

[FUND A LETTERHEAD]

Competition and Markets Authority,
The Cabot,
25 Cabot Square,
London E14 4QZ
Norton.Avast@cma.gov.uk
By hand and by email

11 July 2022

Dear Sir / Madam,

Anticipated Acquisition by NortonLifeLock Inc. of Avast plc:

Response from Fund A to the CMA's Issues Statement

I am writing to you on behalf of Fund A ("Fund A"), an investment management firm.

Up until recently, since the announcement in August 2021 of the anticipated acquisition by NortonLifeLock ("Norton") of Avast plc ("Avast"), funds managed by Fund A have held only a symbolic position of 3% shares in Avast. We had avoided investing more significantly because we shared the initial concerns that the CMA had with the CCS market—we agreed with the view of a potentially concentrated market with three main players and believed that Microsoft Defender might not represent a significant constraint.

After further diligence and consideration of the concerns with the CCS market, our view has changed and 30%. We submit this letter as a means to share some of the analysis that led to our own evolution on the topic in the hope that it may be helpful with respect to some of the issues that the CMA highlighted in its Phase 1 Decision.

Our diligence included commissioning a survey of more than 3,000 consumers to obtain an independent view of the CCS market.

Although confident in our work and analysis, we make no claims of 100% certainty – ultimately, these are "just" our views. We highlight below those aspects addressed by our survey. We will also point to those areas where we feel there are potential gaps in the Phase 1 analysis which hopefully the CMA will have the opportunity to address in more detail in its Phase 2 investigation.

1. We noted the absence in the P1D of discussion of the importance of smartphones and tablets. We would encourage you to consider their impact on market dynamics in the spirit of the CMA's own recent market reports on Mobile Ecosystems, which described, "*Mobile devices with internet connectivity such as smartphones and tablets [as] play[ing] a fundamental role in the lives of UK citizens*". The CMA's interim market report of December-2021 further explains how, "*As well as accounting for the majority of internet usage in the UK – with internet users spending almost three hours a day on average online using a smartphone or tablet – mobile devices are also the channel through which an increasing range and volume of other products and services are accessed and consumed*". We found interesting the report's comments that, "*When consumers today purchase a mobile phone, they effectively enter into one of two mobile 'ecosystems' – one operated by Apple, powered by the iOS operating system; the other operated by Google, powered by Google-compatible versions of the Android operating system,*"

and that, “*The operating system on a mobile device determines and controls a range of features that are important to users of mobile devices, ranging from the appearance of the user interface, through to the speed, technical performance, and security of the device.*” The report also notes that, “*We have heard from some app developers that Apple’s and Google’s stewardship of their ecosystems, in particular through app review processes and strong security features, helps to create consumer confidence and trust, which is vital for small start-ups and unknown brands.*”, and “*We have also heard that having two stable, secure, and trusted platforms helps to create the conditions that are needed to encourage investment in future innovation, and that by providing and maintaining app stores with low costs of entry for the majority of developers*”. Perhaps most significantly for the CCS market, the report concludes that, “*Privacy, security, and safety online: through design choice or other policies, Apple and Google are often in the position of acting in a quasi-regulatory capacity in relation to users’ security, privacy, and online safety. In many cases they opt to make decisions on behalf of consumers.*”

2. We turn now to the P1D itself, and the issues with which, following our own work, we struggle to agree. Although the CMA looks at the CCS market in general, the main focus of the P1D is clearly “total security” products (i.e. bundled products), and the analysis downplays the competitive constraints exerted by both the OS providers and the pure players. The CMA makes the comment that the Parties’ “offerings appear to be converging in respect of ‘total security’ solutions”. When thinking about why that is the case, we would argue that the Parties are doing so because they have realised that their historical core product of endpoint security is no longer a product that will offer them any differentiation on the eyes of the consumer and is a product that has become an absolute commodity. On the one hand, the parties have Microsoft offering for free a product that has historically been their core competency and is barely undistinguishable quality-wise from their own product and, on the other hand, are having to compete with pure play parties that have far superior products, as can be seen in different surveys. The Parties are having to try to convince consumers that the bundles that they offer provide value for consumers rather than that they have superior products
3. The CMA has not seen material evidence to confirm the Parties’ assumption that UK consumers would switch away from bundled offerings towards mix and match CCS solutions in sufficient numbers to constrain the Parties if they were to degrade their current offerings or raise prices to UK users. However, what evidence has the CMA seen to suggest that consumers do prefer bundles –other than comments from third party competitors (who may be biased)? The evidence leads us to conclude otherwise. The Parties’ market shares have been eroded over time by both pure play and OS providers. The market testing by BKartA found that, “*Private users who do not (or no longer) have any additional need for special protection for their devices, especially against malware, due to the meanwhile very high and in future probably increasing level of protection offered by their operating systems and other applications (browsers etc.), can generally easily meet their need for any other specific additional functions, which are now included in the respective product bundles, by using an alternative separate solution.*” In our survey (Q20), 56% of respondents agreed/strongly agreed with the statement, “I would consider switching from a bundled CCS product to purchasing several individual products, if I could save money because the combined price of the individual products was lower than the price of the bundle”, vs. only 17% who disagreed/strongly disagreed. Further (Q14), 73% of respondents would switch to an alternative CCS provider, “If the price of your CCS solution were to increase by 10% tomorrow, or if it performed less well relative to other competitors’ products”
4. The CMA questions how much of a constraint Microsoft Defender (“Defender”) actually offers, given that it establishes a “*baseline level of quality*” and that it is difficult to assess how actively consumers choose Defender given that it is pre-installed on their OS. However, we would argue that the fact that Defender creates a baseline and offers its product for free exerts a massive constraint on other parties’ ability to degrade their offering and having at least to match their offerings and to try to further innovate their products to be able to try to differentiate and justify asking to be paid for their products. Given that the vast majority of computers/laptops sold in the UK come with a free trial CCS product (mostly

McAfee) pre-loaded in their machines, the choice of running Defender is clearly an active one. At the end of the trial period, as far as we understand, a notification from Defender informs a consumer that they either have to renew the subscription of their current product, get a new antivirus product or uninstall the current product and allow Defender to take control. Any changes made by consumers to the configuration to try to enable functions of Defender when they have their products running are met with stark pop-up messages. In our survey (Q7), 45% of respondents had heard of Defender, 2nd highest CCS provider, implying strong brand recognition and higher than AVST and NLOK. In Q8, 15% of respondents had Defender as their CCS provider, 3rd highest after MCFE (44%) and AVST (15%), and higher than NLOK (13%), suggesting Defender a significant competitive presence. In Q11, in a forced choice (where their 1st choice CCS provider was not available), 16% of AVST customers and 14% of NLOK customers would have chosen Defender instead. For AVST customers, Defender 2nd only to MCFE (45%) and higher than NLOK (11%); for NLOK customers, Defender also 2nd only to MCFE (61%) and significantly higher than AVST (7%). Further (Q18), 39% agreed/strongly agreed with the statement, "*Free or pre-installed CCS solutions such as Microsoft Defender offer broadly the same level of protection as paid-for CCS solutions such as McAfee and Norton*", vs. 25% who disagree/strongly disagree

5. The CMA questions how pure play providers can exert a competitive pressure on the Parties when pure play providers typically lack the full range of CCS solutions offered by the Parties, in particular endpoint security. However, we would emphasise to the CMA the significant growth that many of these pure play providers have experienced, and note that many have started to offer their own endpoint security products (e.g. Kape). In several reviews, the pure play products seem to do significantly better than the products offered in bundles. We would also suggest that, when discussing the pure play providers, it is important to consider the CMA's own views that Defender offers a baseline level of quality. We would ask, if there is already a product that offers such baseline level, why would a consumer need to "recreate the wheel" in having another product that is barely distinguishable from the rest of the market? We would suggest that consumers are not so naïve as to prefer bundles over any other aspect of products
6. The CMA considers that the evidence suggests that branding and marketing spend plays a significant role in which CCS solutions consumers choose to use, which is likely to act as a significant barrier to smaller players seeking to grow their market share post-Merger. We would agree that marketing spend is an important aspect. However, it is interesting to see how much of that spend is to try to convince consumers that their default program is not good enough, rather than to highlight the characteristics of their products. We would point to Protected.net as an example where, in a period of 5 years, a company that relied on a white labelling of Avira's threat engine was able to grow revenues from \$0 to \$145m (compared to Avast, which has been running since the late 1990s, and made a number of acquisitions such as AVG, but has only reached \$941m total revenue in 2021). Further, Protected.net has just been acquired by System1 which has a significant marketing machine that should significantly reduce Customer Acquisitions Costs
7. The CMA is concerned that third parties currently have difficulties entering the supply of endpoint security solutions through white-labelling or licensing of a threat analytics engine and that this will continue to be the case post-Merger. However, we would suggest that a UK-based company like Protected.net clearly shows that a player can successfully enter the supply of endpoint security via white-labelling and in a short period of time reach breakeven as they seem to have been able to achieve in late 2021. We would note that the CNMC in their report claim that licensing/white-labelling of the Avira's Threat engine generates between [0-10%] of total sales of Norton and that for the merged parties their market share of licensing/white-labelling would be less than 15%, indicating that there is a significant white-label / licensing market

8. Lastly, if the CMA were to conclude in its Phase 2 investigation that the transaction does result in a substantial lessening of competition, we would suggest there are a number of potential remedies. As above, the CMA believes 3rd parties currently have difficulties entering the market. However, this issue should be addressed if there is a commitment to continue to white-label / license access to the Avast or Avira threat engine for the next 5 years on non-discriminatory terms – with Protected.net as a successful precedent for this approach. Further, if, at a future point, the Parties decided to close down the Avira threat engine in order to realise synergies – they could commit to make the threat engine available to a 3rd party to acquire for a nominal value. This would address the P1D comment (Para 153(c)) that there is a competitive advantage in having an owned and operated engine. If this were insufficient to satisfy the CMA, could additionally commit to maintaining a freemium product for the next 5 years – during which time it must continue to qualify as a “Top Product” by av-test.org (or a similar independent entity)

Also attached are some supplementary materials in PowerPoint format, that may be helpful in providing the background to our analysis.

Please let us know if you have any queries regarding the above views or the attached slides. We would be more than happy to discuss these further if needed.

For full disclosure, as of 8 July 2022, funds managed by Fund A ☒.

Yours faithfully,

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CEO, Fund A

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Anticipated Acquisition by NortonLifeLock Inc. of Avast plc:
Fund A response to the CMA's Issues Statement
Supplementary Materials

11 July 2022

Summary of CMA view of deal in Phase 1 decision

- ▶ Parties are 2 of the 3 largest independent providers in UK by both revenue and volume
- ▶ Parties are close competitors, and their offerings appear to be converging in respect of 'total security solutions' (i.e. bundled CCS solutions)
 - ▶ Internal documents show they monitor each other more frequently than other competitors (except MCFE)
 - ▶ Consumer survey / **switching** evidence in internal documents suggests Parties are closest or 2nd closest alternative for consumers
- ▶ CMA believes deal gives rise to a realistic prospect of a substantial lessening of competition ("SLC") as result of horizontal unilateral effects

Competitors

- ▶ CMA does not believe the competitive constraints provided by other CCS solution providers considered in aggregate are sufficient to offset the loss of competition between Parties resulting from the deal
- ▶ **Other independent providers** (except MCFE) of CCS solutions provide a "more limited competitive constraint" on Parties
 - ▶ Bitdefender (2020 global Revenue €183m), ESET (€526m), Kaspersky (\$704m), Malwarebytes (\$190m), Trend Micro (\$1.7bn)
 - ▶ "Significantly" smaller than Parties; competitive constraint only "to some extent", insufficient to offset loss of competition from deal
 - ▶ Remains the case even when considering dynamic nature of competition in market
 - ▶ Disagrees that smaller providers could rapidly expand market position post-merger
- ▶ **"Pure play" providers** similarly provide "more limited competitive constraints" because lack full range of CCS solutions offered by Parties
 - ▶ Specialise in one or more specific CCS solutions, which do not include endpoint security as a core feature
 - ▶ e.g. Nord Security and Kape / ExpressVPN specialise in VPN products; Experian specialises in identity protection solutions
- ▶ **Defender**: volume likely overstates competitive position since consumers may not actively be choosing Defender as often pre-installed or consumers may not even be aware they are using Defender
 - ▶ Reject significance of Defender growing volume share – not directly relevant to assess extent to which Parties' customers would switch to Defender in event of price increase / quality degradation of Parties' offerings, and thus extent to which a constraint
 - ▶ 3rd party calls "explicitly stated" did not see Defender as particularly close competitor; noted Defender offering as more limited
 - ▶ MSFT incentivised to ensure Windows platform secure from threats, in addition to incentive to distribute Defender
 - ▶ Defender as "baseline level of quality"; consumers may not see value in 3rd party provider unless provides more than Defender
- ▶ **Other OS providers** (e.g. AAPL, GOOG): no significant evidence that they provide material competitive constraint

Summary of CMA view of deal in Phase 1 decision (cont'd)

Relevant Market

- ▶ CMA has considered impact of Merger in relation to supply of CCS solutions, but in doing so has taken account in the competitive assessment of different extents to which suppliers across spectrum of different CCS solutions exert competitive constraints on the Parties
 - ▶ Strongest competitive constraints on the Parties come from the largest independent providers of CCS solutions which include endpoint security as one of its core features, which are increasingly being offered as part of 'total security' solutions ("bundled")
 - ▶ Insufficient evidence to confirm Parties' "assumption" consumers would switch from bundled to mix-and-match if degraded offering
- ▶ **Geographic scope** as UK; reject Parties' view of global market. NLOK and MCFE with higher shares of supply in UK vs. worldwide; differences more significant for smaller independent providers (e.g. TrendMicro "significantly" smaller share of supply in UK vs. worldwide)

Barriers to Entry

- ▶ **Barriers to entry** and expansion: significant, indicating such entry/expansion will not be timely, likely and sufficient to mitigate SLC
 - ▶ Competitors highlighted time and investment to increase UK share of supply, very large vs. annual UK revenue
- ▶ Theoretically, provider could **white-label**/license an engine – but still significant difficulties in building strong brand; advantages of owned and operated engine over licensed from 3rd party
 - ▶ CMA believes 3rd parties currently have difficulties entering supply of endpoint security solutions through white-labelling/licensing of a threat analytics engine and this will continue to be the case post-Merger
- ▶ Branding/marketing spend significant role in consumer choice; likely significant barrier to smaller players seeking to grow market share

Source of Information

- ▶ Although recognises share of supply estimates do not capture fully the competitive constraints on Parties, still provide useful information
 - ▶ Pre-merger,: 3 main providers (MCFE, NLOK, AVST), 1 "significantly" smaller (Kaspersky), a number of "very small" providers
 - ▶ Post-merger, combined company will have largest share of revenue with [40-50%]
 - ▶ Note: CMA amended Parties' revenue share data estimates, but not the volume data
- ▶ CMA view of data
 - ▶ Rejects Parties' criticism of redacted [X] survey – despite limitations, these do not meant results should be discounted in entirety
 - ▶ Critical of Compass Lexecon analysis: (a) not clear what proportion of customers who left one Party moved to a competitor rather than exiting the market; (b) no information on level of switching to other CCS providers; (c) limitations re customer overlaps
 - ▶ Rejects Parties' criticism of CMA's reliance on 3rd party feedback – CMA considers it provides further indication that Parties are close competitors

CMA procedure compared to German BKartA and Spanish CNMC

Decision-maker

- ▶ CMA Phase I decision is made by one individual who is not then part of the subsequent Phase 2 Inquiry Group
- ▶ Distinction does not apply in Germany and Spain

Evidence

- ▶ Evidence reviewed by CMA in Phase I is more limited than the evidence Phase I teams in Spain and Germany use
- ▶ e.g. Surveys: CMA Merger Guidelines specifically note that ‘customer surveys’ are only commissioned by CMA in Phase 2, not in Phase 1
 - ▶ BKartA: some references in German summary of Phase I decision in AVST to BKartA having collected its own data re MSFT usage
 - ▶ CNMC: in AVST, decision notes Spanish regulator had done its customer survey

Threshold / Standard of Proof

- ▶ CMA distinguishes between threshold at Phase 1 vs. Phase 2, with a lower (“*greater than fanciful*”) hurdle at Phase 1
- ▶ Distinction does not apply in Germany and Spain, where Phase 2 is a continuation of Phase 1 (in line with EU merger reviews)
- ▶ In practice, BKartA and CNMC thresholds for referring a case to Phase 2 may be slightly higher than corresponding threshold for CMA
 - ▶ BKartA: no specific standard. Legislation requires Phase 2 “*shall be opened if a further investigation of the concentration is necessary*”
 - ▶ CNMC: similar standard to EU, with Phase 2 opened if CNMC has “*serious doubts*” that transaction raises competition concerns, arguably a higher standard than CMA “*non-fanciful*”
- ▶ CMA has historically referred a higher number of Phase 1 cases to Phase 2 compared to BKartA and CNMC
 - ▶ CMA: ~22% of Phase 1 cases (34 of 157) referred to Phase 2 from Jan-2019 to May-2022
 - ▶ BKartA: Only 1% of Phase 1 cases (10 of c.1,000) referred to Phase 2 in 2021. Between 8 and 11 per year referred to Phase 2 between 2017 and 2020
 - ▶ CNMC: Only 19 Phase 2 investigations in total between 2007 and 2019. On average, fewer than 2 Phase 2 investigations per year between 2011 and 2021

BKartA Germany Comments (cleared transaction 7-Feb)

- ▶ Direct competitors include MCFE, **Kaspersky and ESET**
- ▶ AVST/NLOK combined turnover market share <40%. Higher only in Germany where NLOK strong since acquired AVIRA
- ▶ Strong competition from:
 - ▶ (a) Free but essentially fully functioning basic versions of paid premium product bundles; and
 - ▶ (b) Antivirus software already integrated in **operating systems (Windows, MacOS, iOS, Android)** or pre-installed by manufacturer. Found high usage quota of Defender, and other operating systems having even higher share of users who consider need for protection met by integrated mechanisms
- ▶ **No major obstacles** for users of freemium or product bundles **to switch** from one product to another
- ▶ No major (technical) obstacles to providers entering market or expanding existing market position. A provider can develop own engine or quite usual to license / white-label. Marketing cost as only major **barrier to entry**
- ▶ **Highly dynamic market** re (i) internal relationship between bundle providers and (ii) external relationship, esp. to antivirus software already integrated in operating systems or preinstalled by manufacturer
- ▶ (i) Internal relationship with significant market dynamics which work to parties' disadvantage: parties' share **worldwide** fell significantly vs. competitors, while smaller providers were able to increase share. Indicates competitiveness of small providers
- ▶ (ii) External relationship with increasing competitive pressure exerted by integrated / preinstalled, with Defender (now recognised for high level of protection) as "increasingly replacing the incumbent antivirus software providers", and users of other operating systems (MacOS, iOS, Android) seeing no need for additionally installed antivirus software
- ▶ **Bundles:** "Practically all of the additional functions are also offered by third party providers as an individual solution (e.g. standalone VPN software) or as part of a product bundle without antivirus protection (e.g. in the form of a possibly cross-platform cloud offer). From the private user's perspective the product bundles in question are either completely or at least to a great extent functionally inter-changeable."
 - ▶ "Private users who do not (or no longer) have any additional need for special protection for their devices, especially against malware, due to the meanwhile very high and in future probably increasing level of protection offered by their operating systems and other applications (browsers etc.), can generally easily meet their need for any other specific additional functions, which are now included in the respective product bundles, by using an alternative separate solution"
- ▶ "In competing with one another, **all OS providers** already have a great interest in offering the highest level of protection possible."
- ▶ **White-labelling:** "Apart from the possibility to develop its own so-called antivirus engine or other security functions, it is quite usual in the market for a provider to license white label products or software components for specific key functions provided by third parties. The only major barrier to market entry is likely to be the considerable marketing effort required to convince customers of the need for a paid premium product bundle in view of the availability of free and paid alternatives."

CNMC Spain Comments (cleared transaction 24-Feb)

- ▶ Market share analysis may overestimate parties' share because does not take into account free cybersecurity solutions, closed ecosystems or default solutions built into devices, e.g. Defender
- ▶ **Competitors:** for NLOK, MCFE, Kaspersky and ESET are close competitors, with MCFE the closest; AVST presents certain differences due to freemium business model, system cleaner software (CCleaner) and fact that it commercialises individual products as well as bundles
- ▶ **“Big Tech** companies which offer CCS to consumers (e.g. AMZN, AAPL, GOOG, MSFT) exert considerable competitive pressure on independent software operators, both from a technical perspective and from a consumer perspective”
 - ▶ Per CNMC market test, majority of CCS providers considers the Big Tech companies as a threat, real or potentially
 - ▶ Big Tech expanding offer, e.g. MSFT authenticator; AAPL “Sign in”, “Private Relay”; GOOG VPN offering to large cloud customers
- ▶ **Defender:** according to information provided by Parties and corroborated by CNMC market test, Defender is installed in 1 of every 2 devices globally, with volume shares of 51% at global level, 56% in EEA and 47% in Spain
 - ▶ Per AVTest, Defender offers a level of security comparable to that of paid-for software, such as that offered by the parties
 - ▶ Per CNMC market test, the majority of operators in the market consider MSFT a threat to their business model
- ▶ **Dynamic:** increasing digitalisation and cybercrime threat drive **market growth and development of new cybersecurity solutions**
- ▶ **Barriers to entry:** CCS market “does not present particularly significant barriers to entry, particularly for companies operating in enterprise segment and for Big Tech with established brands”
- ▶ **White-labelling:** Avira revenue from licensing its threat engine represents [0-10%] of NLOK global turnover
- ▶ **Geographic scope:** “As regards the market investigation, the majority of operators confirmed the supranational character of this market”
 - ▶ Fund A: interesting to see in P1D that 3rd parties in UK had a different view of the market
- ▶ **Market segmentation:** “can group in 3 broad categories: device security, identity protection and online privacy.” “In turn, these products can be marketed in packages or independently.” “There are, however, other operators that specialise in specific needs without necessarily having a direct relationship with the size of the company, e.g. MSFT or Surfshark”
- ▶ **Consumer priorities:** according to the Parties, consumers value efficacy and reliability as well as the trust inspired by the brand
 - ▶ Fund A Consumer Survey (Q19) confirmed that these are the aspects valued by consumers
- ▶ **Endpoint commoditisation:** Parties' internal documents show that antivirus threat engines are now considered a commodity in industry

CMA vs. BKartA vs. CNMC vs. Fund A Consumer Survey

Topic	CMA	BKartA	CNMC	Fund A Consumer Survey
Geog. Scope	<ul style="list-style-type: none"> UK only 	<ul style="list-style-type: none"> At least EEA-wide / worldwide 	<ul style="list-style-type: none"> Supranational 	n.a.
Competition	<ul style="list-style-type: none"> 3-to-2 market Parties close competitors Other ind. providers (ex MCFE) "limited constraint" 	<ul style="list-style-type: none"> Competition from (a) direct; (MCFE, Kaspersky, ESET) (b) freemium; (c) OS 	<ul style="list-style-type: none"> MCFE, Kaspersky and ESET close competitors to NLOK AVST different model 	<ul style="list-style-type: none"> At worst, a 4-to-3 market with long tail of smaller competitors
Defender	<ul style="list-style-type: none"> Questions if sig. constraint Baseline level of quality Passive not active choice Incentive to protect Windows 	<ul style="list-style-type: none"> All OS providers have interest in protection 	<ul style="list-style-type: none"> Installed in 50% of devices Level of security comparable to paid-for Majority of market operators see MSFT as threat 	<ul style="list-style-type: none"> 45% have heard of Defender; > AVST or NLOK Defender 2nd (after MCFE) as alternative in forced switch, and before Parties
Other OS / Big Tech	<ul style="list-style-type: none"> No evidence that provide competitive constraint 	<ul style="list-style-type: none"> Other OS even higher share of users see OS integrated protection meets needs 	<ul style="list-style-type: none"> "Considerable competitive threat" Competitors see as threat 	n.a.
Pure Play	<ul style="list-style-type: none"> Questions if constraint when lack full range of solutions 	<ul style="list-style-type: none"> Consumers easily meet needs for additional functions via pure play 	<ul style="list-style-type: none"> Pure play as not necessarily having relationship with company size 	n.a.
Bundling	<ul style="list-style-type: none"> Focus on "total security" Consumers prefer bundles 	<ul style="list-style-type: none"> Consumers can use free endpoint and add pure play 	<ul style="list-style-type: none"> Consider packages and independent provision 	<ul style="list-style-type: none"> 56% would switch to pure play from bundle / 17% not
Barriers to Entry	<ul style="list-style-type: none"> Significant barriers Branding / marketing very significant barrier 	<ul style="list-style-type: none"> No major obstacles to entry Marketing to convince users of need for paid bundle 	<ul style="list-style-type: none"> No particularly significant barriers, esp. for enterprise players / Big Tech 	n.a.
Switching	<ul style="list-style-type: none"> No evidence consumers would switch (to pure play) 	<ul style="list-style-type: none"> No major obstacles to switch 	<ul style="list-style-type: none"> No significant cost to switch 	<ul style="list-style-type: none"> 73% would switch if degrade offer or more expensive
White-labelling	<ul style="list-style-type: none"> Difficult to white-label or license a threat engine 	<ul style="list-style-type: none"> White-labelling "quite usual" 	<ul style="list-style-type: none"> Avira licensing threat engine is [0-10%] NLOK global rev. 	n.a.
Smartphones and Tablets	<ul style="list-style-type: none"> CMA ignores 	<ul style="list-style-type: none"> Consider iOS and Android 	<ul style="list-style-type: none"> Telcos license 3rd party security to improve offer 	n.a.

Fund A Consumer Survey

Bundling: consumer preference for bundling / reluctance to switch to individual or pure play providers

- ▶ CMA: “not clear the extent to which consumers are prepared to mix and match various CCS solutions from multiple providers (including pure play providers) as opposed to taking all the CCS solutions that they need from the Parties, either by buying multiple products or through a bundled offering”
- ▶ Survey: Q20, 56% of respondents agree/strongly agree with the statement, “I would consider switching from a bundled CCS product to purchasing several individual products, if I could save money because the combined price of the individual products was lower than the price of the bundle.”, vs. only 17% who disagree/strongly disagree
- ▶ Survey: Q14, 73% of respondents would switch to an alternative CCS provider, “If the price of your CCS solution were to increase by 10% tomorrow, or if it performed less well relative to other competitors' products”

Defender: not particularly significant / close competitor to Parties

- ▶ CMA: volume likely overstates competitive position; no evidence customers would switch to Defender; 3rd party calls
- ▶ Survey: Q7, 45% of respondents have heard of Defender, 2nd highest CCS provider, implying strong brand recognition and higher than AVST and NLOK
- ▶ Survey: Q8, 15% have Defender as their CCS provider, 3rd highest after MCFE (44%) and AVST (15%), and higher than NLOK (13%), suggesting Defender a significant competitive presence and not a 3-to-2 market
- ▶ Survey: Q11, in a forced choice (where their 1st choice CCS provider was not available), 16% of AVST customers and 14% of NLOK customers would choose Defender instead. For AVST customers, Defender 2nd only to MCFE (45%) and higher than NLOK (11%); for NLOK customers, Defender also 2nd only to MCFE (61%) and significantly higher than AVST (7%)

Defender: only “baseline level of quality”

- ▶ Survey: Q18, 39% agree/strongly agree with statement, “Free or pre-installed CCS solutions such as Microsoft Defender offer broadly the same level of protection as paid-for CCS solutions such as McAfee and Norton.”, vs. 25% who disagree/strongly disagree

Where Fund A's view differs from the CMA

CMA Views	Fund A Comments
<ul style="list-style-type: none"> Focus on “total security” (bundled) products Downplays competitive constraints from OS and pure players Comments Parties converging offerings – CMA does not ask why 	<ul style="list-style-type: none"> Parties realise endpoint security now commoditised Compete with (1) free Defender on core competency and (2) pure play with superior products Have to try to convince customers of value
<ul style="list-style-type: none"> Concludes consumers prefer bundles 	<ul style="list-style-type: none"> No evidence other than 3rd party competitor comments <ul style="list-style-type: none"> BKartA pure play product usage and Fund A survey suggest otherwise Parties' market shares eroded by pure play and OS
<ul style="list-style-type: none"> Defender: questions how significant a constraint Baseline level of quality Difficult to assess active consumer choice given pre-installed 	<ul style="list-style-type: none"> As baseline and free, (1) constrains Parties' ability to degrade and (2) requires innovation to differentiate / justify Not passive choice – most UK devices sold with free trial (MCFE) / pop up messages
<ul style="list-style-type: none"> Pure play: questions how can exert competitive pressure when lack full range of CCS solutions, particularly endpoint security 	<ul style="list-style-type: none"> Misses pure players' significant growth / own endpoint (KAPE) Ignores reviews with pure play products better vs. bundles Ignores own view re Defender as baseline, so no need to recreate Believes consumers are naïve
<ul style="list-style-type: none"> Branding and marketing as significant barrier to smaller players 	<ul style="list-style-type: none"> Marketing spend to convince consumers default as insufficient Ignores Protected.net / System1 marketing machine
<ul style="list-style-type: none"> White-labelling or licensing a threat analytics engine as difficult 	<ul style="list-style-type: none"> Protected.net shows endpoint security entry via white-labelling CNMC: Avira white-label [0-10%] NLOK sales; for NewCo, <15% market share of white-labelling / licensing, signifying another 85% provide white-labelling
<ul style="list-style-type: none"> Ignores importance of smartphones and tablets Despite CMA own recent market report on Mobile Ecosystems, that these “play a fundamental role in the lives of UK citizens” 	<ul style="list-style-type: none"> Majority of internet usage in UK 2 mobile ecosystems: AAPL iOS / GOOG Android AAPL and GOOG quasi-regulatory capacity re users' security, privacy and online safety; make decisions on behalf of customers

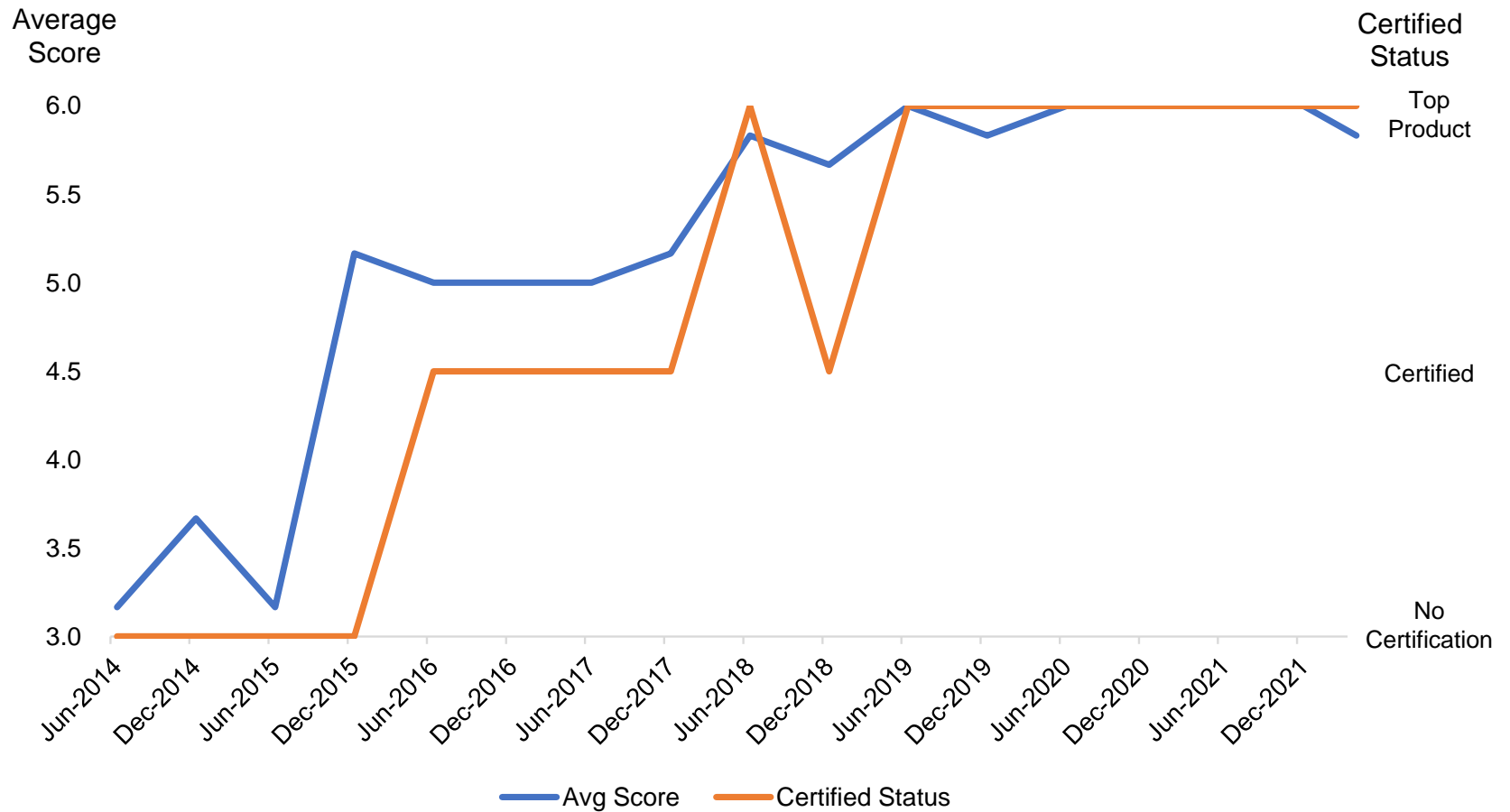
Where Fund A's view differs from the CMA (cont'd): MSFT Defender recent developments

- ▶ In March 2020, MSFT launched Defender on IOS and Android for Enterprise
- ▶ In March 2022, MSFT released a preview version of “Microsoft Defender for Individuals”, so far only in the US:
<https://www.microsoft.com/en-us/microsoft-365/microsoft-defender-for-individuals>
 - ▶ This version of Defender is available for consumers as a standalone product on Windows but also on Android and macOS
 - ▶ MSFT notes that *“in the future, Microsoft Defender will require a Microsoft 365 Family or Personal subscription”*
 - ▶ This version is different from the version of Defender automatically included in the Windows operating system (even without the 365 Office suite), and MSFT Defender for Individuals may have additional features (such as anti-phishing) compared to the basic Defender version included in Windows
 - ▶ No specific indication of when this version will be fully rolled out; MSFT notes that *“Microsoft Defender will be generally available soon.”*
 - ▶ Note: Microsoft Defender for Individuals does not appear to be reflected in CMA Phase 1 decision, where CMA goes out of its way to highlight that *“this application is for enterprise customers only”*.
- ▶ In April 2022, MSFT announced it had surpassed \$15bn in enterprise security revenue, with >50% yoy growth, growing faster than any other significant product or service sold by MSFT
- ▶ In April 2022, MSFT announced the launch of Edge Secure Network (a VPN service built into Edge)
- ▶ In May 2022, MSFT CEO Satya Nadella announced an increase in annual R&D spend on cybersecurity from \$1bn to \$4bn, with the VP for Security noting that, *“We’re just expanding the scale because of the demands we are seeing.”*
- ▶ In June 2022, MSFT announced launch of Microsoft Defender for Individuals:

<https://www.microsoft.com/security/blog/2022/06/16/making-the-world-a-safer-place-with-microsoft-defender-for-individuals/>

Clearly shows MSFT development from enterprise to consumer, and shows MSFT is investing heavily in security, privacy and identity protection. The CMA does not seem to address the possibility that MSFT may make their OS a closed system like AAPL

Where Fund A's view differs from the CMA (cont'd): Evolution of MSFT Defender ratings



Source: av-test.org as at Jun-2022.
 Note: Windows 10 released Jul-2015.

Where Fund A's view differs from the CMA (cont'd): Case Study 1 Protected.net

(in USD)	31-Dec-17	31-Dec-18	31-Dec-19	31-Dec-20
Revenue	14,498,894	34,517,198	54,799,910	90,929,679
COGS	(4,698,463)	(8,340,002)	(12,172,438)	(17,865,412)
Gross Profit	9,800,431	26,177,196	42,627,472	73,064,267
Administrative Expenses	(33,146,020)	(45,940,202)	(60,563,431)	(90,608,088)
Operating Profit	(23,345,589)	(19,763,006)	(17,919,254)	(15,561,108)
Net Interest	(792,659)	(1,871,897)	-	(434,852)
Profit Before Tax	(24,138,248)	(21,634,903)	(17,919,254)	(15,995,960)
Tax	-	-	-	-
Net Profit	(24,138,248)	(21,634,903)	(17,919,254)	(15,995,960)

Deferred Revenue (USDm)		16.6	26.6	47.4
Average Number of Employees	11	31	37	47
Ownership:	System1, Inc started to control the company from 16 October 2018			

Source: Companies House Filings

Turnover BreakDown	31-Dec-18	31-Dec-19
UK	6,077,378	8,663,484
Europe	9,385,507	19,878,402
North America	15,322,138	20,872,292
Rest of World	3,732,175	5,385,732
Total	34,517,198	54,799,910

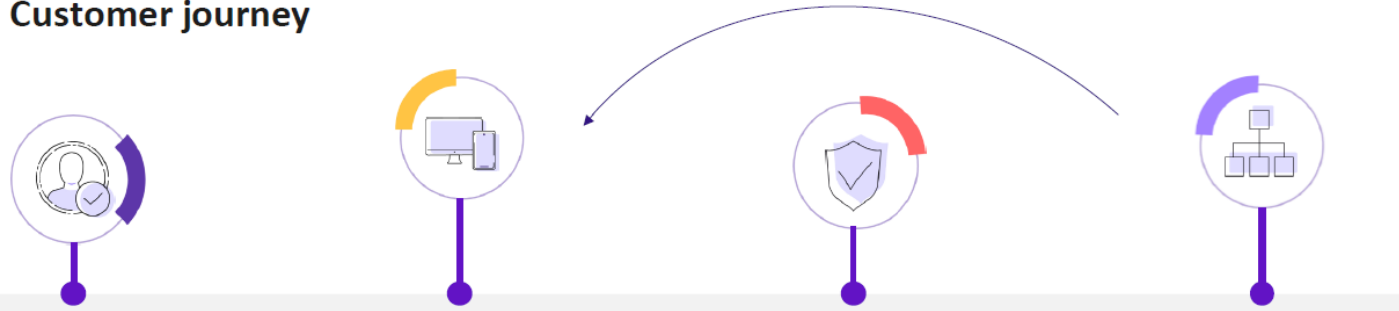
- ▶ **Case study 1:** new entrant with a security product based on white-labelling Avira
- ▶ Revenue growth in 5 years from \$0m to \$145m FY2021E shows how much can scale a paid product based on white-labelling, with only a modest budget
- ▶ Protected.net has been merged into System1, a company with resources and with expertise in marketing, so may see ramp up
 - ▶ TOTALAV, TOTALAdblock and TOTALWebShield are subscription products
- ▶ Challenges CMA scepticism re white-labelling

Where Fund A's view differs from the CMA (cont'd): Case Study 2 Kape

Kape's customer ecosystem




Customer journey



Intent

- Privacy
- Security
- Work from home
- Digital ease

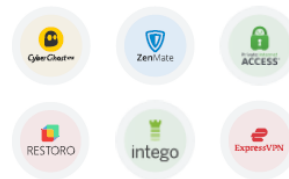
Organic

- Brand awareness
- SEO
- Word of mouth
- Reviews 

Paid

- Digital Ads
- Influencers
- Social

Brands



Retention/ Upsell

In-app offer

- ▶ **Case study 2:** CCS provider in Privacy pillar moving into Security (Intego)
- ▶ Kape extending strong position in VPN market, leveraging significant brands
- ▶ Acquisition of Webselenese allows Kape to achieve significant reduction in CAC
- ▶ KAPE revenue expected to grow from \$231m 2021A to \$619m 2022E and \$703m 2023E

Considerations re potential remedies if SLC identified

CMA comments:

- ▶ *“branding and marketing spend plays a significant role in which CCS solutions consumers choose to use, which is likely to act as a significant barrier to smaller players seeking to grow their market share post-Merger” (Phase 1 decision, para. 131)*
- ▶ *“evidence received by the CMA from third parties during its investigation indicates that there are significant barriers to entry and expansion, indicating that such entry or expansion will not be timely, likely and sufficient to mitigate any SLC arising” (para. 152)*
- ▶ *“white-labelling or licensing of a threat analytics engine from a third-party provider might, in principle, be a viable way to enter as a provider of endpoint security solutions. However, the CMA considers that even if one provider managed to enter in this way, it would still encounter significant difficulties in building a strong brand and expand successfully. Further, many competitors who responded to the CMA questionnaire submitted that having an owned and operated threat analytics engine gives advantages over competitors that license their engine from a third-party. The CMA has received and assessed information about third parties’ plans for licensing threat analytics engines and this evidence indicates that the options available to providers who want to license a threat analytics engine are limited. Contrary to the Parties’ submissions, the finding that it would be difficult for a third party to white-label or license a threat analytics engine is not inconsistent with the fact that the CMA has not identified any vertical foreclosure theory of harm. Rather, the CMA believes that third parties currently have difficulties entering the supply of endpoint security solutions through white-labelling or licensing of a threat analytics engine and this will continue to be the case post-Merger” (para. 153(c))*

1. White-label / license threat engine

- ▶ As above, CMA believes 3rd parties currently have difficulties entering the market, which should be addressed if there is a commitment to continue to white-label / license access to AVST or Avira threat engine for the next 5 years on non-discriminatory terms
- ▶ From CNMC decision, can see that Avira revenue from licensing its threat engine represents [0-10%] of NLOK global turnover and that post-merger the combined company would still have only <15% market share – indicating significant white-label / licensing market
- ▶ Success of Protected.net shows that a physical entrance is possible

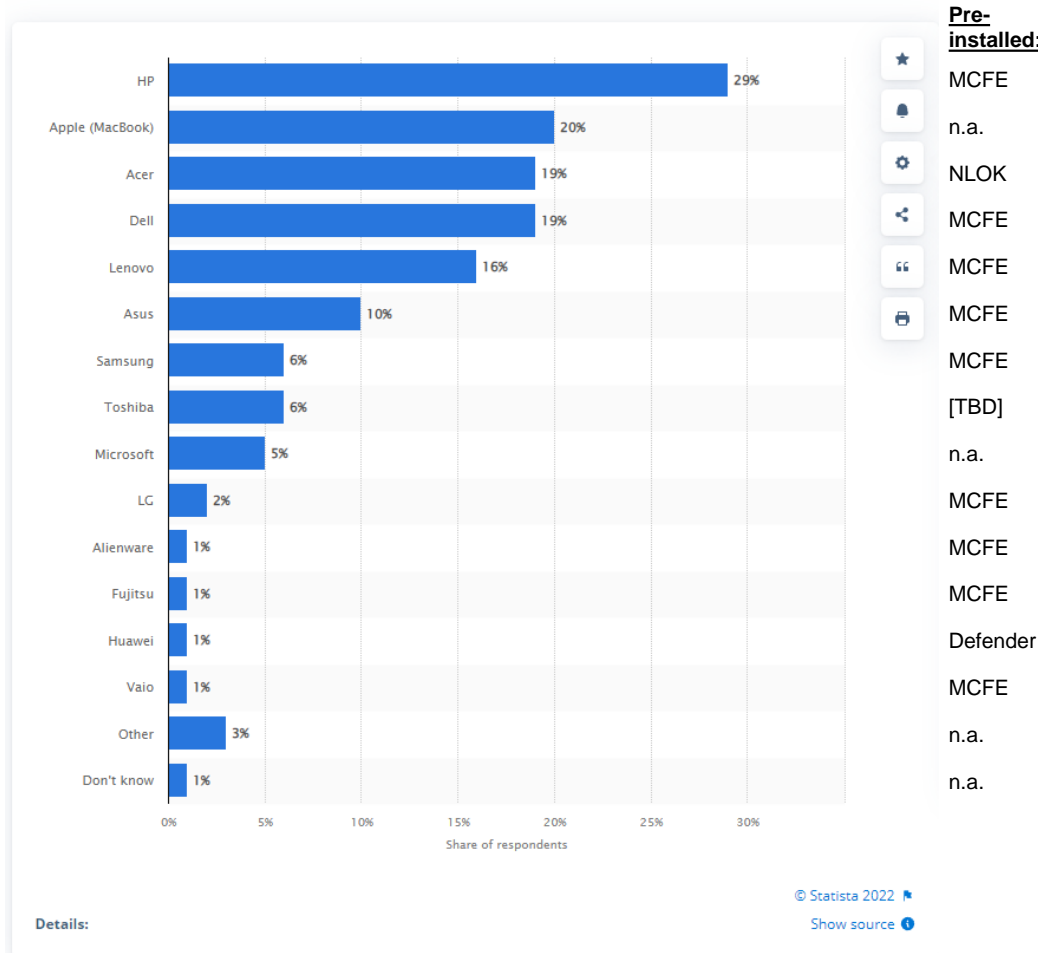
2. Divest threat engine; continue freemium product

- ▶ If, at a future point, the parties decide to close down the Avira threat engine in order to realise synergies – would commit to make the threat engine available to a 3rd party to acquire for a nominal value
- ▶ This would address the CMA’s point above that there is a competitive advantage in having an owned and operated engine
- ▶ If this is insufficient to satisfy CMA, could additionally commit to maintaining a freemium product for the next 5 years – during which time it must continue to qualify as a “Top Product” by av-test.org (or a similar independent entity)

APPENDIX

Appendix: PC brand market share

Laptop ownership by brand in the UK in 2022



Source: Desktop Research.

Appendix: PC brand market share (cont'd)

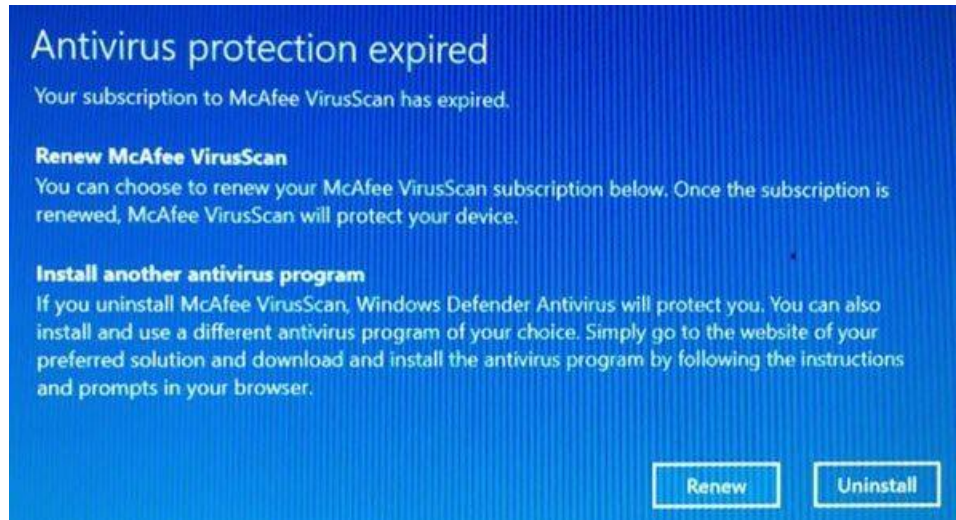
**Table 1. Preliminary Worldwide PC Vendor Unit Shipment Estimates for 1Q22
(Thousands of Units)**

Company	1Q22 Shipments	1Q22 Market Share (%)	1Q21 Shipments	1Q21 Market Share (%)	1Q22-1Q21 Growth (%)
Lenovo	18,560	23.8	20,882	25.0	-11.1
HP Inc.	15,863	20.4	19,295	23.1	-17.8
Dell	13,804	17.7	13,012	15.6	6.1
Apple	7,005	9.0	6,449	7.7	8.6
ASUS	5,594	7.2	4,640	5.6	20.6
Acer	5,531	7.1	5,850	7.0	-5.5
Others	11,503	14.8	13,393	16.0	-14.1
Total	77,861	100.0	83,520	100.0	-6.8

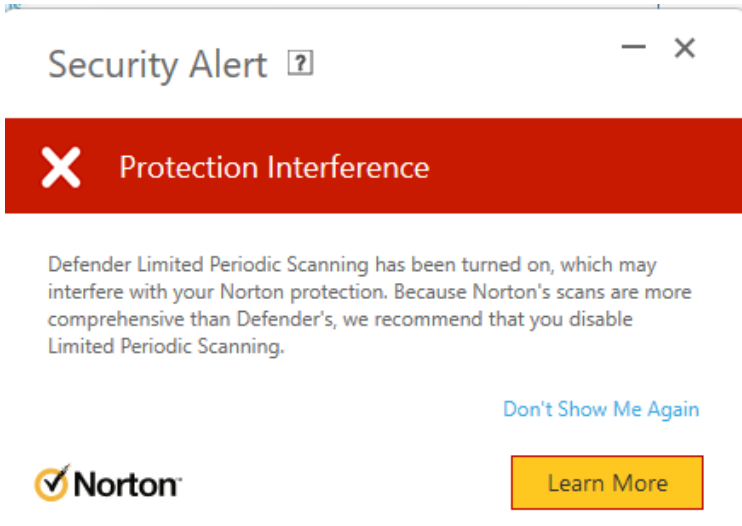
Notes: Data includes desk-based PCs, notebook PCs, ultramobile premiums (such as Microsoft Surface) and Chromebooks, but not iPads. All data is estimated based on a preliminary study. Final estimates will be subject to change. The statistics are based on shipments selling into channels. Numbers may not add up to totals shown due to rounding.

Source: Gartner (April 2022)

Appendix: MSFT Defender-related “pop-ups”



- ▶ Example of the active choice the consumer has to make



- ▶ Example of how protective each provider is

Appendix: Example of AAPL privacy changes



- ▶ Example of AAPL privacy and security settings

Appendix: Fund A Consumer Survey responses

Q2: What is your age?

	Total	
Total	3,344	100%
Under 18	0	0%
18 to 25	711	21%
26 to 35	1,008	30%
36 to 45	721	22%
46 to 55	449	13%
56 to 65	283	8%
Over 65	172	5%

Q4: Which of the following items do you own/use?

	Total	
Total	3,344	100%
Mobile	3,281	98%
Tablet	2,353	70%
Personal computer (excl. work computer) - either a desktop or laptop	3,344	100%
Smartwatch	1,671	50%
None of the above	0	0%
<i>Count</i>	3.18	

Q5: Which operating system do you use most frequently on your computer?

	Total	
Total	3,344	100%
Microsoft Windows	2,825	84%
Apple Mac	482	14%
Other (please specify):	37	1%

Note: there is no Q1 and no Q3.

Appendix: Fund A Consumer Survey responses (cont'd)

Q6: Thinking of your main personal computer, do you currently have a consumer cyber safety solution (CCS) installed?

Please note: this refers to any computer program designed to influence information security/safety, such as antivirus software, endpoint security, online privacy (VPN), identity protection or device care solutions.

	Total	
Total	3,344	100%
Yes	3,344	100%
No	0	0%
Don't know	0	0%

Q7: Which of the following cyber safety solutions providers have you heard of?

	Total	
Total	3,344	100%
Avast	1,321	40%
Bitdefender	527	16%
ESET	229	7%
F-Secure	327	10%
Kaspersky	980	29%
McAfee	2,480	74%
Microsoft Defender	1,506	45%
Norton LifeLock	1,403	42%
Trend Micro	218	7%
Other (please specify):	60	2%
None of the above	0	0%
<i>Count</i>	2,71	

Note: in Q7, AVG has been mapped to Avast and BullGuard and Avira have been mapped to Norton LifeLock.

Appendix: Fund A Consumer Survey responses (cont'd)

Q8: Which of the following is your cyber safety solution provider? If you have more than one, please indicate your main CCS product.

	Total	
Total	3,344	100%
Avast	514	15%
Bitdefender	87	3%
ESET	51	2%
F-Secure	53	2%
Kaspersky	180	5%
McAfee	1,482	44%
Microsoft Defender	496	15%
Norton LifeLock	421	13%
Trend Micro	13	0%
\$(Q7.r10.open}	47	1%
Don't know / cannot say	0	0%

Q9: How long is it since you installed the CCS solution on your main personal computer?

	Total	
Total	3,344	100%
Less than 1 year	797	24%
1-2 years	1,201	36%
2-5 years	843	25%
More than 5 years	442	13%
Don't know	61	2%

Appendix: Fund A Consumer Survey responses (cont'd)

Q10: Thinking back to when you installed the CCS solution on your main personal computer, which other providers did you consider?

	Total	
Total	1,935	100%
Avast	353	18%
Bitdefender	144	7%
ESET	67	3%
F-Secure	91	5%
Kaspersky	290	15%
McAfee	578	30%
Microsoft Defender	404	21%
Norton LifeLock	486	25%
Trend Micro	68	4%
\$(Q7.r10.open}	3	0%
Don't know	93	5%
I did not consider any other providers	335	17%
<i>Count</i>	1.50	

Appendix: Fund A Consumer Survey responses (cont'd)

Q11: Thinking back to when you installed the CCS solution on your computer, which provider would you have chosen if [pipe: Q8] was not available?

	Total	Avast	Bitdefende	ESET	F-Secure	Kaspersky	McAfee	Microsoft [Norton Life	Trend Micro	\$(Q7.r10.c	Don't know	None
Total	1,507	188	57	34	34	148	403	212	295	16	3	113	4
	100%	12%	4%	2%	2%	10%	27%	14%	20%	1%	0%	7%	0%
Current Provider	Total	Avast	Bitdefende	ESET	F-Secure	Kaspersky	McAfee	Microsoft [Norton Life	Trend Micro	\$(Q7.r10.c	Don't know	None
Avast	238	2	10	3	3	27	107	37	27	1	1	19	1
	100%	1%	4%	1%	1%	11%	45%	16%	11%	0%	0%	8%	0%
Bitdefender	47	7	0	3	0	9	13	5	5	2	1	2	0
	100%	15%	0%	6%	0%	19%	28%	11%	11%	4%	2%	4%	0%
ESET	30	4	1	0	1	5	9	4	1	1	0	3	1
	100%	13%	3%	0%	3%	17%	30%	13%	3%	3%	0%	10%	3%
F-Secure	25	3	2	5	0	1	5	4	3	0	1	1	0
	100%	12%	8%	20%	0%	4%	20%	16%	12%	0%	4%	4%	0%
Kaspersky	102	21	6	4	3	0	45	8	4	0	0	11	0
	100%	21%	6%	4%	3%	0%	44%	8%	4%	0%	0%	11%	0%
McAfee	583	87	11	8	14	75	0	119	224	3	0	41	1
	100%	15%	2%	1%	2%	13%	0%	20%	38%	1%	0%	7%	0%
Microsoft Defender	263	49	22	9	7	23	97	0	30	6	0	20	0
	100%	19%	8%	3%	3%	9%	37%	0%	11%	2%	0%	8%	0%
Norton LifeLock	203	14	4	2	5	8	123	29	0	3	0	14	1
	100%	7%	2%	1%	2%	4%	61%	14%	0%	1%	0%	7%	0%
Trend Micro	7	0	1	0	1	0	1	2	1	0	0	1	0
	100%	0%	14%	0%	14%	0%	14%	29%	14%	0%	0%	14%	0%
\$(Q7.r10.open)	9	1	0	0	0	0	3	4	0	0	0	1	0
	100%	11%	0%	0%	0%	0%	33%	44%	0%	0%	0%	11%	0%

Note: in Q11, the 2 Avast customers who would have chosen Avast is due to the fact that people who had AVG as provider selected Avast as someone they would consider, while none of the Avira/BullGuard selected Norton LifeLock.

Note: there is no Q12.

Appendix: Fund A Consumer Survey responses (cont'd)

Q13: Which of the following CCS providers have you trialled or used in the past?

	Total	
Total	3,344	100%
Avast	805	24%
Bitdefender	177	5%
ESET	95	3%
F-Secure	107	3%
Kaspersky	396	12%
McAfee	2,005	60%
Microsoft Defender	770	23%
Norton LifeLock	724	22%
Trend Micro	49	1%
\$(Q7.r10.open)	52	2%
None	41	1%
Count	1.56	

Q14: If the price of your CCS solution were to increase by 10% tomorrow, or if it performed less well relative to other competitors' products, would you seriously consider switching to an alternative CCS solution?

	Total	
Total	3,344	100%
Yes, I would switch	2,448	73%
No, I would not switch	896	27%

- ▶ Q15 data split by AVST and NLOK customers:

Q15: Which providers would you seriously consider switching to?

	Total	Avast	Bitdefender	ESET	F-Secure	Kaspersky	McAfee	Microsoft Defender	Norton LifeLock	Trend Micro	\$(Q7.r10.open)	Don't know
Avast	237 100%	5 2%	27 11%	6 3%	12 5%	55 23%	120 51%	77 32%	65 27%	7 3%	2 1%	43 18%
Norton	190 100%	42 22%	12 6%	4 2%	8 4%	41 22%	126 66%	58 31%	0 0%	1 1%	0 0%	22 12%

Note: in Q15, the 5 Avast to Avast represent respondents who have AVG and would switch to Avast.

Note: there is no Q12.

Appendix: Fund A Consumer Survey responses (cont'd)

Q16: What was the main reason you chose Microsoft Defender as your current CCS provider?

	Total	
Total	496	100%
It was already installed on my computer when I acquired it	235	47%
It was free	103	21%
The quality / level of protection provided by the Defender	154	31%
Other (please specify):	4	1%

Q17: Do you currently have Microsoft Defender installed on your computer?

	Total	
Total	2,848	100%
Yes	1,212	43%
No	1,055	37%
Don't know	581	20%

Q18: To what extent do you agree with the following statement? Free or pre-installed CCS solutions such as Microsoft Defender offer broadly the same level of protection as paid-for CCS solutions such as McAfee and Norton.

	Total	
Total	3,344	100%
Strongly disagree	142	4%
Disagree	688	21%
Neutral	938	28%
Agree	999	30%
Strongly agree	304	9%
Don't know	273	8%

Appendix: Fund A Consumer Survey responses (cont'd)

Q19: When choosing a CCS product, how important are the following factors? Please rank from most important to least important.

	Total	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5
Price	3,344	1,101	791	785	653	14
	100%	33%	24%	23%	20%	0%
Reputation of the supplier	3,344	513	858	1,001	957	15
	100%	15%	26%	30%	29%	0%
Range of features	3,344	219	703	977	1,435	10
	100%	7%	21%	29%	43%	0%
Safety/reliability	3,344	1,507	991	574	266	6
	100%	45%	30%	17%	8%	0%
Other	1,521	4	1	7	33	1,476
	100%	0%	0%	0%	2%	97%

Q20: To what extent do you agree with the following statement? I would consider switching from a bundled CCS product to purchasing several individual products, if I could save money because the combined price of the individual products was lower than the price of the bundle.

	Total	
Total	3,344	100%
Strongly disagree	125	4%
Disagree	445	13%
Neutral	789	24%
Agree	1,367	41%
Strongly agree	508	15%
Don't know	110	3%

Survey data breakdown:

- ▶ Dates of the survey: 2-Jun-2022 to 15-Jun-2022
- ▶ Survey description: to understand the use of consumer cyber safety solutions
- ▶ Geographic criteria: based in the UK
- ▶ Age criteria: aged 18 or over
- ▶ Further criteria: all respondents use a personal computer and have a cyber safety solution installed in order to qualify for the survey
- ▶ Sample size: 3,344 consumers
- ▶ Survey breakdown:
 - ▶ Total entries: 11,829
 - ▶ Partial completes: 471
 - ▶ Screened out: 7,499
 - ▶ Overquota: 515
 - ▶ Qualified completes: 3,344

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