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Digital Platforms Services Inquiry 2020-2025
Australian Consumer and Competition Commission
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Microsoft appreciates the opportunity afforded by the Australian Consumer and Competition Commission (ACCC) in response to the Digital Platform Services Inquiry – September 2021 Interim Report to provide its views *“on potential competition and consumer issues in the provision of web browsers and general search services to Australian consumers and in particular, the impact of default arrangements”* as well as *“views on the use of choice screens to address identified concerns.”*

This inquiry is timely. As the ACCC observed last year in its Digital Platform Services Final Report “approximately 95 percent of general searches in Australia are performed through Google” and it is “largely insulated from dynamic competition.”¹ As a result, Google has become a powerful gatekeeper to the Internet; businesses – whether as advertisers or retailers – and content creators and publishers must go through Google to reach their customers and consumers online. This commanding intermediary position has enabled Google to capture a lion’s share of digital advertising revenue.

As the ACCC understands well, the lack of competition in search and digital advertising has troubling and important consequences for the economy, for society, and even democracy.² These considerations have been the subject of significant analysis across the globe, including within the United Kingdom, United States, and European Union.³ So it is important that the ACCC address them now. And, because web browsers are closely intertwined with search services as a critical entry point into those services, it is appropriate that inquiry extend to competition for browsers.

This is not to make a statement about whether Google has acted lawfully or not. Over the years, Google has displayed significant creativity and determination and it has diligently and consistently invested to evolve its products and services. We offer our perspective and comments to inform the debate over how best to address specific market dynamics and not to challenge any specific activity or offer opinions as to the legality of any business practice.

¹ ACCC, Digital Platforms Inquiry Final Report at 8 (June 2019).

² See *id.* at 280 (detailing impact on news and journalism) at 374 (detailing impact on consumers).

³ See, e.g., United Kingdom Competition and Markets Authority, Online platforms and digital advertising market study final report (1 July 2020) (available at <https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study#final-report>); U.S. House of Representatives Subcommittee on Antitrust, Commercial and Administrative Law of the Committee of the Judiciary, Investigation of Competition in Digital Markets (6 October 2020) (available at <https://judiciary.house.gov/news/documentsingle.aspx?DocumentID=3429>); Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets in the digital sector (Digital Markets Act) (15 December 2020) (available at https://ec.europa.eu/info/sites/info/files/proposal-regulation-single-market-digital-services-digital-services-act_en.pdf).

As the ACCC considers how to address the specific market dynamics, it is worth noting that legislative efforts to improve contestability and enable competition in search and other digital markets are also underway in various countries. These efforts seek a more efficient and effective path forward more quickly than enforcement by targeting specific problems while seeking to preserve innovation and the benefits consumers receive from many successful digital platforms. We believe the ACCC should consider recommending the same.

Of course, Microsoft clearly has its own commercial interests at stake in this debate, and we would be less than forthright if we failed to acknowledge them. We offer this submission as part of our effort to inform the overall discussion of these complex issues and in full recognition that some of the new rules that come about may help our business, including our own web browser and general search service – Microsoft Edge and Bing – while other rules could be harmful to us. In either case, we believe having clarity and agreed “rules of the road” is the best path forward to continue to enable companies, including Microsoft, to offer new and innovative products and services to consumers and businesses.

Below we provide Microsoft’s comments on the Issues Paper as it relates to:

- the general market dynamics in web browsers and general search services;
- the impact of default distribution arrangements; and
- the relative value of choice screens as a potential approach to improving competition.

A. Market Overview

The Issues Paper accurately captures the basic market dynamics and business models associated with web browsers and general search services. Browsers and search services are very closely intertwined from the business model perspective. The web browser is an important entry point through which users access search services. At the same time, browser providers seek to monetize their offerings through advertising, primarily through either offering their own general search services, as is the case with Google and Microsoft, or by partnering with a general search service to set that service as the default in exchange for revenue share. Thus, competition in general search services directly impacts the ability of browsers to compete and monetize, while web browsers provide a key entry point to general search services.

As explained more fully below, we also agree with the Issues Paper’s observation that both web browsers and general search services involve significant network effects that can limit competition. This is especially true once a firm achieves a significant advantage in usage share compared to its next closest rivals. We also agree that these network effects may be amplified by “customer inertia as well as default settings,” resulting in high barriers to entry and expansion.

1. Web Browsers

Providers of web browsers compete across many different possible dimensions, including the user interface, privacy features, available extensions, and other functionality. However, the most important aspect of competition is ensuring that the web browser is compatible with websites. People will only use a browser if it is compatible with nearly all, if not all, websites. If a user visits a website with a web browser and the site does not render or otherwise does not work well, then that user is almost certainly going to switch to that web browser.

While the Internet is based on a series of open standards that should theoretically eliminate concerns of website compatibility, in practice compatibility issues remain. Website developers do

not develop their sites against a consistent set of web standard specifications and instead develop sites using development tools and then test those sites against the web browsers they want to make sure they support. All major web browsers offer a set of development tools for web designers to use to make sure sites work well in their browsers.⁴ Given the ubiquity of Google Chrome, both on desktops and laptops as well as mobile devices, this means that, first and foremost, website developers target their sites to work well with Google Chrome. Developers may then also test and actively support Apple's Safari browser given its high usage share, particularly on mobile devices. However, it is less common for web developers to do further work to ensure other less popular web browsers, such as Mozilla Firefox and Microsoft Edge, work well with their sites.

After years of attempting to address incompatibilities as they arose with different websites – including some of the most popular ones on the Internet – we eventually decided that continuing to offer Microsoft Edge with a unique proprietary web platform no longer made sense. In December 2018, we announced that Microsoft Edge would instead be based on the Chromium open-source project.⁵ Because Chromium also powers Google Chrome, we could dramatically reduce website compatibility issues without developers having to do much (if anything) to ensure that their websites developed and tested for Chrome also worked well in Edge. And, because users who pick Edge also tend to use Microsoft's Bing search service, making Edge as attractive as possible to users across the entire web was critical to our ability to compete in general search services as well.

2. General Search Services

Even more than is the case with browsers, general search services are also characterized by network effects. In the case of general search services, the key to a competitive service is achieving sufficient user and advertiser scale in the following key ways:

- (a) **Scale reduces the investment cost of improving quality.** In search and search advertising, the fixed costs of investment are quite substantial: they include R&D expenses, investment in the web index, and infrastructure. But the investment cost required to achieve a given quality improvement or cost reduction does not increase proportionately with the number of users. Instead, a general search service with more consumers incurs lower costs per consumer to achieve a given increase in quality.
- (b) **Scale is required to enable algorithms to improve relevance results and facilitate experimentation.** The “raw material” of the web is not useful in the absence of algorithms that know how to use it, and the quality of these algorithms is scale driven. In particular, the quality of a general search service improves with user feedback. The more users that use a particular search service, the more click and query data and other usage information to which that search service will have access. That usage data can then be used to train powerful machine learning algorithms to improve the relevance of the search results, which will attract more users and make it less likely that existing users will switch to a different general search service. With more usage, the general search service can also increase experimentation. This experimentation can involve all kinds of things from small changes to the user interface to efforts at improving relevance. By being able to show many different users many different experiences, the search service can “learn” what users like best and find most helpful. In addition, the additional usage will also attract website developers to use webmaster tools for

⁴ See for example, <https://developers.google.com/web/tools>, <https://developer.apple.com/safari/tools/>, <https://developer.mozilla.org/en-US/docs/Tools>, and <https://docs.microsoft.com/en-us/microsoft-edge/devtools-guide-chromium/>.

⁵ <https://blogs.windows.com/windowsexperience/2018/12/06/microsoft-edge-making-the-web-better-through-more-open-source-collaboration/#rzLfAuZoSMIL7gZQ.97>

the general search service to provide better access to information on their sites, proactively share information with the search service, and otherwise improve the search service's ability to index the content of the website. This too makes the results of the general search service more relevant and useful. Without sufficient scale, this flywheel can never get moving and a general search service will struggle to provide results as relevant as those provided by the incumbent dominant firm.

- (c) **Scale is required to attract advertisers.** Achieving user scale is also critical to attracting advertisers to a general search service. Advertising, of course, is necessary to monetize the service and provide a revenue stream to support continued innovation and development of the search and advertising functionality. Achieving scale with advertisers has many benefits. First, with more advertisers, it is more likely that relevant ads will be available to be shown for any particular query. Showing irrelevant ads to users undermines the whole page relevance for the user resulting in perceived lower quality results. Second, search ads are offered through an auction style system. The more advertisers on a platform, the more density will exist in the auction and the better able the search service will be able to monetize with relevant ads against more keywords.
- (d) **Scale relativities impact competitive outcomes.** Scale is important not just in absolute terms, but even more importantly, in relative terms. The bigger the scale gap the more likely that there will be significant differences in the ability of a general search service to compete. Users prefer the highest quality general search service and advertisers join first the largest general search service, plus pay more attention to it in all of their investments. Additional scale leads to higher quality results, leading to more users and advertisers, which in turn leads to even more user scale and leads to increased dominance over time once a significant scale gap has been created.
- (e) **Scale enables a general search service to enter into default distribution agreements that further amplifies scale gaps.** Finally, a third set of constituents are impacted by scale: the "partner ecosystem" for which scale drives network effects, further entrenching a dominant general search service provider. As the Issues Paper notes, a critical source of user queries come from users who rely upon the default settings on devices and browsers, particularly in the mobile context. These device and browser makers are critical potential partners for distribution of a general search service. Because these partners sell the initial default settings to general search services, they are attracted to those services with better monetization. Default settings, especially on mobile devices, are seldom changed by users. The result is that the scale gap is maintained and can even grow bigger over time.

In sum, scale drives network effects across three main dimensions in search:

- Users are attracted to general search services with more users (better algorithmic quality due to user feedback) and with more advertisers (better whole page relevance).
- Advertisers are attracted to general search services with more users (better return on their fixed cost investments of maintaining and monitoring campaigns, better ad matching algorithms).
- Distribution partners like original equipment manufacturers (**OEMs**) and web browser vendors are attracted to set as defaults general search services that monetize the best and can share more search advertising revenue.

B. Impact of Default Arrangements

Microsoft agrees with the Issues Paper’s observation that “pre-installed services and services set as a default can function as barriers to entry and expansion.” In our experience, this observation has been true for *the dominant* web browser and search service, not a challenger. As described above, both browsers and search services benefit uniquely from scale. Ubiquity as a browser ensures broad compatibility with websites across the Internet and for search usage drives quality and attracts advertisers and partners in a virtuous and reinforcing flywheel.

Therefore, a challenger browser and search service will always be at a relative disadvantage with respect to quality and relevance vis-à-vis the dominant browser and search service. Even when a challenger browser or search service is pre-installed and set as the default, users can be convinced to and will change settings. Indeed, this has been our experience on Windows PCs, where Microsoft Edge and Bing are pre-installed and set as the default. Users regularly choose to switch to Google Chrome and Google Search. As a result, according to Statcounter, on desktop PCs in Australia Microsoft Edge has a share of only nine percent and Bing has a share of only eight percent.⁶

In addition, the open nature of the Windows operating system makes this switching particularly easy. Unlike mobile devices, users can and do download software – including browsers – from the Internet on Windows PCs; the process of installing software is not controlled or limited by a proprietary app store. This enables unique and effective opportunities for providers to promote browser distribution. For example, on Windows PCs, Google leverages its propriety and very popular web properties and services, such as Google Search, YouTube, Gmail, and Maps, to promote Google Chrome. When a Windows PC user visits one of these sites – which most do at some point – Google prompts them to download Google Chrome. If the user chooses to do so, the browser comes with Google Search set as the default. Similarly, providers can install a browser with other software. For example, historically, one way Google successfully distributed Chrome broadly on Windows PCs was by partnering with Adobe. When users downloaded and installed the popular Adobe Reader software, Chrome also installed.

Therefore, pre-installing and setting a challenger browser and search service as the default only serves to provide each with an opportunity to get new users to try their products and, therefore, access and grow critical scale. It does not create a high barrier to entry or expansion.

But the same is not true for a dominant web browser and search service. When the leader is pre-installed and set as the default, it only serves to entrench its dominant position and to deny the opportunity for potential challengers to gain critical scale. Because of the quality and relevance disadvantage that challengers suffer, it is very difficult for them to get users to choose to switch away from the leader. That is precisely what is happening on mobile devices where Google Chrome, Apple Safari and Google Search are pre-installed and set as defaults.

Indeed, in Australia, as is the case worldwide, there is a close correlation between pre-installation and defaults and usage.

- Android accounts for 45 percent of mobile devices and Chrome, its pre-installed default browser, has a 39.8 percent share on mobile devices.

⁶ See <https://gs.statcounter.com/browser-market-share/desktop/australia> (last accessed 11 April 2021) and <https://gs.statcounter.com/search-engine-market-share/desktop/australia/#monthly-202004-202103> (last accessed 11 April 2021).

- iOS accounts for 54 percent of mobile devices and Safari, its pre-installed default browser, has a 49.3 percent share on mobile devices.⁷

The only other browser used to any reasonable extent on mobile devices is the Samsung Browser, which is also pre-installed (but not set as the default) by Samsung on many of its Google Android devices. For general search services, the correlation between pre-installation and default setting and usage is even more dramatic. Google Search is the default on all Android *and* iOS mobile devices. Android and iOS account for 99 percent market share for mobile devices and Google Search similarly accounts for 98 percent market share in search services on mobile devices.⁸

The value of pre-installation and the default setting on mobile devices to the leader is underscored by the significant amount Google pays for these rights on iOS devices (where it cannot simply mandate – as it does on Android devices – that it is default): reportedly \$12 billion annually.

C. Effectiveness of Choice Screens

The Issues Paper also asks specifically about choice screens and how they may (or may not) be effective at restoring competition in general search services or web browser markets. In Microsoft's view, choice screens can be a beneficial supplement to other interventions but are unlikely to do much on their own to change competitive dynamics in existing search and browser markets. And, as explained more fully below, a choice screen alone is especially unlikely to impact search service competition.

First, choice screens inherently benefit the dominant firm. Such a firm typically enjoys strong brand recognition; users will choose that firm out of habit or just out of a lack of familiarity with other alternatives. The name "Google" has effectively become a verb for the act of conducting an internet search, leading users to be pre-disposed to choose the service for search. There is not sufficient motivation or information available to users to elect to try a new alternative. Thus, choice screens likely result in relatively few users choosing one of the smaller challenger firms.

The impact of getting relatively few selections from a choice screen is compounded by the need for search services to get to scale quickly to improve search relevance. If relatively few users choose an alternative general search service, then the search service will not have sufficient scale to improve relevance quickly. This means that eventually the user will enter a search query for which challenger search offerings do not provide results that are as relevant as the dominant incumbent. As users encounter these occasional poor search experiences, they will increasingly switch back to the dominant offering. Thus, even a well-designed choice screen will result in only a modest increase in queries that is not sufficient to enable product improvements. Without the product improvements enabled by scale, over time most users will switch back and undermine the purposes of the choice screen.

Indeed, where choice screens have been successful in the past, it was in situations where the markets were not tipped dramatically in the favour of the dominant firm and there were competitors that were already at scale, had overcome any network effects, and had strong brand awareness. For example, in 2017 an antitrust investigation in Russia resulted in Google shipping a

⁷ For mobile device operating system share see <https://gs.statcounter.com/os-market-share/mobile/australia> (last accessed 11 April 2021). For mobile device browser share see <https://gs.statcounter.com/browser-market-share/mobile/australia> (last accessed 11 April 2021).

⁸ <https://gs.statcounter.com/search-engine-market-share/mobile/australia> (last accessed 11 April 2021).

search choice screen on Android devices in Russia.⁹ While the Russian Federal Antimonopoly Service found that Google had engaged in illegal conduct that harmed the second place search service Yandex, Yandex still had over 30 percent usage share on mobile devices as of the beginning of 2017.¹⁰ That 30 percent usage share meant that Yandex was not too far behind the scale curve to provide relevant results relative to Google and had sufficient brand recognition amongst users to make a choice screen approach feasible. As a result, by the end of 2018, the choice screen had resulted in more balanced competition with Yandex achieving 48 percent usage share and Google having fallen from 67 percent to 50.5 percent.

Similarly, in 2009 Microsoft entered into a commitments decision with the European Commission to resolve its investigation of the inclusion of Internet Explorer in Windows. A key portion of that remedy involved Microsoft delivering a browser choice screen to European Windows users. At that time, however, Microsoft faced strong competition from Mozilla Firefox, which in some European countries had more usage share than Internet Explorer, and from Google which had strong brand recognition that was synonymous with the Internet. In December of 2009, shortly before Microsoft began its roll out of the browser choice screen, its usage share in Europe was 44 percent and Firefox was almost equal at 40 percent.¹¹ Four years later at the end of 2014 and as the commitment to deliver a browser choice screen ended, Internet Explorer's usage share had fallen to the fourth most used web browser in Europe, behind Chrome, Firefox, and Safari. While those popular browsers did benefit from the choice screen, lesser-known browser vendors did not. The choice screen included 12 browsers from which users could choose, but the lesser-known browsers were seldom chosen. Indeed, approximately 94 percent of the time that a user chose a browser, it was Internet Explorer, Firefox, Chrome, or Safari. This experience also confirms that choice screens are likely to work only when the difference in usage shares is not dramatically tilted towards just one firm and other product offerings are well known to consumers.

These experiences can be contrasted with the current Android search choice screen being presented to users in Europe.¹² When in March of 2019 Google announced it would deliver a choice screen in Europe, Google Search already had 97 percent usage share on mobile devices.¹³ Given this usage share and Google Search's familiarity to nearly every single European, most if not all users will likely choose Google. The choice screen is also delivered to new Android devices only, and not the existing installed base of users. This further dilutes the impact because even if other search services are chosen at a reasonable rate, their usage will grow only slowly over time as users retire existing devices and buy new ones. This trickling in of usage will not provide sufficient scale to make the search services into viable competitors. As a result, even for those users that select a Google alternative, we expect they will switch back to Google given the scale gap that will remain. Thus, it is not surprising that today usage of Google Search in Europe remains unchanged. Google continues to control 97 percent of searches on mobile devices in Europe.¹⁴

While a choice screen alone is not sufficient to address the high barriers to entry and expansion in browsers or search services, to the extent a choice screen option is pursued, the following key design considerations are critical to making it as effective as possible.

⁹ <https://www.pcmag.com/news/google-opens-android-to-search-rivals-in-russia>

¹⁰ <https://gs.statcounter.com/search-engine-market-share/mobile/russian-federation/2017>

¹¹ <https://gs.statcounter.com/browser-market-share/all/europe/2009>

¹² <https://www.android.com/choicescreen/>

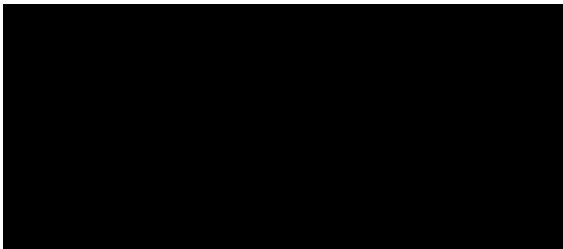
¹³ <https://gs.statcounter.com/search-engine-market-share/mobile/europe/2019>

¹⁴ <https://gs.statcounter.com/search-engine-market-share/mobile/europe>

- The choice screen should at a minimum be delivered to all existing *and* new mobile devices. Offering a choice screen only on new devices will take too long for alternative general search service providers to reach a critical mass of users, especially as the lifespan of mobile devices continues to increase.¹⁵ It could also be offered on desktops and laptops, but the impact of defaults is most pronounced on mobile devices.
- The choice screen should only be displayed to the user when the dominant incumbent is installed and set as the default. If a smaller rival, such as Bing, Yahoo!, or DuckDuckGo, has successfully negotiated distribution as the default solution on a device, the choice screen should not interfere.
- Participating services should be selected via an objective means at no charge, rather than auctioned off to the highest bidders, to ensure that any revenues earned through new search volume are kept by the challengers so that they can be reinvested to improve their services.
- Participating services should be ordered on the screen at random in the display and allowed to include marketing and promotional text (as well as a “Learn More” link).
- Users should be required to make a choice and should not be able to dismiss the screen without choosing.
- When a user makes a choice, the default search service should be updated in *all* search entry points on the device, including home screen, browser, personal assistant, camera, and others.
- There should be no situations in which default search settings revert to the dominant incumbent automatically. For example, if a user deletes a third-party search service app on the device, that should have no impact on the default search provider on the start screen search widget. Similarly, changing the search default in the search widget should not result in the other search entry points on the device automatically reverting to the dominant incumbent. Indeed, the only way that the choice of default search engine should change is if the user expressly changes each relevant search entry point.

Ultimately, the goal of the choice screen should be putting competing solutions on as equal a footing as possible, to minimise the distortion of competition that results from the network and scale effects of a dominant search engine and browser. In Microsoft’s opinion the design principles set out above will aid in that goal.

Sincerely,



¹⁵ <https://www.statista.com/statistics/619788/average-smartphone-life/>