purchase from.

#	Software competitor	Software Brand	Website	Software App	Software application	Web based solution
			https://www.mwm.ai/ap ps/edjing			
8	Ableton	Ableton Live, PUSH	https://www.ableton.co m/en/		Yes	
9	Mixxx	Mixxx	https://mixxx.org/		Yes	
10	Gismart Limited	DJ lt!	https://gismart.com/pro duct/dj-it/	Yes		
11	Onexip GmbH	Ultramixer	https://ultramixer.com/		Yes	
12	Xylio	Future.dj Pro	https://www.xylio.com/		Yes	
13	Independent Sounds	Blaze DJ			Yes (Windows)	
14	CuteDJPro Software, LLC	Cute DJ	https://www.cutedjpro.c om/		Yes	
15	Digital Multi Soft Corp	DJ Prodecks	https://www.djprodecks.		Yes (Windows)	
16	Disco XT	Disco XT	http://discoxt.net/		Yes	
17	Ms. Pinky	Ms. Pinky	http://mspinky.com/		Yes	
18	Apollo Vibes LLC	transitions dj	https://transitions.dj/ind ex.html		Yes	Yes
19	DJ Player Pro	DJ player Pro	http://djplayerpro.com/	Yes (iOS)	Yes (MacOS)	
20	inMusic	Engine DJ	https://enginedj.com/		Yes	
21	Gemini	Gemini V-CASE	https://geminisound.co m/		Yes	
22	MVTrail Tech Co, Ltd	DJ Mixer Studio	https://djmixerstudio.mv trail.com/	Yes (iOS)		
			https://apps.apple.com/ us/app/dj-mixer-studio- remix- music/id1398634693			
23	Groove Vibes	Party Mixer 3D		Yes (iOS)		
24	Inqbarna Kenkyuu Jo S.L	deej Lite	http://inqbarna.com/	Yes (iOS)		
25	DJ.Studio B.V.	DJ.Studio	https://dj.studio/		Yes	
26	Anzhela Kravchuk	MIXED – Virtual Dj Music Mixer		Yes (iOS)		
27	Music Topia	X Djing	https://apps.apple.com/ us/app/x-djing-music- mix- maker/id1280254120? mt=12	Yes (iOS)		
28	Fragranze Apps Limited	iRemix 2.0	http://fragranzeapps.co m/	Yes		

#	Software competitor	Software Brand	Website	Software App	Software application	Web based solution
29	Trajkovski.n et	DJ Control	https://trajkovski.net/ind ex.html	Yes (Google Play)		
30	Beatport	Beatport DJ	https://www.beatport.co m/			Yes
31	Mixvibes	Cross DJ	https://www.mixvibes.c om/	Yes	Yes	
32	Hercules	DJUCED	https://www.djuced.com /		Yes	
33	GameG	DiscDJ3D	https://play.google.com/ store/apps/details?id=c om.oimvo.discdj&hl=ja ≷=US	Yes (Google Play)		
34	TarrySoft	DJ Music Mixer – Dj Remix Pro	https://play.google.com/ store/apps/details?id=dj mixer.djmixerplayer.re mixsong.bassbooster	Yes (Google Play)		

5.43 The DJ hardware market is also characterised by a large number of manufacturers and suppliers. Table 2 below is a non-exhaustive list of ATC's competitors and the types of DJ hardware products each supply in New Zealand. Details of these competitors (except for headphones and DJ monitor competitors) are in Annexure 11.

Table 2: DJ hardware suppliers by category

Company Name	Brand	Controller	Player	All-in- one DJ system	Mixer	DJ Monitor	Headphone
inMusic	DENON, Rane, Stanton, Numark Akai Professional	*	✓	✓	✓	*	~
Panasonic	Technics	×	\	×	×	×	✓
Gemini Sound	Gemini	✓	\	✓	✓	✓	×
Audiotonix	A&H	✓	×	*	~	*	*
Music Tribe Commercial My Sdn. Bhd.	Behringer	√	×	×	✓	*	√
MIXARS	Mixars	✓	✓	×	✓	✓	×
Reloop	Reloop	✓	✓	×	✓	×	✓
Hercules	Hercules	✓	*	×	×	✓	✓
Sennheiser	Sennheiser	*	*	×	×	×	✓
Roland	Roland	✓	×	*	✓	✓	✓
Audio- Technica	Audio- Technica	×	√	*	*	*	√
AIAIAI	AIAIAI	*	*	×	×	×	✓
Sony	Sony	*	×	×	×	×	✓
Shure	Shure	*	*	×	×	×	✓
Korg	Korg	✓	×	×	✓	✓	✓
YAMAHA	YAMAHA	*	*	×	✓	✓	✓
Beyerdynamic	Beyerdynamic	*	×	×	×	×	✓
Native Instruments	TRAKTOR Komplete Maschine	√	*	*	✓	*	*

5.44 The list in Table 2 is based on a review of websites with a New Zealand domain. It is not an exhaustive list of all DJ hardware available through New Zealand retailers. DJ hardware can also be purchased by New Zealand consumers through online retailers that do not operate a New Zealand domain, such as Amazon, and DJ hardware products available through these other sources are not reflected in Table 2.

Customers

- 5.45 Serato's and ATC's DJ software customers comprise individuals ranging from 'bedroom' or hobbyist DJs through to touring, club and event DJs. Both parties offer their products on a subscription basis, and Serato also offers a perpetual licence for a one-off fee.
- 5.46 Serato also licenses its Serato brand and software to DJ hardware suppliers. Serato's key DJ hardware partners are ATC, inMusic (through its brands Rane, Numark and Denon DJ), Hercules DJ, Roland Corporation and Phase DJ (MVM). Contact details for Serato's partners are listed in Confidential Annexure 10. Details of the revenue that Serato earned from each of its partners will be provided to the Commission directly by Serato.
- 5.47 ATC supplies its DJ hardware to retailers in New Zealand via a distributor called []. ATC does not have visibility of sales to each of the retailers that sell ATC products in New Zealand. Contact details for ATC's distributor are in Confidential Annexure 6.
- 6. COMPETITION ASSESSMENT NO SUBSTANTIAL LESSENING OF COMPETITION IN THE DJ SOFTWARE MARKET
- 6.1 The Proposed Transaction will not have the effect of substantially lessening competition in the DJ software market because:
 - (a) the market is dynamic and characterised by innovation;
 - (b) ATC will continue to be constrained by vigorous competition from other DJ software solutions (including DJ software Apps and applications);
 - (c) ATC will continue to be constrained by other options that are available to users outside of the DJ software market;
 - (d) barriers to entry and expansion are low, particularly for music production software developers and DJ software Apps; and
 - (e) the Proposed Transaction will not result in any coordinated effects.

Market shares

- 6.2 The DJ software market is highly fragmented, with numerous DJ software providers globally.
- ATC acknowledges that Serato is one of the market leaders in the provision of DJ software applications and rekordbox is also very popular in this area. Accordingly, Serato and rekordbox have a more significant share within the DJ software application category. However, as explained earlier, the DJ software market includes DJ software applications, Apps and web-based solutions. DJ software Apps (which are used on tablets and phones) are becoming increasingly popular with DJs, from bedroom/hobbyist DJs through to professional DJs, and therefore account for an increasing proportion of the DJ software market. Defining the market as comprising only DJ software applications is artificially small and does not reflect the competitive reality which the Parties face in the industry. In particular,

- focusing on DJ software applications only does not take into account the increasing prominence and competitive constraints provided by DJ software Apps.
- 6.4 There are no reliable sources of market share data for the DJ software industry either globally or for New Zealand. ATC has, however, endeavoured to provide its best estimates based on some available market data from third party sources, together with its own data. These estimates are for the supply of DJ software globally based on monthly active users (MAU). ATC's view is that comparing the monthly active users is the most reliable measure of market share at any given point in time because:
 - (a) it measures the users who are actively using the software, as opposed to users who may have downloaded the software but are not presently using it; and
 - (b) it minimises data "noise" that may be observed from daily active user data, which could vary significantly from the beginning and end of weekdays, weekends and public holidays.
- 6.5 ATC has been unable to estimate market shares based on MAU for New Zealand. The sources of data used by ATC to estimate global shares do not report New Zealand users separately from those based in other countries.
- 6.6 Based on ATC's estimates, the parties' combined global share for the supply of DJ software is []. Assuming that this share is representative of New Zealand, then the parties' combined shares are well below any level that could potentially raise any competition concerns. Serato's estimated share is [] and ATC's estimated share is [].
- 6.7 The largest DJ software provider globally is edjing with an estimated global market share by MAU of [], followed by djay (Algoriddim) with an estimated global market share of []. edjing is one of the most downloaded DJ Apps on Apple App store and Google Play. djay is a digital music mixing software program for Mac OS X, Microsoft Windows, iPad, iPhone, and iPod Touch. The remaining DJ software providers have global market shares of less than [], with many providers with global market shares of less than [], demonstrating the unconcentrated and fragmented nature of the global market.
- 6.8 The table below provides ATC's estimates of global DJ Software market shares (based on DJ software App and DJ software application) by estimated MAU:

Table 3: Global DJ Software Market Shares (App and Application) by Estimated Monthly Active User (MAU)

Product	Global Estimated MAU	Global estimated Share %
Edjing Mix / DJ Mix Machine	[]	[]
djay	[]	[]
DiscDj3D	[]	[]
rekordbox / WeDJ	[]	[]
CrossDJ / Mixvibes	[]	[]
Serato DJ	[]	[]
DJ it!	[]	[]
Virtual Dj	[]	[]
DJ Music Mixer	[]	[]
Traktor	[]	[]
Engine DJ	[]	[]
Ableton Live	[]	[]

DJUCED	[]	[]	
TOTAL	[]	[]	

Source: ATC estimates based on "The 2023 Global DJ Census" (DJ Census 2023), publicly available online subscription data (found here: https://www.data.ai/en/) (data.ai) as at December 2022, and ATC's own MAU data.

- 6.9 ATC's methodology for calculating these market shares was as follows:
 - (a) Due to the lack of any other reliable data source, ATC used the "Response Number & %" shown on page 40 of DJ Census 2023 (CY2022 data) as a reflection of the global share for the DJ software application category of the DJ software market. However, ATC considers that the DJ Census 2023 is not representative of the DJ software market as a whole because the proportion of respondents to the Census survey that reported they used Apps is very small in comparison to Application users (1.53% of respondents versus 61.32% of respondents) and far below the proportion of users that do in fact use DJ software Apps globally. For example, MAU for ATC's DJ software App (rekordbox and WeDJ) as at December 2022 was [] compared to [] MAU for ATC's rekordbox application.
 - (b) ATC then used the Census % to estimate the total MAU in the market based on ATC's actual rekordbox application MAU (as at December 2022) as well as to estimate other DJ software application providers' MAU, including Serato's. ATC notes that Serato's actual MAU as at December 2022 was []. Therefore, ATC's estimate of Serato's MAU based on the DJ Census data is over-estimated by approximately [].
 - (c) ATC then used estimated MAU (as at December 2022) for DJ software Apps from data.ai as at December 2022 where available. data.ai is publicly available online subscription data (found here: https://www.data.ai/en/). It is an integrated data Al platform combining consumer data and market estimates (see https://www.data.ai/en/about/why-data-ai/ for further information).
 - (d) ATC then checked the data.ai estimates against its actual rekordbox and WeDJ App MAU figures. When ATC's actual App MAUs and data.ai MAUs are compared, the results have indicated that data.ai [] ATC's MAU []. See Table 4 below.

Table 4: MAU comparison

	Actual MAU	Difference (%)	data.ai MAU
WeDJ	[]	[]	[]
rekordbox (App)	[]	[]	[]

Despite these discrepancies, ATC considers that the data provides the best approximation available of the MAUs for DJ software Apps.

- (e) ATC then combined the estimated DJ software application and App MAUs to estimate market share figures.
- (f) ATC focused only on the DJ software products listed in the table above. There are numerous other DJ software suppliers globally, however there is a lack of reliable data on usage.
- 6.10 ATC considers that these estimates are likely to overstate the parties' share of the global DJ software market because they do not take account of the numerous other products in the

- market. Out of an abundance of caution, the market share table only includes the players from Table 1 above which the Parties consider supply like-for-like products.
- 6.11 Furthermore, data contained in the DJ Census 2023 report was from respondents who were overwhelmingly in the age bracket of 35 and over. As has been discussed, the market for DJ software is highly dynamic and constantly evolving. Historically, DJ software applications and hardware may have been the industry standard, but with the increasing sophistication of DJ software Apps together with the increased processing power of mobile devices, these provide a much more credible alternative for DJs across the industry than they did a decade ago. Similarly, ATC understands that a majority of respondents to the Census are experienced DJs (i.e., with more than 10 years' experience) who do not make up the majority of end-users in the market. As such, ATC considers that data obtained from the DJ Census is likely to materially overstate the market shares of DJ software application providers and does not reflect the competitive reality in the present market.²⁰

The market is dynamic and characterised by innovation

- 6.12 The DJ software market is dynamic and rapidly evolving. The market has experienced significant evolution and growth in recent years, driven by several key factors:²¹
 - (a) the widespread adoption of digital music platforms and digital music distribution;
 - (b) the increasing number of both physical and virtual music events, clubs and festivals worldwide;
 - (c) the ease of access to automated features of DJ software allowing even amateur DJs to create high quality mixes; and
 - (d) continuous advancements in technology such as the integration of artificial intelligence and machine learning algorithms, further enhancing the capabilities of DJ software.
- 6.13 As a result of these recent developments, DJ software Apps have emerged as credible and viable alternatives to legacy DJ software applications and stand-alone DJ hardware. With increased functionality and the increasing processing power of mobile devices (such as iPad Pros), Apps have been rapidly gaining market share and provide an increasingly strong competitive constraint on software applications. ATC expects that DJ software Apps will become the preferred software for all types of DJing within the next 5 years or even sooner. As a result of changing customer demands and new generations of DJs and end-users entering the market, it is more appropriate to take a dynamic view of the competitive landscape and evolving offerings, as opposed to a static view of the market, as this better reflects the realities of the DJ software market.
- 6.14 Investment in brand and product offering is critical to success in this market, and Serato and ATC are continually investing in their brands and products to stay competitive. At any given time, ATC has a team of between [] designers and engineers working on DJ software development and improvements. Serato is also committed to ongoing software development. Specifically, in the financial year ended 31 March 2023, Serato employed over [] staff involved in research and development, incurring an annual cost of [] (which equates to approximately [] of Serato's annual opex).

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²⁰ []. Nevertheless, as explained in paragraph [3.8] above, the key driver for ATC's acquisition is its ability to leverage Serato's music production expertise to expand its presence in this industry.

²¹ https://www.linkedin.com/pulse/dj-software-market-size-share-growth-industry/

- 6.15 There are a large number of competitors in the market as shown in table 1 above. These include, for completeness, smaller and more nascent DJ software providers. ATC nevertheless considers that due to the dynamic nature of the market and access to improving computing power, any competitor's product with more limited functionality or niche customer base could rapidly develop additional functionalities and products to exert a much greater competitive constraint on the parties in a limited amount of time.
- 6.16 It is anticipated that the DJ software industry will continue to experience rapid change over the next few years as artificial intelligence coding becomes more sophisticated, allowing new entrants and existing competitors to rapidly evolve. Further, other DJ software developers (of both applications and Apps) will continue to innovate and improve their products which will provide further competitive constraint on the parties. In turn, post-Proposed Transaction, ATC and Serato will also have to continue to innovate and improve their products to remain relevant.

There will continue to be vigorous competition from existing DJ software providers

- 6.17 Regardless of the market share, the parties are currently, and ATC will continue to be, constrained by the multitude of other DJ software providers active globally, both large and small.
- 6.18 As demonstrated in Table 1 above, there are many alternative DJ software solutions that offer comparable functionality and features to ATC's and Serato's DJ software solutions which constrain the parties currently and will continue to constrain ATC post- Proposed Transaction, including:
 - (a) **edjing mix**, was the world's first DJ app, launched in 2012 by one of the world's top 10 ranked mobile music app publishers, DJiT. As discussed above, edjing holds by far the largest share of the global DJ software market, with an estimated [], and markets itself as, "the #1 App to mix on your iPhone, iPad, Android phones and tablets."²² edjing mix allows anyone with a smartphone or tablet to mix anywhere for free and is available on iOS, Android and Windows. It has won several awards since its release, including recently "Best App of the Year" by both Apple and Google and records more than 45 million downloads.²³
 - (b) djay (produced by Algoriddim)²⁴ is the second largest player in the DJ software market with an estimated global market share of approximately []. It markets itself as the number one DJ software for Mac and Windows. It is the winner of a number of Apple Design Awards. According to Algoriddim's website, "djay is the perfect DJ software for casual and mobile DJs, while djay Pro is a DJ software designed for professional DJs,"²⁵ Algoriddim was founded in 2006 and has collaborated with numerous world-class artists on creative ideas and projects such as David Guetta and Snoop Dogg, contributing to its high profile. djay is also actively promoted by world renowned DJs including DJ Angelo²⁶ and Invisibl Skratch Piklz.²⁷

²² https://www.edjing.com/

²³ http://world.edjing.com/about#:~:text=Ranked%20among%20the%20world%27s%20top,product%20released%20by%20the%20company.

²⁴ https://www.algoriddim.com/

²⁵ https://www.algoriddim.com/

²⁶ https://www.youtube.com/watch?v=gUXWGZFvBZs&t=9s

²⁷ https://www.youtube.com/watch?v=nsdjZiIMUuw

- (c) **DiscDJ3D** is a mobile based DJ App produced by French software maker, GameG. What distinguishes it from other mobile Apps is that it has a 3-dimensional interface, allowing mobile DJs to mix music with virtual DJ hardware. It has gained popularity with users who wish to DJ with physical hardware but cannot afford it. Users can change the view points by moving around the virtual DJ hardware. Like other DJ software, it has full mixing features. It has been downloaded more than 20 million times.
- (d) **CrossDJ** is produced by the French company Mixvibes. Mixvibes expanded its "Cross" software (application) in 2012 to cover nearly all Apple devices. CrossDJ for iPad was launched in early 2012 as a professional DJing App, and since then it has become a primary focus for Mixvibes. The CrossDJ App has full features such as high-quality audio effects and support for streaming services, and also offers a remote feature allowing users to control their mixes at a distance from their laptops or PCs through a connection on their Apple device. Mixvibes is also known to have successfully launched a music production App.
- (e) DJit! is produced by Gismart, a London-based leading developer and publisher of entertainment-focused Apps and games. It is one of the recent entrants into the DJ software industry (2020), and it has gained popularity at a significant pace with more than 20 million downloads to date. Although it was developed to be as simple as possible in its interface, it has not compromised on features. Gismart also offers 17 music Apps over its SAAS model, and many of DJit! users appear to be a part of Gismart's music App community.
- **VirtualDJ** is produced by Atomix Productions, a large international corporation with (f) offices all over the world.²⁸ It is marketed as the most downloaded DJ software globally. Its website has a running counter of how many times the software has been downloaded (currently up to 151m). It is free for non-professional use and can be used with or without DJ hardware. The terms of the licence agreement specify that if a user earns money using VirtualDJ, the user must purchase a PRO licence. According to its website, it supports more DJ controllers and hardware than any other DJ software provider from "easy to use entry level controllers to advanced club mixers". Like Serato DJ software and rekordbox. Virtual DJ can be used during both professional and amateur performances. Its base functionality is nearly identical to Serato's software (for example, they both have virtual turntables, controls for EQ and gain, crossfaders, transport controls, scratch effects, pitch shifting, automatic beat matching, beat gridding, music streaming service integration and mix-tape recording features).29 Virtual DJ is designed for use on laptops, but users can download Virtual DJ Remote, an application for iPad/iPhone/Android etc. which allows users to use mobile/tablet devices as an additional interface for VirtualDJ. VirtualDJ also markets its software with testimonies from world famous DJs including David Guetta, Dimitri Vegas, Qbert, Afrojack and Deniz Koyu.³⁰
- (g) **DJ Music Mixer** was launched by a US-based android developer called TarrySoft in December 2021. Although it has been less than 2 years since its launch, and its App is only available on Android devices, it has been downloaded more than 14 million times. In addition to allowing users to mix tracks with full features, it also allows users to edit/remix, record and create music. It may be the only App currently available in the market with a music creation feature.

²⁸ https://www.virtualdj.com/atomixproductions/

²⁹ DJ Gear 2k "Serato vs. Virtual DJ software – Which one is better for you? (20 March 2022) https://djgear2k.com/serato-vs-virtual-dj-software-battle/; Versus "Atomix virtualDJ Pro Full vs Serato DJ" https://versus.com/en/atomix-virtualdj-pro-full-vs-serato-dj

³⁰ https://www.virtualdj.com/

- (h) Traktor, which is produced by Native Instruments, one of the world's largest and most influential music technology companies. 31 Traktor Pro has similar features and functionality to both Serato and rekordbox. The three offer the same interface, connectivity and library and music features (however rekordbox also offers cloud library access). Traktor also offers the same playback and performance features as rekordbox (with Serato offering fewer of these). Traktor software was first launched in 2000 and the most recent software version, Traktor Pro 3, was launched in late 2018. ³² Traktor's manufacturer. Native Instruments, is also a DJ hardware manufacturer with a wide range of DJ products. Traktor Pro 3 offers deep integration with Native Instruments hardware, but also offers support for a range of other mixers and controllers.³³ Traktor Pro is laptop software with no USB/standalone option.³⁴ Traktor has MIDI mapping so can be used with any DJ hardware. Carl Cox, who is considered one of the first DJs to become a globally recognised celebrity, and Richie Hawtin are among some of the professional DJs that promote Traktor Pro.
- (i) Engine DJ, which is produced by inMusic, the "Home of the World's Premier music and audio technology brands"35 and is a major supplier of DJ hardware and DJ software. inMusic produces 19 brands of DJ and music production hardware and software and is "dedicated to creating cutting-edge products that incorporate and build upon the latest in engineering, design, and technology."36 Engine DJ was launched in 2017 but has developed at a rapid pace.³⁷ Engine DJ is the only DJ software that works with Amazon Music Unlimited music-streaming on DJ gear. It is marketed as compatible with Denon DJ hardware and some Numark hardware (both sold by inMusic under those respective brands).38 Engine DJ is designed to be used as a library preparation tool, where the library is exported and played on standalone DJ gear designed to work with Engine. Since March 2023, users can now DJ from their laptops by plugging them into Engine DJ equipped hardware. Engine DJ has a layout akin to rekordbox and Serato, providing a smooth and easy user experience. It is. however, newer than rekordbox and Serato and has introduced some cutting-edge concepts such as stems in standalone controllers and library features such as track star rating.39

https://www.native-instruments.com/en/company/about-us/#:~:text=MORE%20ABOUT%20NATIVE%20INSTRUMENTS&text=As%20one%20of%20the%20world%27s,artists%20to%20first%2 Dtime%20producers.

³² Home DJ Studio "Traktor vs Serato – Two DJ Software Titans Compare" (23 July 2023) https://homedjstudio.com/traktor-vs-serato/#:~:text=With%20Serato%2C%20your%20access%20to,button%20to%20mix%20and%20perform.

³³ See all hardware marketed as compatible at https://www.native-instruments.com/en/products/traktor/dj-software/traktor-pro-3/compatible-controllers/

³⁴ https://www.digitaldjtips.com/best-dj-software/

³⁵ https://www.inmusicbrands.com/

³⁶ https://www.inmusicbrands.com/about/

³⁷ Digital DJ Tips "Denon DJ launches Engine Prime Music management App" (24 March 2018) https://www.digitaldjtips.com/denon-dj-launches-engine-prime-music-management-app/; Digital DJ Tips "7 Surprising Things You May Not Now About Engine DJ" (17 May 2023) https://www.digitaldjtips.com/7-surprising-things-you-may-not-know-about-engine-dj/.

³⁸ See hardware at https://enginedj.com/hardware

³⁹ https://www.gear4music.com/blog/rekordbox-vs-serato/

- (j) **DJUCED** DJ software is produced by Guillemot Corporation for its Hercules branded hardware. Guillemot Corporation is a major designer and manufacturer of interactive entertainment hardware and accessories, listed on the stock market since 1998. It has a current operating income of €34.2 million. ⁴⁰ DJUCED is commonly rated amongst the best DJ software programs and is praised for its assistance for beginners it is "featured with an integrated 'academy' full of learning resources, a preprogramed music assistant, various guides and comprehensive tutorials".⁴¹
- 6.19 Finally, although not included in the calculation of market share, there is another player called Mixxx which is a free open-source DJ software for Windows, macOS and Linux. Mixxx is community driven with no company sitting behind it, "the development is shouldered by passionate DJs and programmers that dedicate their free time to working on their favourite DJ software." Mixxx, released in 2001, is a rapidly evolving offering Mixxx 2.3.3, 2.3.4, 2.3.5 and 2.3.6 were all released between June 2022 and August 2023. Mixxx can be used to perform DJ sets with MIDI controllers, CD players, vinyl turntables or just a computer keyboard and mouse. Mixxx has been identified as a "serious contender for DJs" and "one of the best free alternatives to the big commercial programs."
- ATC understands that some DJs may perceive Serato as being the "industry standard" for professionals or that Serato may be considered the "best" by some DJ software reviewers. However, what may be considered the "industry standard" or the "best" by one DJ may not be considered the "industry standard" or the "best" by another. This is evidenced by the wide array of professional DJs who promote different DJ software products (some of which are listed in paragraph [6.18] above). Based on recent commentary comparing DJ software products, it appears that Serato is most favoured among 'scratch' DJs and turntablists⁴⁵, although its features are comparable with many other DJ software products on the market. However, like all online articles, that article represents only one person's viewpoint on each of the available products in the market. ATC submits that, when considering the extent to which other DJ software products in the market compete with Serato and rekordbox, the Commission should focus on the features and functionality of the products available in market, and not the views of a few individuals, as the views of a few individuals are unlikely to be representative of the market and will be skewed by individual preferences.

6.21 [].

DJ hardware users can switch between compatible DJ software products at little cost (other than the cost of either subscribing or acquiring the software). As explained earlier, the core features across the various DJ software products are similar (see Annexure 9) and, once users learn how to use core features of any DJ software products, it does not take much effort to learn how to use these features on different products. Users on a monthly subscription can simply unsubscribe at the end of the month and move to an alternative DJ software product. Furthermore, there are also many 'free' versions of software that have all of the same "mixing" and other core features to DJ as the paid versions, enabling users to try them before they commit to a paid monthly (or perpetual) subscription. Original data/music is purchased and stored in applications such as iTunes which can easily be imported to new DJ Software without having to export the music from old software. In many cases, this importation step is not required, as due to DJ software libraries generally being unencrypted.

⁴⁰ https://www.guillemot.com/en/

⁴¹ For example, see https://musiciantuts.com/best-dj-software/

⁴² https://mixxx.org/

⁴³ https://www.digitaldjtips.com/mixxx-1-9-interview/

⁴⁴ https://djtechtools.com/2012/08/07/review-mixxx-1-10-dj-software/

⁴⁵ See for example https://www.musicradar.com/news/best-dj-software-apps

- different software products are able to read from competing software's libraries (e.g., VirtualDJ and Denon EngineDJ automatically read Serato DJ and rekordbox libraries and playlists). Switching software providers does not require users to acquire new DJ hardware.
- As explained above, most DJ hardware manufacturers use the MIDI standard and many are starting to use HID (which is complementary to MIDI), which means that all MIDI-compatible DJ software can theoretically be used. There are some limited examples of DJ software that are "hardware locked" to certain DJ hardware, meaning that they cannot be used with other DJ hardware without a code to unlock them (see discussion further below), for example, Engine DJ and DJUCED appear to be "hardware locked". Despite these few exceptions, and while Serato has a good reputation in the market, any attempt by ATC to exercise market power to increase prices above competitive levels or reduce the quality of its product risks that reputation; its users could and would acquire DJ software from one of the many other DJ software providers.
- 6.24 Alternatively, a DJ can elect to use Ableton Live which, as explained earlier, is music production software which has DJ capabilities. As evidenced by the multitude of articles praising it, Ableton Live has established itself as powerhouse software used by DJ professionals and enthusiasts. 46 It is "a great tool for beginner DJs, all the way to professionals. You can mix inside the platform, and it's compatible with all sorts of DJ hardware, meaning DJing live with Ableton on a club setup isn't a problem." Ableton is a substantial player in the much larger music production industry and is well placed to seek to grow its share of the DJ software market.

Barriers to entry and expansion for the supply of DJ software are low

- 6.25 Barriers to entry and expansion for the supply of DJ software are low and therefore ATC will also be constrained by the threat of new entry:
 - (a) There are a large number of suppliers: The sheer number of DJ software suppliers globally demonstrates that there are low barriers to entry and expansion. See Table 1 above for a list of suppliers.
 - (b) There is evidence of fast growth, especially by Apps: rekordbox (launched at the end of 2015) only took 7 years to nearly catch up with Serato in terms of MAU, who took more than 20 years to where it is. edjing (launched in 2012) took only 10 years to become more than [] popular than rekordbox or Serato in MAU. Engine DJ by inMusic launched in 2017 and is already becoming one of the popular DJ software products globally.
 - (c) A DJ software development tool is readily available: A competing DJ software brand, Mixxx, has produced open-source DJ software, which means its code could be used as the basis for anyone wanting to manufacture their own.
 - (d) DJ software can be developed relatively quickly: It may take as little as a few months for a new entrant to develop simple DJ software, and less than 12 months to develop more complex DJ software that competes with rekordbox and Serato. The time to enter the DJ software market is significantly less for music production software providers. A music production software application provider would take only 3 months to enter the DJ software market with a DJ software application.

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https://saturncloud.io/blog/how-does-the-ableton-warp-algorithm-work-exactly/#:~:text=In%20the%20realm%20of%20music,a%20flexible%20and%20precise%20manner.

⁴⁷ https://pirate.com/en/blog/djing-with-ableton-live/

- (e) Barriers to expansion are particularly low for DJ software application providers to expand into Apps and vice versa: While the coding language is completely different for Apps and applications, it would be relatively easy for a DJ software App provider to expand into DJ software applications (and vice versa) because they can leverage the design and interface of their existing software. All that is required is a software engineer with the requisite skills to write the code and a designer. It may only take 6 months or less for an App developer to write an application with similar features to rekordbox and Serato.
- (f) The market is dynamic and innovative: While buyer preferences for established brands such as Serato can create a short-term advantage, they are short lived in a market where innovation is critical. Like most technology markets, innovation is critical for success in the DJ software market. Innovation however does not necessarily have to be technological breakthroughs, and it could be as simple as improvements to design and appearance, and user-friendliness. DJ software providers continually need to innovate and invest in their brands to compete. A provider who fails to invest in their brand will quickly be overtaken by their competitors who do as evidenced by the case of edjing. While edjing initially possessed fewer features than those which Serato provided, that is no longer the case, and edjing's user-friendliness, and automated and simplified features have enabled edjing to become very successful. The fact that reputation can be quickly eroded by innovation in technology markets is most starkly demonstrated by the dramatic decline of Blackberry's market share in the 2010s.⁴⁸ The number one factor attributed to its decline was the failure to adapt and innovate. 49 While the significance of reputational barriers to entry in antitrust analysis is primarily dependent on the nature of the market and seems somewhat unsettled in New Zealand and overseas, in Fisher & Paykel Ltd v Commerce Commission, the Court appeared to accept that a firm's reputation will not ordinarily be an entry barrier.⁵⁰ United States courts have also held that "brand name recognition or reputation alone is not an entry barrier",51 and that "we fail to see how good will achieved through effective service is an impediment to, rather than the natural result of, competition".⁵² In the DJ software market, while Serato has a strong brand and a loyal following of users, this is the result of significant and ongoing investment by Serato into its products and marketing; investment that is required (and will continue to be required post-Proposed Transaction) because of the high degree of competition in the DJ software market.
- 6.26 Serato has identified a number of potential suppliers who may enter the DJ software market. This is provided at Annexure 12. Notably, music production software companies possess a strategic advantage in entering the DJ software market, largely due to the relatively low barriers to entry. This is attributed to the following factors:
 - (a) First, their existing expertise in software development, particularly in areas such as audio processing algorithms and user-interface design, can be effectively leverage to expedite the development of DJ software, leading to a faster time-to-market.

⁴⁸ Blackberry held a 33.02% market share in the United Kingdom in 2011. This decreased to 0% by 2021. See https://www.makeuseof.com/the-reasons-blackberry-failed-spectacularlyand-why-they-might-rise-again/

⁴⁹ https://www.makeuseof.com/the-reasons-blackberry-failed-spectacularlyand-why-they-might-rise-again/

⁵⁰ Chris Noonan Commercial Law – Competition – A to Z of New Zealand Law (online ed, Thomson Reuters) at [14.C.3.2.5(16)] and Fisher & Paykel Ltd v Commerce Commission [1990] 2 NZLR 731 (HC) at 748

⁵¹ Ticketmaster Corp v Tickets.Com Inc CV99-7654-HLH (VBKx) (CD Cal 2003).

⁵² United States v Waste Management Inc 743 F 2d 976 (2d Cir 1984) at 984

- (b) Second, their specialisation in the audio industry equips them with insights into the specific requirements of musicians and producers. This knowledge can be leveraged and applied to the DJ segment, resulting in savings in both time and research resources.
- (c) Third, their existing customer base and distribution channels provide direct access to the market, facilitating more streamlined and effective product launches.
- (d) Lastly, these companies enjoy established brand recognition within the audio and software communities, which would assist with credibility for new products.
- 6.27 Collectively these factors significantly reduce the (already low) barriers to entry, making it relatively straightforward for music production software companies to diversify into the DJ software market.
- 6.28 A prominent example of a company successfully transitioning from music production software to the DJ software market is Native Instruments. With an established brand in the audio industry, Native Instruments leveraged its software development expertise and industry knowledge to create Traktor, a leading DJ software solution.

ATC will continue to be constrained by other options available to DJs

- As explained earlier, DJs do not require DJ software to DJ; there are other options available should a DJ wish to not use DJ Software. For example, a DJ can elect to buy CDJs with a mixer or an 'all-in-one' system which is supplied with full featured embedded software (i.e., it allows a DJ to 'mix' music and add effects in real time). CDJs with a mixer, and all-in-one systems can be used without separate DJ software and many professional DJs elect to use this option due to the convenience of not requiring a separate laptop or device and because there is less risk of interruptions to a DJs performance due to connection failures. Further, there are many scratch DJs that elect to use analogue hardware (e.g., turntables for vinyl) to mix music requiring no software at all.
- 6.30 All these options present very real and significant constraints on the Parties' ability to increase price or reduce the quality of their DJ software products.

The Proposed Transaction will not increase the risk of coordinated effects

- 6.31 The Proposed Transaction does not result in any coordinated effects. It will not enhance the ability of ATC and its competitors to coordinate their behaviours, including because:
 - (a) DJ software offerings are not entirely homogenous. While there is commonality in the core features offered across all DJ software products, there are variations in the additional features that each software solution offers. For example, DJs in hip-hop music genre may prefer software such as Algoriddim djay (App) and Serato's (Application) digital vinyl systems (DVS) for their scratch functions, and for better groove, (https://fb.watch/njBZ1dg-eh/);
 - (b) there are a large number of DJ software options, and the Proposed Transaction will not result in the removal of a particularly aggressive or destabilising competitor. While Serato is one of the market leaders in the DJ software application category, there are many other DJ software applications and Apps available in the market. Given the sheer volume of alternative options, any attempt to coordinate conduct across the industry is unlikely to be successful:

- (c) there are limited interactions between competitors in the DJ software market and the number of DJ software users using a particular DJ software application or App is fluid and not fully transparent; and
- (d) the market is characterised by a high degree of innovation (including the rapid advancement of AI).

7. COMPETITION ASSESSMENT - NO VERTICAL COMPETITION CONCERNS

7.1 The Proposed Transaction will not give rise to any vertical competition concerns as it will not create the ability or incentive for ATC to foreclose competition in either the DJ hardware market or the DJ software market.

No ability or incentive to foreclose competition in the DJ hardware market by refusing to allow Serato to operate with rival DJ hardware

Ability

- 7.2 The Proposed Transaction will not create the ability for ATC to prevent or inhibit competition in the DJ hardware market by, for example, refusing to allow Serato to be used with rival non-partner DJ hardware, making it more difficult to use Serato with rival DJ hardware products or only making a more limited version of Serato available to be used with rival DJ hardware products.
- 7.3 The Commission recognises in its Merger Guidelines that "[a] firm is generally only able to foreclose competitors if it has market power at one or more level(s) of the supply chain." 53 Accordingly, the Proposed Transaction could only give ATC the ability to foreclose competition in the DJ hardware market if Serato has market power in the DJ software market or if the combination of Serato and rekordbox would give ATC market power.
- 7.4 ATC submits that Serato does not have market power, and the Proposed Transaction will not give ATC market power in the DJ software market. As explained in section 6 above, there are numerous DJ software products in the market that match or better Serato's features (see also Annexure 9), barriers to entry are low and the market is innovative and dynamic.
- 7.5 [].
- 7.6 Post-Proposed Transaction, ATC would in any event have limited technical ability to prevent end-users from using Serato in its current state with rival DJ hardware which has a Serato-supported sound card. In particular:
 - (a) Serato is MIDI compatible and therefore it is possible to "map" Serato to all DJ hardware devices which either contain a Serato-supported sound card or are connected to another device with a Serato-supported sound card. Generally, most popular DJ hardware has a Serato-supported sound card and, if the hardware does not have a Serato-supported sound card or no sound card at all, it can be connected to an external sound card device which is supported (essentially operating like an adaptor).⁵⁴ Once connected in this way, Serato DJ Pro can be MIDI mapped to a DJ

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⁵³ Merger Guidelines at 5.7.

⁵⁴ For example, see the Reloop Flux (https://www.reloop.com/reloop-flux). This contains a Serato-supported sound card and any DJ hardware can be plugged into this device and used with Serato.

hardware device.⁵⁵ The MIDI mapping process in Serato DJ Pro encompasses two levels:

- (i) Utilising the Serato DJ Pro user interface and the MIDI button. This uses a simple interface, designed for mapping knobs, buttons and sliders.
- (ii) Advanced users seeking more extensive functionality can directly edit the XML file located in the Serato DJ MIDI folder on their hard drive. This enables users to map platters, adjust lighting, and customise other aspects to their preferences. Due to the open and standardised nature of MIDI, many users collaborate and share these XML files online, fostering a community-driven approach to customisation and mapping.⁵⁶
- (b) Once Serato's software has been downloaded and installed on a computer, Serato cannot unilaterally update the software to render it incompatible with particular hardware. This limitation arises because the software resides locally on the user's computer. As a result, if Serato attempted to "lock out" certain DJ hardware, it would be unable to do so for users who have already downloaded and installed the software. In essence, once the software is in the hands of the end user, it remains under their control ⁵⁷, ensuring that compatibility with their chosen hardware remains intact regardless of any subsequent software updates by Serato. This autonomy over software compatibility is a key advantage for users who rely on specific DJ setups and hardware configurations.
- 7.7 Further, while it would be theoretically possible to introduce other "encryptions" to the Serato software (and impose new licence conditions prohibiting its use with other hardware) in an attempt to "lock" the newly downloaded or updated software to a specific DJ hardware in the future so that it cannot be used with hardware that has a Serato-supported sound card, such a 'lock' would only have temporary effect (for the same reason. It would be relatively simple for rival DJ hardware manufacturers or other third parties to write and release codes to remove the lock so the software could be used fully with any DJ hardware that uses the MIDI standard. This would create an ongoing cat and mouse situation, which is only likely to negatively affect the Pioneer and Serato brands. Similarly, if post-Proposed Transaction Serato were to offer its DJ software with limited features to other rival hardware suppliers, they (or a third party) could simply use already available unlocking codes or develop software to "unlock" the full version of the software. The ability to 'unlock' DJ software is readily available without a prominent incentive to develop this technology. ATC considers that if it were to pursue this strategy post-Proposed Transaction, there would be a reason for third parties to actively improve the 'unlocking' offering and the coding and techniques to do so would rapidly improve, becoming much easier for end-users.

Incentive

- 7.8 Even if post-Proposed Transaction ATC had an ability to prevent Serato software from operating with rival DJ hardware, it has no incentive to do so.
- 7.9 ATC and Serato are incentivised to distribute their software as widely as possible; doing so maximises the potential revenue from software sales and provides a constant revenue stream from subscriptions in contrast with the less frequent DJ hardware sales. The incentive to distribute DJ software widely is demonstrated by the fact that ATC has not taken any steps

⁵⁵ MIDI mapping DJ hardware to DJ software is the process of configuring and assigning the physical controls on your DJ controller (hardware) to control various functions and features within your DJ software.

 $^{^{56} \} For \ example, see \ \underline{https://djtechtools.com/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-jogwheels-touchstrips-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-touchs-and-modifiers/2018/04/11/hacking-serato-djs-midi-mapping-gogwheels-s$

⁵⁷ It should be noted, however, that Serato can remove access to its subscription-based software in the event of non-payment.

to 'lock' the paid version of rekordbox to its own DJ hardware; to the contrary, the paid version of rekordbox can be used with all of ATC's competitors' hardware that operate using the MIDI standard (albeit some configuration by the user may be necessary). ATC's free version of rekordbox is presently locked to its own DJ hardware to encourage subscription to its paid version, however, it still has full "mixing" features that can be used without DJ hardware.

- 7.10 As far as the growth opportunity is concerned, given ATC's current strong position in the DJ hardware market, the DJ software market is as important as its DJ hardware business. This is because, while the per unit price is much higher for DJ hardware, DJ software provides a more constant and consistent revenue stream over time. However, as explained elsewhere in this application, competition in the DJ software market is fierce, and ATC's core strength lies with the development of hardware. As such, ATC is placing increased value in its music production hardware business.
- 7.11 ATC has always been open to exploring the possibility of partnering rekordbox with competitor hardware suppliers, since it could be the start of a new revenue stream for rekordbox. [].
- 7.12 Action by ATC to "lock" Serato DJ software to its own DJ hardware (or to not make Seratosupported sound cards available to rival hardware manufacturers) would be economically irrational (see paragraph [7.17] below for the estimated economic impact).
- 7.13 ATC considers that 'locking' Serato's software to its own DJ hardware (or refusing to make Serato-supported sound cards available for rival DJ hardware) would not result in an increase in revenues from DJ hardware sales, for the following reasons:
 - (a) rival DJ hardware end users can choose to acquire DJ software from one of the numerous other DJ software providers. While many purchasers of DJ hardware use DJ software offered by the manufacturer, they are not required to do so. These other DJ software options have comparable "mixing" features and functionality to Serato DJ and are therefore substitutable. While Serato DJ software is a popular product, it is not a "must have" as discussed above;
 - (b) rival DJ hardware suppliers already have and, if not, could develop their own competitive DJ software to package with their hardware as barriers to entry are low. For example, rival DJ hardware suppliers that have developed their own proprietary DJ software include inMusic, Native Instruments, Hercules, and more;
 - Serato branding or perceived compatibility is not a material driver of DJ hardware sales (c) in New Zealand or globally. The design, user-friendliness, features, price and brand of DJ hardware hold far greater influence over a purchaser's decision when choosing which DJ hardware to purchase than particular brands of software. This is evidenced by ATC's experience in the US DJ hardware market. ATC achieved its strong position in that market by continually improving its DJ hardware by corresponding and working with top DJs closely, pre- and/ or post their tour performance / events, and reflecting their feedback directly into their next models, and being the first to market with new and innovative features, not by partnering with Serato. For example, when ATC started collaborating with Serato in 2009 (at arguably the peak of its popularity), it had no impact on ATC's US DJ hardware market share (based on MIST data). In contrast, ATC gained its first foothold in the US DJ hardware market in 1994 when it was the first manufacturer to offer DJ players with CDs, and a DJ mixer with auto beats-perminute counter. ATC's next jump in its US market share occurred when it introduced the first DJ hardware with an ability to mix music stored in USB sticks in 2011. Further increases in ATC's US market share occurred from 2012 to 2017 following numerous feature updates to its DJ controller and the launch of ATC's first and subsequent allin-one systems. If Serato branding was a 'must have' to successfully compete in the

- DJ hardware market, all of ATC's DJ hardware sales (by unit) would be of DJ hardware carrying the Serato brand than is currently the case.
- (d) rival DJ hardware suppliers market their hardware products with DJ software other than Serato further evidencing that Serato is not a 'must have' to compete. In fact, Serato's hardware partners commonly release DJ hardware before achieving official compatibility with Serato, frequently promote their own software as the primary choice for their hardware and, even when their hardware is compatible with Serato, actively promote other DJ software solutions alongside Serato demonstrating that Serato's support is just one of several options available to users. For example, inMusic, Native Instruments, and Hercules sell their products with Algoriddim djay (App), and more, besides their own DJ software, and Serato DJ. Other rival hardware suppliers also advertise compatibility with a range of software brands, not only Serato.⁵⁸ Since April 2021, Serato has officially supported [] DJ hardware products released by Serato's non-ATC DJ hardware partners; and
- (e) as evidenced from ATC's MAU estimates, the increasing popularity of DJ software Apps, and emergence of other DJ software applications, is eroding any branding advantage Serato currently possesses. ATC therefore considers it could be risky to associate Pioneer DJ's hardware with Serato's software more than it does already. Incremental gains both in revenue and in market share that may be realised by marketing ATC's DJ hardware with Serato branding would be very limited.
- 7.14 Finally, any refusal to allow Serato to be used with rival DJ hardware post-Proposed Transaction would cause a massive outcry from Serato users, resulting in significant damage to the reputation of both the Serato and Pioneer DJ brands. As the Commission is aware from the volume of media articles released about the Proposed Transaction, the DJ industry is extremely vocal. It is important to recognise that practically enforcing hardware-specific restrictions on Serato would be particularly challenging (for the reasons mentioned in paragraphs [7.6] and [7.7] above), potentially making such efforts appear irrational. Any perceived attempt by ATC to exercise market power post-Proposed Transaction is likely to result in a loss of DJ hardware, rekordbox and Serato customers, further underscoring the importance of maintaining compatibility and avoiding actions that could lead to impractical and reputational consequences.

No incentive to refuse to partner with other DJ hardware brands and/or make Serato less attractive to rival DJ hardware brands

- 7.15 Similarly, post-Proposed Transaction there is no incentive for ATC to refuse to allow Serato to partner with other DJ hardware brands or make Serato less attractive for other DJ brands to partner with by, for example, refusing to allow Serato to be included with rival DJ hardware, refusing DJ hardware rivals to carry the Serato brand, raising its licence fees or taking longer to make Serato 'compatible' with rival hardware. It would be self-defeating and commercially irrational for ATC to engage in this conduct for the reasons explained below.
- 7.16 Further, inMusic, has made a joint announcement with Serato confirming that its relationship with Serato will be unaffected by the Proposed Transaction (please refer to the PPTX).

Terminating Serato's partnerships would lead to an immediate loss of revenue

7.17 If post-Transaction Serato were to terminate its partnerships with rival DJ hardware suppliers, including refusing to allow Serato to be used with rival DJ hardware products, it would suffer

⁵⁸ For example, many of inMusic's hardware products are advertised as compatible with (in addition to Engine DJ) Serato, Virtual DJ, Traktor and Algoriddim djay Pro.

a loss of revenue with no guarantee that additional revenue would be derived from direct sales of Serato to end-users to compensate for that loss. In particular, Serato would lose:

- (a) all "hardware fees" associated with sale of rival DJ hardware (approximately [] per annum);⁵⁹ and
- (b) all perpetual licence and recurring subscription revenue associated with end-users who use Serato DJ with rival DJ hardware (currently estimated at approximately [] per annum).

Increasing licence fees to Serato's partners or otherwise making Serato unattractive to partner with is likely to be counter-productive

- 7.18 Post-Proposed Transaction, any attempt to increase licence fees to Serato's partners or make Serato unattractive to partner with, such as making fewer features available or taking longer to make Serato work immediately with partner hardware (without additional configuration by the user being required), is likely to cause Serato's partners to look for alternatives to Serato.
- 7.19 Many DJ hardware manufacturers offer their own DJ software product (for example, as noted earlier, inMusic has developed its own DJ Software product called Engine DJ, Native Instruments has its own DJ software called Traktor, and Hercules has DJUCED) and therefore Serato's partners could instead focus on their own DJ software product, or seek partnerships with any of the numerous other DJ software products, including App software, available in the market. For the reasons explained earlier, Serato is not a 'must have' product for DJ hardware suppliers to compete and therefore any attempted exercise of market power by ATC is likely to result in Serato's partners moving elsewhere.

The terms of the SPA preclude refusing to allow Serato to partner with other DJ hardware brands or making Serato less attractive to partner with

7.20	As explained in section 3.3 above, the SPA includes a number of obligations on ATC []. Ir
	particular, for the Contingent Consideration Period (defined in the SPA), ATC is contractually
	bound to (amongst other things):

- (a) [];⁶⁰
- (b) [];⁶¹
- (c) [].⁶²

7.21 Any refusal to allow Serato to partner with rival DJ hardware brands, refusing to allow Serato to operate with rival DJ hardware (if it were technically possible to prevent Serato from being so used) or refusing to make the full version of Serato's DJ software product available to rival DJ hardware suppliers would breach ATC's obligations under the SPA which would entitle the sellers to damages to compensate [].

7.22 Further, [].

7.23 The parties submit that it is necessary for the Commission to consider ATC's contractual commitments to the Sellers as part of the competition analysis. The terms of the SPA (which

⁵⁹ This is based on FY22 data.

⁶⁰ Schedule 11, clause 6.1.

⁶¹ Schedule 11, clause 6.2.4.

⁶² Schedule 11, clause 6.2.9(a).

are legally binding) form part of the factual and are relevant to the competitive dynamics in the DJ software and DJ hardware markets post-Proposed Transaction. The Commission has taken account of forward-looking contractual commitments in previous clearance determinations, most recently in relation to Connexa's proposed acquisition of certain assets from 2degrees where the Commission concluded that certain contractual commitments were sufficient to prevent any prospect of vertical foreclosure.⁶³

7.24 ATC submits that its contractual commitments under the SPA comprehensively address any conceivable residual foreclosure concerns the Commission may have. ATC's contractual commitments are legally binding and operate for at least the next []. ATC will be subject to monitoring by the sellers and any breach of its commitments would entitle the sellers to seek injunctive relief and/or damages. ATC's contractual commitments eliminate the potential for ATC to withhold access to Serato or make it less attractive to rival DJ hardware manufacturers for at least the next [] years. There are likely to be significant changes in the DJ software market over the next [] years due to innovation and the increasing popularity of DJ software Apps. Accordingly, the Commission cannot draw any conclusions as to the effect of the Proposed Transaction after the contractual commitments cease.

No ability to undermine competitors by using their commercially sensitive information

- 7.25 There have been concerns raised in the media that the Proposed Transaction will give ATC "access" to its hardware competitors' confidential information as a result of their partnership arrangements with Serato. 64 ATC considers these concerns unfounded and damaging. The Proposed Transaction will not give ATC access to sensitive information that ATC could or would use to undermine its competitors.
- 7.26 ATC understands that the potentially commercially sensitive information that Serato has access to through its partnership arrangements are:
 - (a) the hardware specification documents, as it relates to the silkscreen design and the MIDI specification of each partnered product (but detailed blueprints of the physical parts are not received by Serato); and
 - (b) the fee paid to Serato per unit sold.
- 7.27 Serato also receives hardware and compiled firmware while implementing software support for new hardware. Sometimes this may be prior to release of the new hardware to the public. Serato does not receive access to source code or algorithms of the hardware manufacturer, and likewise the hardware manufacturer does not receive access to Serato source code. Accordingly, neither ATC nor Serato will have access to this information post-merger.
- 7.28 ATC does not consider information about its competitors' hardware specifications and fees paid to Serato would allow ATC to act in a manner that it could not already act (ie it can already reverse-engineer its competitors' DJ hardware specifications and estimate the royalties paid by its competitors to Serato per unit based on their retail pricing), although ATC acknowledges that if it were to have access to its competitor hardware and specifications prior to its public release, this would theoretically allow it act earlier than it otherwise would be able to.

⁶³ Connexa Limited and Two Degrees Networks Limited and Two Degrees Mobile Limited [2023] NZCC 10 at 93.1.

⁶⁴ https://djmag.com/news/inmusic-threatens-legal-action-over-alphatheta-corporations-serato-acquisition

- 7.29 In any event, post-Proposed Transaction ATC has no incentive to access and use any competitively sensitive information held by Serato regarding its hardware competitors as:
 - (a) ATC's primary focus for its DJ hardware offering, and the way it has developed and maintained its market position to date, is to refine and improve its existing DJ hardware, working closely with top DJs in the industry for continuous improvement. For example, ATC has worked with DJs to improve the layouts for equalisers and knobs, introduced a slightly more technical friction level of faders and jogs, and introduced center locks minimising mixing mistakes (https://www.youtube.com/watch?v=ZhbKDHfw3G4);
 - (b) Unlike in the past 10 years, there are, in any event, now very few (if any) substantive differences between competitor products at the different price points within each category of DJ hardware and DJ hardware suppliers are quick to copy others' new features. For example, despite ATC's efforts, since the end of 2017 its market share in the US (based on MIST data) has remained more or less the same, and may even have stagnated slightly in some regions. To the extent that DJ hardware manufacturers introduce new technology, they are likely to be protected by patents in any event; and
 - (c) if ATC were to access and use its competitors' information to their detriment, ATC would likely suffer significant reputational damage and other legal consequences (as mentioned below). ATC cannot afford to engage in conduct that risks alienating its customers.
- Absent the Proposed Transaction, ATC could feasibly reverse-engineer its competitors' DJ hardware specifications (i.e., the information that would likely be contained in the hardware specification documents) and estimate the royalties paid by its competitors to Serato per unit based on their retail pricing. Accordingly, ATC does not consider the Proposed Transaction would give it access to information that it otherwise could not gain access to (or estimate) if it wished. ATC has seen comments in the media from inMusic raising concerns about the Proposed Transaction and the sharing of confidential information. It has been quoted in the media as saying that, under its partnership with Serato, it "give[s] them our product up to a year ahead of time so they can analyse it and put the software in. If I was handing it to the new dominant player, I'm essentially handing it to my competitor."65 []. Further, ATC notes that Serato's software is not included within rival DJ hardware Serato is a laptop-based product.
- 7.31 Finally, although there will be no practical risks to rival DJ hardware manufacturers from sharing information with Serato, to address any perceived risks ATC intends to put in place the following measures post-Proposed Transaction within a month of closing:
 - (a) a confidentiality protocol between Serato and its hardware partners designed to ensure that the hardware partner's confidential information regarding its hardware is only shared amongst certain Serato employees and is not disclosed to Serato's parent company (Serato is already actively engaging with its hardware partners on these protocols);
 - (b) non-disclosure agreements for Serato employees who have access to confidential information provided by an ATC competitor in the course of their partnership arrangements, precluding them from sharing this information with other Serato employees, and with ATC;

⁶⁵ https://djmag.com/news/inmusic-threatens-legal-action-over-alphatheta-corporations-serato-acquisition

- (c) creation of an ethical wall and firewall between Serato and ATC, and amongst the Nortisu Koki group, preventing employees of any subsidiary accessing confidential information of any ATC competitor held by another subsidiary company; and
- (d) internal governance protocols amongst the Noritsu Koki Co., Ltd subsidiaries to make specific reference to the Unfair Competition Prevention Act (https://www.meti.go.jp/english/policy/economy/chizai/chiteki/index.html) which is monitored by the Ministry of Economy, Trade and Industry in Japan, and other relevant laws that deal with theft. Under Japanese law, in general, it is a civil and/or a criminal offence to gain from competitors' trade secrets that are obtained without their consent.
- 7.32 After implementing these measures, ATC's board and staff will have no ability to access any confidential competitor information held by Serato. ATC notes, for completeness, that the confidential information set out at paragraphs [7.26] and [7.27] above will not be required, under any circumstance, to be shared with the senior management of ATC and its Board.
- 7.33 Further, there are confidentiality obligations in Serato's partner agreements. Under those agreements, confidential information can only be shared with Serato's employees and directors, and Serato's "Affiliates" (which will include ATC post-Proposed Transaction) on a "need to know" basis for the purpose of carrying out work under the agreement.

No ability or incentive to foreclose competition for the supply of DJ software

- 7.34 The Proposed Transaction will not give ATC any greater ability or incentive to foreclose competition in the DJ software market by, for example, not allowing rival DJ software products to be used with its DJ hardware products or increasing the proportion of its DJ hardware products that carry Serato branding.
- 7.35 ATC already has its own DJ software products, rekordbox and WeDJ. If ATC could refuse to allow rival DJ software products to be used with its DJ hardware and if doing so would be profitable, ATC would do this absent the Proposed Transaction. The fact that ATC does not is conclusive evidence that the Proposed Transaction will not give ATC any greater ability or incentive to foreclose competition in the DJ software market by refusing to allow rival DJ software products to be used on its hardware. To the contrary, this demonstrates that ATC has an incentive to allow any DJ software to be used with its hardware products.
- 7.36 In any event, ATC could not, post-Transaction, prevent end-users from using rival DJ software with Pioneer DJ hardware because, as explained earlier, ATC hardware utilises the MIDI standard and therefore any DJ software which supports MIDI can theoretically be used, although some minor configuration by the user may be required to access the full functionality of the software. As noted earlier however, some rival DJ software products (namely Engine DJ and DJUCED) are currently "hardware locked" to their own DJ hardware products, and therefore these software products cannot be used with ATC hardware in either the factual or the counterfactual without an 'unlock' code. As explained at paragraph [7.7] above, while ATC could technically introduce "encryptions" to "lock" its own DJ software to its DJ hardware, this would be a temporary measure which ultimately would be unsuccessful and damaging to ATC's reputation and its brands. It would therefore be irrational.
- 7.37 Further, multiple software products can be used with a single device. This means that, even if an end-user were to elect to subscribe to rekordbox or Serato for use with their ATC hardware in particular months, they are not prevented from subscribing or acquiring DJ software from another provider in different months. Compatibility with hardware products is, moreover, only necessary to perform a narrow subset of DJ software functionality, the 'mixing' function. End-users can use hardware alone with embedded software to perform this function whilst operating a stand-alone software solution for their 'editing' needs. Even if ATC were

- capable of locking or degrading software access to its hardware, this would therefore not result in foreclosure of rival software producers.
- 7.38 Further, if simply including software branding on ATC's DJ hardware products would have the effect of substantially increasing ATC's software revenues, then ATC would sell all of its DJ hardware with its rekordbox branding. It does not.

8. **CONFIDENTIALITY**

- 8.1 Confidentiality is requested of the information in this notice that is in bold, highlighted yellow, blue or green and contained in square brackets, and the information set out in the Confidential Annexures, on the basis that disclosure would be likely unreasonably to prejudice the commercial position of the parties providing the information.
- 8.2 The Applicant requests that it be notified if a request is made to the Commission under the Official Information Act 1982 for release of the information for which confidentiality has been claimed.
- 8.3 Confidential and public versions of this Notice have been provided to the Commission.

DECLARATION

I, Mr. Yoshinori Kataoka , have prepared, or supervised the preparation of, this notice seeking clearance.

To the best of my knowledge, I confirm that:

- a) all information specified by the Commission has been supplied;
- b) if information has not been supplied, reasons have been included as to why the information has not been supplied;
- c) all information known to me that is relevant to the consideration of this notice has been supplied; and
- d) all information supplied is correct as at the date of this notice.

I undertake to advise the Commission immediately of any material change in circumstances relating to the notice.

I understand that it is an offence under the Commerce Act to attempt to deceive or knowingly mislead the Commission in respect of any matter before the Commission, including in these documents.

I am a director/officer of the company and am duly authorised to submit this notice.

Name and title of person authorised to sign:

Mr. Yoshinori Kataoka President and CEO		
Signature		
Date		

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CONFIDENTIAL ANNEXURE 4: ATC'S NEW ZEALAND REVENUE AND VOLUMES

	C,	Y2020	C	/2021	CY2022		
	Volume Revenue		Volume	Revenue	Volume	Revenue	
DJ Software	[]	[]	[]	[]	[]	[]	
DJ Hardware	[]	[]	[]	[]	[]	[]	

Note:

- DJ software revenue is recognised in Japanese yen, while the DJ hardware is traded in US\$[].
- We have applied average US\$-JPY TTS exchange rate for each calendar year as follows; US\$1 to JPY 107.82 (CY2020), to JPY110.80 (CY2021), JPY132.43 (CY2022).
- DJ Software revenue is Japanese yen were, [] (CY2022), [] (CY2021) and [] (CY2022)

CONFIDENTIAL ANNEXURE 5: ATC's ANNUAL REPORT

CONFIDENTIAL ANNEXURE 6: ATC'S NEW ZEALAND DISTRIBUTOR

Retailer	FY22 revenue	Contact details

ANNEXURE 7: TRADE OR INDUSTRY ASSOCIATIONS

ATC participates in the following trade or industry associations:

- 1. Association of Music Electronics Industry (AMEI),
- 2. Japan Electronics and Information Technology Industries Association (JEITA)
- 3. USB Implementers Forum
- 4. SD Association
- 5. SD-3C LLC
- 6. DVD forum
- 7. Bluetooth SIG
- 8. Wi-Fi Alliance
- 9. Open Invention Network

CONFIDENTIAL ANNEXURE 8: SERATO'S REVENUE AND VOLUMES

Revenue in NZD		FY21			FY22			FY23	
	Worldwide	NZ	% NZ	Worldwide	NZ	% NZ	Worldwide	NZ	% NZ
Software licence subscriptions DJ	[]	[]	[]	[]	[]	[]	[]	[]	[]
Software licence subscriptions Music production	[]	[]	[]	[]	[]	[]	[]	[]	[]
Perpetual licences DJ	[]	[]	[]	[]	[]	[]	[]	[]	[]
Perpetual licences Music production	[]	[]	[]	[]	[]	[]	[]	[]	[]
Physical stock and other	[]	[]	[]	[]	[]	[]	[]	[]	[]
Direct Revenue	[]	[]	[]	[]	[]	[]	[]	[]	[]
Partner income*	[]	[]	[]	[]	[]	[]	[]	[]	[]
Total Revenue	[]	[]	[]	[]	[]	[]	[]	[]	[]

^{*}In respect of partner income, the figures for New Zealand are estimates. Serato does not receive country-by-country sales data from all its hardware partners (most report hardware partner licensing fees on an aggregated basis for sales by region). Accordingly, Serato has estimated the New Zealand revenue from partner income based on any NZ data it has been provided by hardware partners as well as data provided by ATC for NZ.

	FY21	FY22	FY23
Total NZ DJ Software Revenue (NZD)			

ANNEXURE 9: COMPARISON CHART OF DJ SOFTWARE FUNCTIONALITY

This annexure is provided in a separate Excel file.

CONFIDENTIAL ANNEXURE 10: SERATO'S PARTNERS

Hardware partner	Contact details
Pioneer DJ	[]
inMusic	[]
Roland	[]
Reloop	[]
Hercules	[]
Mixars	[]
Phase	[]

ANNEXURE 11: HARDWARE COMPETITOR DETAILS Excluding DJ Monitor and Headphone

Competitor	Brands	Contact details
inMusic	DENON, Rane, Numark, Akai	Not Available
Native Instruments	TRAKTOR	Not Available
Hercules	Hercules	Not Available
Roland	Roland	Not Available
Reloop	Reloop	Not Available
Panasonic	Technics	Not Available
Audiotonix	Allen & Heath	Not Available
Gemini Sound	Gemini	Not Available
Music Tribe Commercial My Sdn. Bhd.	Behringer	Not Available
MIXARS	Mixars	Not Available
Audio-Technica	Audio-Technica	Not Available
Korg	Korg	Not Available
YAMAHA	YAMAHA	Not Available

ANNEXURE 12: POTENTIAL FUTURE SUPPLIERS OF DJ SOFTWARE

#	Potential Entrant	Rationale
1	Amazon	Amazon have a "DJ mode" which could create a more advanced Al powered DJ system. See the press release from Amazon here .
2	Apple	Apple is a large music steaming provider and has recently filed a patent relating to turntables and laptops (see the article here). Apple frequently showcases DJing in its product demonstrations and has recently acquire a music production software company (Logic).
3	Audiotonix	Owners of the A&H DJ Brand, among other large hardware brands
4	Avid	Creator of Protools, previously acquired Torq DJ software
5	ByteDance (Tiktok)	ByteDance has been experimenting with music creation products and launching a music streaming service (see the article here).
6	Image Line	Creators of popular DAW production Software FL Studio, could pivot into performance
7	Spotify	Spotify is a large music steaming provider and has launched an Al DJ product (see the press release here).
8	Focusrite	Produce a range of hardware/software products. Have previously dabbled with DJ products.
9	Tidal	As per Spotify - large music catalogue to leverage with Al DJ tools
10	Soundcloud	As per Spotify - large music catalogue to leverage with Al DJ tools