OFFICIAL



OFFICIAL

Radio prominence on smart speakers

Proposals paper

September 2024



© Commonwealth of Australia 2024

September 2024

Ownership of intellectual property rights in this publication

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to below as the Commonwealth).

Disclaimer

The material contained in this publication is made available on the understanding that the Commonwealth is not providing professional advice, and that users exercise their own skill and care with respect to its use, and seek independent advice if necessary.

The Commonwealth makes no representations or warranties as to the contents or accuracy of the information contained in this publication. To the extent permitted by law, the Commonwealth disclaims liability to any person or organisation in respect of anything done, or omitted to be done, in reliance upon information contained in this publication.

Creative Commons Licence

With the exception of (a) the Coat of Arms (b) the Department of Infrastructure, Transport, Regional Development, Communications and the Arts photos and graphics, (c) data and graphics from third parties, copyright in this publication is licensed under a Creative Commons Attribution 4.0 Australia Licence.

Creative Commons Attribution 4.0 Australia Licence is a standard form licence agreement that allows you to copy, communicate and adapt this publication provided that you attribute the work to the Commonwealth and abide by the other licence terms.

Further information on the licence terms is available from <https://creativecommons.org/licenses/by/4.0/>. This publication should be attributed in the following way: © Commonwealth of Australia 2024

Use of the Coat of Arms

The Department of the Prime Minister and Cabinet sets the terms under which the Coat of Arms is used. Please refer to the Commonwealth Coat of Arms - Information and Guidelines publication available at [http://www.pmc.gov.au](http://www.pmc.gov.au/).

Contact us

This publication is available in PDF and Word formats. All other rights are reserved, including in relation to any departmental logos or trademarks which may exist. For enquiries regarding the licence and any use of this publication, please contact:

Director—Publishing and Communications

Communication Branch

Department of Infrastructure, Transport, Regional Development, Communications and the Arts

GPO Box 594

Canberra ACT 2601 Australia

Email: publishing@communications.gov.au

Websites: [www.infrastructure.gov.au](http://www.infrastructure.gov.au) | [www.communications.gov.au](http://www.communications.gov.au) | [www.arts.gov.au](http://www.arts.gov.au)

Table of Contents

[Executive Summary 5](#_Toc178255661)

[Radio prominence is an emerging policy issue 5](#_Toc178255662)

[There is a case for a radio prominence framework 6](#_Toc178255663)

[The proposed radio prominence framework for smart speakers 7](#_Toc178255664)

[Part 1 — The current media landscape 10](#_Toc178255665)

[1. Radio services in Australia 10](#_Toc178255666)

[1.1 Public policy role of radio services 10](#_Toc178255667)

[1.2 Changes in technology and consumer behaviours 12](#_Toc178255668)

[1.3 Market factors 18](#_Toc178255669)

[2. What is radio prominence? 18](#_Toc178255670)

[2.1 Similarities and differences with prominence for radio and TV 19](#_Toc178255671)

[2.2 International developments 20](#_Toc178255672)

[Conclusions 22](#_Toc178255673)

[Part 2 — The case for a radio prominence framework 23](#_Toc178255674)

[3. A radio prominence framework in Australia 23](#_Toc178255675)

[3.1 The policy context 23](#_Toc178255676)

[3.2 Smart speakers as gateway devices 24](#_Toc178255677)

[3.2 Expected shifts in bargaining power 25](#_Toc178255678)

[3.3 Inaccurate surfacing of radio stations by voice assistants 26](#_Toc178255679)

[3.4 The Senate Committee inquiry report 27](#_Toc178255680)

[Conclusions 27](#_Toc178255681)

[Part 3 – Elements of possible radio prominence framework 29](#_Toc178255682)

[4. Elements of a radio prominence framework 29](#_Toc178255683)

[5. Potential impacts and timing considerations 40](#_Toc178255684)

[5.1 The consolidated radio prominence proposal 40](#_Toc178255685)

[5.2 Potential impacts of the proposed radio prominence framework 42](#_Toc178255686)

[5.3 Application considerations 47](#_Toc178255687)

List of Figures and Tables

[Table 1: Proposed radio prominence framework for smart speakers 7](#_Toc178255649)

[Table 2: Main source of accessing types of news (extracted sources) 12](#_Toc178255650)

[Table 3: Audio content listening habits by location in the past 7 days 13](#_Toc178255651)

[Table 4: Devices used to listen to audio content (past 7 days) 14](#_Toc178255652)

[Figure 1: Top 10 brands in Australia for smart speaker ownership as of December 2023 16](#_Toc178255653)

[Figure 2: Accessing audio content via a voice assistant 17](#_Toc178255654)

[Figure 3: Prominence issues for television and radio 20](#_Toc178255655)

[Table 5: Possible elements of a radio prominence framework 30](#_Toc178255656)

[Table 6: Consolidated elements of the proposed radio prominence framework 41](#_Toc178255657)

[Table 7: Potential costs associated with the proposed radio prominence framework 43](#_Toc178255658)

[Table 8: Potential benefits associated with the proposed radio prominence framework 45](#_Toc178255659)

[Table 9: Application considerations 47](#_Toc178255660)

# Executive Summary

The Australian Government is committed to a program of work to modernise media regulations and fulfil the legitimate expectations of consumers and industry for consistency, transparency and equity in our regulatory environment. This is part of a broad media reform agenda to enhance the ability of the Australian media to keep us informed, reflect our diverse cultures and perspectives, uphold and respect community standards and provide access to services.

Access to broadcasting services is a key component of this reform agenda given the importance of these services to all Australians, particularly those living in remote and regional Australia.

In 2022 and 2023, the Government undertook extensive consultation to inform the development of a legislated prominence framework for free-to-air television services on connected television devices. This culminated in the introduction of the television prominence framework in Part 9E of the *Broadcasting Services Act 1992* (BSA) as part of the *Communications Legislation Amendment (Prominence and Anti-siphoning) Act 2024*.

The Government is now seeking to assess prominence issues arising in relation to radio services. The views of interested parties are sought in relation to a proposed radio prominence framework outlined in this paper. This proposed framework would apply to smart speakers: internet-enabled devices that provide access to audio content through voice activation software (or voice assistants). The entity, or entities, required to provide prominence to regulated radio services would be the providers of voice assistants for smart speakers, as voice assistants determine how audio content is made available on these devices.

## Radio prominence is an emerging policy issue

Radio broadcasting services are, and will remain, important in achieving media policy objectives: an informed citizenry; a strong and vibrant democracy; and engaged and cohesive local communities. However, the way that these services are accessed and consumed by Australian listeners is changing. A key feature of these changes has been the take-up of smart speakers, which are currently found in 32 per cent of Australian households.[[1]](#footnote-2)

Smart speakers offer a range of benefits for consumers, including ease of use, effective integration with other smart home devices, and access to multiple products or services (beyond audio content). Smart speakers are also ‘gateway devices’; critical conduits for radio stations to reach listeners. In contrast to traditional radio sets (which are generally ‘passive’ in terms of the content they are providing), smart speakers actively mediate access to radio services and can facilitate (or alter or block) the delivery of radio content from the provider to the listener. The smart speaker market in Australia is dominated by the digital platforms – Google, Amazon and Apple – both in terms of devices (Google Nest, Amazon Echo and Apple HomePod), and the voice assistants that facilitate access to services and content (Google Assistant, Amazon’s Alexa and Apple’s Siri).

Regulation to support the prominence of broadcasting services is relatively novel. To date, most regulatory interventions in overseas markets have focused on the prominence of content, rather than services. However, the United Kingdom (UK) has legislated separate prominence frameworks for television and radio services.

The UK’s radio prominence framework, contained in the Media Act 2024 (UK), will require ‘voice assistant platforms’ (the providers of voice activation software on smart speakers) to provide users with access to the online simulcasts of mainstream radio services, and will prohibit those providers from charging UK radio stations for that access or altering the content of the service.[[2]](#footnote-3) This policy and market context is further explored in Part 1 of this paper.

## There is a case for a radio prominence framework

There is an asymmetric relationship between radio stations and voice assistant platforms operating on smart speakers. On these devices, there is limited capacity for users to browse for media services and content, and the integration of these services with the voice assistants is vital to finding an audience. There is also an increasing level of vertical integration of the platforms and content creation.

As such, a radio service carried across a voice assistant interface is heavily dependent on the hosting platform – in contrast to the situation with a traditional radio device, or even a website or an app. To date, this relationship has generally been mutually beneficial:

* radio stations protect and gain incremental listening on smart speakers, which enables commercial entities to earn incremental revenues and all radio stations (including national broadcasters) to expand their reach; and
* smart speaker providers gain from having radio present through incremental product sales, the familiarisation of users with voice commands and apps that support the interface, and through the use of data.[[3]](#footnote-4)

However, this dynamic is forecast to change over the coming years. A key factor in the design of the UK’s radio prominence framework has been the expected shift in bargaining power between voice assistant platforms operating on smart speakers and radio stations. Smart speakers are expected to become less reliant on radio; while radio broadcasters are likely to be more dependent on voice assistant platforms.

A key concern for users and the radio industry is the inaccurate surfacing of radio stations in response to user requests. This was an issue identified in consumer research commissioned by the Office of Communications (Ofcom) in the UK. It was also found to be a problem in 2018 through a Voice Request Audit undertaken by Commercial Radio & Audio (CRA).[[4]](#footnote-5)

* According to this Audit, only 43 per cent of requests for 370 station call IDs via the Google Assistant on a Google Home device returned accurate results.
* This accuracy has reportedly improved substantially as a result of subsequent commercial arrangements struck between radio broadcasters and the major voice assistant platforms. However, there is no guarantee that this outcome will be maintained if, and when, those arrangements expire.

There is a case for the development of a regulatory framework to support access to Australian radio services on smart speakers. This was also the finding of the Senate Environment and Communications Legislation Committee, in its inquiry into the Communication Legislation Amendment (Prominence and Anti-siphoning) Bill 2023. The Committee recommended that the Government prioritise the implementation of radio prominence on smart speakers, forming the view that although swift action could be taken in relation to smart speakers, others – such as prominence in car audio systems – will take a longer timeframe.[[5]](#footnote-6)

Part 2 of this paper outlines the domestic and international factors that support the development of a radio prominence framework in Australia.

## The proposed radio prominence framework for smart speakers

The main elements of a proposed radio prominence framework for smart speakers are outlined in Table 1. This framework would seek to ensure that the radio services that provide vital local content, news and emergency information would be available when Australian audiences ask their voice-assisted smart speakers for them. In this way, Australians would continue to have equitable access to the radio services they rely on in the digital age.

To achieve this outcome, the proposed framework would address the barriers that may make it difficult for radio broadcasters to be heard on these devices, now and in the future. Specifically, the model would mitigate the risk that the major providers of voice activation software used on smart speakers – currently Google, Amazon and Apple – leverage their bargaining power on these gateway devices to restrict the availability of Australian radio services, or otherwise impose fees or charges for a basic level of access.

This proposed approach is closely aligned with the UK’s radio prominence framework, sharing a number of key elements.

* Under both proposed frameworks, the online streams of ‘mainstream’ broadcasting services would be subject to regulation when those services are accessed on smart speakers.
* The level of prominence would be calibrated to support accurate responses to voice commands to play a radio station, and there would be no payments.
* There would be no ability to alter the content of radio services, when providing access.

The proposed model for radio prominence also shares a number of key features with Australia’s television prominence framework. These include the application of the framework to mainstream broadcasting services, and the ‘no cost’ and ‘no alteration’ elements noted above.

Table 1: Proposed radio prominence framework for smart speakers

|  |  |  |
| --- | --- | --- |
| Key design issue | Description  | Proposed approach |
| 1. Level of prominence
 | The type of access afforded to regulated radio services under the framework. | Consistent and reliable access – a regulated access provider must respond to and play a specific regulated radio service when requested to do so by the user of a smart speaker, where this is reasonable in the circumstances. |
| 1. Payment for prominence
 | The extent to which the framework governs the exchange of money between regulated access providers and regulated radio service providers. | No cost – a regulated access provider must provide the required level of prominence for a regulated radio service (as above) without the imposition of a fee, charge or other form of consideration. |
| 1. Service integrity
 | The degree to which the framework permits regulated access providers to alter a regulated radio service, including in relation to advertising. | No alteration – a regulated access provider would be prohibited from altering the content (including advertising) of a regulated radio service when providing prominence for the service. |
| 1. Regulated radio service providers
 | The entities that would be afforded prominence under the framework. | Australian national, commercial and community broadcasters – the framework would provide prominence for ‘mainstream’ Australian radio broadcasters that maintain an online presence. |
| 1. Regulated radio services
 | The types of services that would be required to be prominent. | Online simulcasts of radio broadcasting services – the framework would apply to the online simulcasts of the broadcasting services provided by mainstream Australian radio broadcasters. |
| 1. Regulated access providers
 | The entities required to provide prominence to regulated radio services. | Voice assistant platforms – the prominence obligations would apply to the providers of voice activation software used in smart speakers. |
| 1. Access pathway
 | The degree to which the framework stipulates how (via what pathway) regulated access providers facilitate access to regulated content services. | Open access pathway – a regulated access provider would be able to determine the source or pathway for users to access a regulated radio service, unless the user requests a particular source. |
| 1. Minimum technical standards
 | The degree to which the framework stipulates minimum technical and other operational standards that regulated radio services need to meet to be afforded prominence on regulated access devices. | Negotiated standards – the framework would enable the relevant parties to determine any technical standards for the integration of regulated radio services and voice activation software, with the ACMA to have the capacity to determine ‘offer’ requirements, should this prove to be necessary. |

This proposed radio prominence framework would have a range of impacts on industry and consumers, including voice assistant platforms (Google, Amazon and Apple), radio broadcasters and consumers. Views are sought on the proposed framework and on the nature and quantum of any impacts. The Government will consider these inputs and expects to make a decision regarding the model and mechanism of the framework later in 2024.

Make your views known

**The purpose of this consultation**

This consultation is seeking views on the need for, and potential form of, a prominence framework for radio services on internet connected, voice-enabled smart speakers. It is not seeking views on the prominence of radio on other internet connected devices that might be used to listen to audio content, including cars.

In its inquiry into the provisions of the Communications Legislation Amendment (Prominence and Anti-siphoning) Bill 2023, the Senate Environment and Communications Legislation Committee (the Committee) recommended that the Government prioritise the implementation of radio prominence on devices such as smart speakers, and concluded that other matters – such as prominence on car audio systems – will take a longer timeframe. This is consistent with the approach adopted in the UK’s radio prominence framework, which is focused on enhancing radio prominence on smart speakers. The issues associated the prominence of radio services in cars will be assessed as part of future policy development processes.

**Making a submission**

The department is inviting written comments and submissions on the matters outlined in this paper. Comments and submissions should be received by **5:00 PM Australian Eastern Daylight Time on Monday, 11 November 2024**. Submissions received by the department as part of this consultation process will be used to inform the Government’s decision on the future direction of policy interventions for the radio industry.

Comments and submissions can be lodged by:

Website: <https://www.infrastructure.gov.au/have-your-say/>

Post: Media Policy Division
Department of Infrastructure, Transport, Regional Development, Communications and the Arts GPO Box 594
CANBERRA ACT 2601

Comments and submissions should include the respondent’s name, organisation (if applicable) and contact details.

Questions about the submission process can be directed to media.reform@communications.gov.au.

**Publication of submissions and confidentiality**

All submissions will be made publicly available by the department unless a respondent specifically requests that a submission, or a part of a submission, including names of persons and/or organisations, contact details and information that may be commercially sensitive, be kept confidential.

The department reserves the right not to publish any submission, or part of a submission, which in its view contains potentially offensive or defamatory material, or for confidentiality reasons.

Comments will not be published.

The department is subject to the *Freedom of Information Act 1982* and comments and submissions may be required to be disclosed by the department in response to requests made under that Act.

# Part 1 — The current media landscape

This part of the paper outlines the contribution of radio services in Australia to public policy outcomes and the changes in technology, consumer behaviour and markets that are relevant to radio prominence. It then considers what is radio prominence, the differences between radio prominence and television prominence, and relevant international developments.

## Radio services in Australia

### 1.1 Public policy role of radio services

The existing legislative framework for media services in Australia relies heavily on broadcasting services, both TV and radio, to meet the policy objectives that are reflected in the objects of subsection 3(1) of the *Broadcasting Services Act 1992* (BSA). These include (among others):

a) to promote the availability of a diverse range of radio and television services offering entertainment, education and information;

b) to provide a regulatory environment that will facilitate the development of a broadcasting industry in Australia that is efficient, competitive and responsive to audience needs;

e) to promote the role of broadcasting services in developing and reflecting a sense of Australian identity, character and cultural diversity;

ea) to promote the availability to audiences throughout Australia of television and radio programs about matters of local significance;

f) to promote the provision of high quality and innovative programming by providers of broadcasting services; and

g) to encourage providers of commercial and community broadcasting services to be responsive to the need for a fair and accurate coverage of matters of public interest and for an appropriate coverage of matters of local significance.

These objectives remain relevant in the contemporary media environment. Terrestrial radio broadcasters will continue to make valuable services available to the majority of Australians, while the radio industry increases its operating capacity and offerings in the online environment.

#### Informing Australians

Australia’s broadcasting sectors, TV and radio, provide close to universal access to news and entertainment content through a combination of terrestrial broadcasting and services made available over the internet.

* In 2023, radio was the medium by which 51 per cent of Australian adults accessed most of their news content; ahead of domestic / Australian news websites or apps (49 per cent), social media (46 per cent), and publicly-owned free-to-air TV (38 per cent).[[6]](#footnote-7)
* The University of Canberra’s *Digital News Report: Australia 2023* found that there is substantial difference across the generations for accessing news through radio, with older generations more inclined to listen to radio (77+ age group - 41 per cent; baby boomers - 30 per cent), and Gen Z (14 per cent) being least inclined to source news via radio services.[[7]](#footnote-8)
* The *Digital News Report* also found that the use of voice activated speakers to access news has increased significantly between 2017 (1 per cent) and 2023 (7 per cent).[[8]](#footnote-9)

#### Access to emergency information

The ability to access local emergency information quickly and reliably is critical to the safety of many Australians, particularly those living in areas prone to emergency events. Australian audiences expect to have access to both general and localised information on unfolding emergencies, including from emergency services, to protect the life, health and safety of individuals and communities in times of crisis.[[9]](#footnote-10)

Radio is a particularly effective method of communicating important information to large groups of people before, during and after emergency situations. The Senate inquiry into the Australian 2019-20 bushfire season highlighted the fundamental role of radio broadcasts (in particular analogue terrestrial radio) during these catastrophic bushfires. The reasons cited for this key role included the ubiquity and portability of radio receivers, the wide area of geographic radio coverage, and the overlapping broadcast sites.[[10]](#footnote-11) Submitters to the bushfire inquiry noted the challenges of providing consistent and accurate emergency information to local communities, alongside other sources such as popular social media sites.[[11]](#footnote-12)

Emergency services apps provide an important source of up-to-date and authoritative information during emergencies. They can assist in emergency preparedness, identify nearby hazards and are largely compatible with ubiquitous smart operating systems.[[12]](#footnote-13) GPS on mobile phones can also be utilised to locate someone in an emergency, without the need for pre-installed apps.[[13]](#footnote-14) However, information sourced through apps and internet enabled devices is only helpful when and where internet networks are available. Where mobile phone towers are damaged or inoperable, radio can be the last remaining source of up-to-date emergency information.

#### Local content and supporting Australian voices

Radio supports access to local content for local communities. Local content includes material that is produced in a particular area, or that relates to events or people who live in that region or community.

In 2023, 59 per cent of Australian adults accessed news from radio in the past 7 days.[[14]](#footnote-15)

As outlined in Table 2, radio is the main source of local news for 12 per cent of Australians, ahead of local print newspapers (3 per cent) and broadly comparable with domestic / Australian news websites and apps (16 per cent).[[15]](#footnote-16)

Table 2: Main source of accessing types of news (extracted sources)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Local news | State or Territory news | Australian national news | International news |
| Radio | 12 | 9 | 8 | 5 |
| NET: TV | 37 | 42 | 42 | 35 |
| Domestic / Australian news website or app | 16 | 18 | 20 | 12 |
| Local print newspaper | 3 | 1 | 0.1 | 0.1 |

Source: *Television & Media Survey 2023*, Q: “In general, what is your main source for accessing news about each of the following?” page 83. Percentage of use for each type of news.

There are in excess of 750 commercial, national and community radio stations operating across Australia and, to varying degrees, each plays an important role in the provision of local content.

* Commercial radio stations operating in regional licence areas are required to provide minimum levels of material of local significance.
* The national broadcasters – ABC and SBS – operate under their own respective statutes and provide radio services across the country. The ABC operates 60 local radio services; 52 of which are in regional areas. SBS provides First Nations and multicultural communities with programs in over 60 languages, across 7 radio services.
* Community radio stations have an immediate and direct connection to their local communities, as they are required (among other matters) to represent a community interest and provide material that is significant to the local community.

### 1.2 Changes in technology and consumer behaviours

Technology developments continue to drive changes in media markets and present challenges and opportunities for existing and new media businesses. Dramatic shifts have occurred in relation to audio-visual content. The growth of streaming services – both subscription-based services and those supported by advertising – has resulted in significant changes in the way audiences are accessing television content.

Radio has not been immune to this online transition, although the impacts to date have not been as stark as for print and television services.

* In 2023, 69 per cent of Australians listened to any radio (whether broadcast or via internet), having decreased from 75 per cent in 2022.[[16]](#footnote-17) Similarly, in 2023:
	+ 57 per cent of Australians listened to FM radio in the past 7 days (the same as in 2022);
	+ 22 per cent listened to AM radio in the past 7 days (an increase from 21 per cent in 2022); and
	+ 14 per cent listed to DAB digital radio, which is available in the mainland capital cities and a small number of regional areas (also 14 per cent in both 2022 and 2023).[[17]](#footnote-18)
* In 2023, 89 per cent of Australians had a radio in their home or car (down from 92 per cent in 2022).[[18]](#footnote-19)

These results affirm that although gradually declining, traditional methods of listening to radio remain important for the bulk of Australians.

As outlined in Table 3, there is also a regional dimension to listening habits.

* Some 54 per cent of Australians listened to FM radio in the capital cities in the past 7 days, rising to 64 per cent for those listening in areas outside the capitals.
* Radio listening via the internet or an app (excluding podcasts) was also notable in 2023: 15 per cent of Australians in the capital cities; and 14 per cent in other areas.
* Online music streaming services were also very popular: 56 per cent of Australians in the capital cities accessing them in the past 7 days; and 52 per cent of those in other areas.

Table 3: Audio content listening habits by location in the past 7 days

|  |  |  |
| --- | --- | --- |
|  | Capital city  | Rest of state |
| AM Radio | 22 | 21 |
| FM Radio | 54 | 64 |
| Digital radio (DAB) | 18 | 6 |
| Radio via the internet or an app (excluding podcasts) | 15 | 14 |
| Online music streaming services (e.g. Spotify or Apple Music) | 56 | 52 |
| Podcasts | 24 | 26 |

Source: *Television & Media Survey 2023*, Q: “Which, if any, of the following have you listened to in the past 7 days?”. Percentage of listening by Capital City and Rest of State.

#### Listening to radio and radio-like services

The points of access for radio and radio-like content have proliferated. A diverse range of Australian and international entities are vying for Australian listeners across all forms of radio services and online audio content streaming services at the listener’s discretion. As outlined in Table 4:

* Radio broadcasts (FM and AM) were most commonly consumed in cars in 2023 (87 and 78 per cent of Australians, respectively, who listened to audio content in the past 7 days), followed by digital radio (DAB) which is available in the mainland capital cities and a small number of regional areas (66 per cent of Australians who listened to audio content in the past 7 days).
* Online music streaming services and podcasts were most commonly accessed via smartphones (84 per cent and 85 per cent of Australians, respectively, who listened to audio content in the past 7 days).
* Listening to FM, AM, radio via the internet or app, and digital radio were services that Australians accessed via smart speakers, with 9 per cent of Australians who listened to radio content in the past 7 days using a smart speaker to access these services.[[19]](#footnote-20)

Table 4: Devices used to listen to audio content (past 7 days)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Car audio system | Dedicated radio | Smartphone | Computer / Tablet / Laptop | Smart Speaker | Other |
| FM radio | 87 | 23 | 12 | 4 | 5 | 1 |
| AM radio | 78 | 38 | 16 | 6 | 6 | 1 |
| Digital radio (DAB) | 66 | 34 | 19 | 4 | 11 | 1 |
| Radio via the internet or an app (excluding podcasts) | 29 | 7 | 67 | 27 | 21 | 1 |
| Online music streaming service | 30 | 2 | 84 | 31 | 23 | 2 |
| Podcasts | 19 | 2 | 85 | 25 | 7 | 2 |

Source: *Television & Media Survey 2023*, Q: “In general, what do you use to listen to…”. Percentage of listening by device. Note: the survey results for smart speaker use needs to be treated with caution as these devices are not required to have radio frequency tuners.

Research commissioned by CRA in 2022 highlights the importance of listening to radio in the home environment.[[20]](#footnote-21)

* At home listening constituted more than 53 per cent of metropolitan listeners average daily listening time, with 70 per cent of that time spent listening to commercial radio.[[21]](#footnote-22)
* Metropolitan listeners only spent 28 per cent of their average daily listening time in the car, although 87 per cent of that was spent listening to commercial radio.[[22]](#footnote-23)

#### Smart speakers

What is a smart speaker?

* + An internet enabled audio device comprising a speaker and microphone which can operate independently of other devices. These devices are primarily voice activated, and usually linked to a localised (i.e. in-home) Wi‑Fi network.
	+ A smart speaker with a screen can be described as a ‘multimodal’ device, as it has multiple input pathways.[[23]](#footnote-24)

While dedicated radio devices (i.e. a device with a radio frequency tuner) are almost exclusively used for live radio broadcast listening, this type of device is becoming less and less common in Australian households.

* Ownership of traditional ‘in-home’ radio sets fell from 70 per cent in 2017 to 44 per cent in 2023.[[24]](#footnote-25)
* Ownership of smart speakers is reported to have increased from 5 per cent in 2018 to 26 per cent in 2021, and has risen further in 2022 to 32 per cent of Australian households, or 3.2 million households.[[25]](#footnote-26)

Smart speakers offer a range of benefits for consumers, including ease of use, effective integration with other smart home devices, and greater access to multiple products or services (beyond audio content). Radio stations and smart speaker providers also benefit from interoperating in a mutually beneficial way.

Google is the market leader in the smart speaker product category in Australia, with around 62 per cent of Australian adults owning a Google device as at December 2023:

* 39 per cent owned a Google Home device (Google’s smart speaker offering until 2019); and
* 23 per cent owned a Google Nest device (available from 2019) in 2023.[[26]](#footnote-27)

This was followed by households with an Amazon Echo smart speaker (33 per cent) and an Apple HomePod smart speak (20 per cent), along with a ‘tail’ of manufacturers with a smaller market share: Bose; JBL; and Edifier, among others.[[27]](#footnote-28)

Figure 1: Top 10 brands in Australia for smart speaker ownership as of December 2023

Source: Statista Consumer Insights. Notes: Australia; January to December 2023; 455 respondents; 18-64 years; respondents who own smart speaker (Housing & household equipment, Internet & devices)

As a point of comparison, in the UK and the United States (US) markets, the reverse is true.

* In the UK, Amazon accounts for around 75 per cent of smart speaker ownership, Google 15 per cent, and Apple 8 per cent, with the current leading brand-integrated devices being the Echo, Nest and HomePod, respectively.[[28]](#footnote-29)
* In the US, it is estimated that Amazon has 70 per cent of the smart speaker market, followed by Google with 25 per cent and Apple with 5 per cent.[[29]](#footnote-30)

Internationally, Chinese providers such as Baidu, Alibaba and Xiaomi are believed to account for around 30 per cent of global sales.[[30]](#footnote-31)

#### Voice activation software (‘voice assistants’)

The defining feature of smart speakers, and other smart home devices, is that they are almost exclusively controlled by voice activation software, or ‘voice assistants’.

What is a voice assistant?

* + Voice assistants enable a person to carry out everyday tasks – such as making phone calls, checking the weather, lowering their blinds, or requesting a radio station – by using speech, rather than physical actions or selecting prompts on a screen.
	+ The three leading voice assistants are Google Assistant, Amazon’s Alexa and Apple’s Siri.[[31]](#footnote-32)

The process that occurs when a user makes a request using a voice assistant is depicted in Figure 2. This process is one of the most complicated for a developer to create.[[32]](#footnote-33)

Figure 2: Accessing audio content via a voice assistant



Voice assistants are increasingly integrated into various ‘smart’ devices: mobile devices such as smart phones and tablets; and well as smart home devices, such as smart speakers and certain smart TVs, among others.

* Australian consumers have a clear preference to use smart speakers to control other smart home devices, with speed of use and increased convenience cited as key reasons for doing so.[[33]](#footnote-34)
* It is also an accepted and desired feature of consumer electronics, with 36 per cent of Australians surveyed in 2023, responding in the affirmative to the statement ‘I would love to control my home via smartphone or voice.’[[34]](#footnote-35)
* Global data on the use of voice assistants indicates that convenience is the key factor, with 90 per cent considering voice search to be easier and faster than a standard typed search.[[35]](#footnote-36)

With ownership of dedicated radio devices in decline, smart speakers are likely to be an increasingly popular choice for home listening in the future, based on the current usage patterns and take-up rates.

### 1.3 Market factors

The technological shift toward smart speakers is part of a broader adoption and use of internet-connected devices by Australian households, where digital platforms have come to dominate.[[36]](#footnote-37) With respect to smart speakers:

* Google, Amazon and Apple are the only providers of voice assistants at any scale, integrating this software into their own devices or into third-party devices. Although Microsoft launched a voice assistant, Cortana, in 2014, it was discontinued in 2021.[[37]](#footnote-38)
* As outlined in section 1.2, Google, Amazon and Apple dominate the smart speaker market in Australia.

The key change that has occurred with the take up of connected audio devices is that radio access has moved from being ‘passively mediated’ by third party devices (that simply enable the user to tune to a radio station), to being ‘actively mediated’ by connected devices that are able to facilitate (or alter, or block) the delivery of radio content from the provider to the listener.

* Radio stations need to pass through the smart speaker ‘gateway’ in order to reach their audiences. In this way, a radio service carried across a voice assistant interface is dependent on the platform – in contrast to the situation with a traditional radio device with a radiofrequency tuner, or with a website or an app.[[38]](#footnote-39)
* This, in turn, requires some form of direct relationship between the radio station and the platform, or between the radio station and an aggregator, who then manages the relationship with the platform. By its nature, this is an asymmetric relationship.[[39]](#footnote-40)

There is no directory or consumer browsing option to enable radio stations to bypass the need to integrate services within the smart speaker platform, and there is an increasing level of vertical integration of platforms and content.

## What is radio prominence?

In the context of this paper, radio prominence refers to the relative ability of the users of smart speakers to access local radio services. This marks a key point of difference with television prominence, where service and / or content prominence typically involves (among other matters):

* a visual element – the placement and relative positioning of services and content on a screen display; and
* service and content selection – which can be voice driven, but is more commonly achieved through ancillary hardware (remote controls), or other devices (mobile phones).

Historically, Australian radio services have been afforded prominence for their AM and FM services through in-home and in-car radios. These devices required the user to ‘tune-in’ to particular radio frequencies and could be set to particular radio stations. In a pre-internet era, AM and FM radio services were the only live audio options available to consumers at home, on the move or in the car.

As described in section 1.3, this is a ‘passively mediated’ means of accessing radio content, where the device is simply a conduit for access to a radio station. The device has little control over the form of access, and no control at all over the content (other than sound quality and volume).

This outcome was a product of market factors and not the result of the regulation of radio reception equipment. This was a ‘mutually beneficial’ arrangement for radio broadcasters, consumers and automotive and electronics manufacturers, and over time radio broadcasters were incrementally subject to additional regulatory obligations to support particular policy outcomes.

In a contemporary environment, the prevalence of internet-connected devices has changed the way in which radio services can be accessed and consumed, with radio being available in traditional broadcast and streamed online formats. Voice activation software is the key access mechanism for these devices, which is not a feature of traditional radios that operate using radiofrequency tuners.

### 2.1 Similarities and differences with prominence for radio and TV

Radio and television broadcasting services share a number of important similarities.

* They both provide Australians with near universal access to free media services and content, without explicit consumer charges or subscription fees.
* As free-to-air services, they are both reliant on either advertising revenue or, in the case of the national broadcasters and community broadcasters, Commonwealth funding.

The regulatory regimes are also similar.

* Commercial and community services are licensed to operate in, and authorised to provide services to, specific geographic areas (licence areas). This allows for the imposition of the targeted regulatory obligations.
* For the national broadcasters, the broadcast of both radio and television services is authorised under the *Australian Broadcasting Corporation Act 1983* and the *Special Broadcasting Service Act 1991*.

However, with respect to prominence, there are some important differences between television and radio.

As outlined in Figure 3, the key prominence issue for smart TVs is the visual positioning of television services and content. In contrast, the key prominence issue for smart speakers is the accurate surfacing of radio stations.

Visual cues are not a key part of the content offering for radio on smart speakers, even for those devices with screen functionality. In addition, a radio user is generally not in control of the pathway that leads to their listening choice, unless they are very specific in their commands. Listener behaviour is therefore more intentional than when choosing audio-visual content to watch. Hence, the prominence issues arising on smart TVs are not identical to those arising for smart speakers.

Figure 3: Prominence issues for television and radio



### 2.2 International developments

Regulation to support the prominence of broadcasting services is relatively novel. To date, most regulatory interventions have focused on:

* the availability and discoverability of certain types of content – predominantly content produced in a relevant jurisdiction or within Europe – rather than the availability of services per se; and
* the provision of, or investment in, this content within large content aggregation services (i.e. within streaming services like Netflix), rather than the availability on particular gateway devices such as smart TVs or smart speakers.

Only the United Kingdom (UK) has legislated prominence frameworks for both television and radio services. The UK’s approach to radio prominence is outlined in Box 1.

Box 1 - UK approach to regulating the availability of radio on smart speakers

The UK’s Media Act 2024 seeks, among other matters, to protect the availability of UK radio stations on connected audio devices, such as smart speakers, and ensure that they are accessible in response to a user’s voice request.[[40]](#footnote-41)

The legislation has been developed to address a risk that large technology platforms, operating competing audio services, are reducing the ability of UK radio stations to reach and maintain online audiences.

The legislation defines an ‘internet radio service’ and sets out the regulatory framework for internet radio service providers by the UK’s Office of Communications (Ofcom), including penalties for non-compliance and the payment of an annual fee to Ofcom. The BBC, commercial and community radio services are in scope.

The legislation also seeks to prevent technology platforms from charging UK radio stations for facilitating user access to radio stations’ live services on internet enabled devices, or from altering the content of the live service, such as overlaying advertisements.

In effect, the Act will regulate voice assistant technologies (referred to as ‘designated radio selection services’), and will require Ofcom to establish, maintain and publish a list of designated radio selection services and their providers. As with internet radio services, there is the potential for annual fees payable to Ofcom.

The Act will create an obligation for radio selection services and their providers to ensure that listeners will be able to use a radio selection service to select and listen to relevant internet radio services. If this fails, the service should take reasonable steps to comply with the request, such as ask the listener to repeat or clarify the request.

It will also require the radio selection service to use the preferred access method of the internet radio service, unless that would be unduly burdensome, or the listener has requested another method. A provider of a radio selection service will also not be required to provide access where the listener has failed to take relevant action, such as install a relevant app.

The UK’s approach to radio prominence regulation has been instructive for Australia.

Firstly, the UK has not sought to regulate television and radio under a single prominence framework. Nor has the UK sought to regulate television and radio prominence in the same way. Rather, the UK Media Act establishes separate and distinct frameworks for each sector, with a different regulatory model underlying each regime. While both frameworks are seeking to ensure reasonable access to broadcasting services, there are some critical differences between the two.

* The television prominence framework will require Public Service Broadcasters to offer their on-demand services to Designated TV Platforms, which in turn must carry those services. The regulation will be enforced through a bargaining framework, operating on the basis that Public Service Broadcasters and platforms should always seek to pursue mutually beneficial commercial arrangements in the first instance. Ofcom will oversee and administer the regime with powers to resolve disputes and intervene in support of effective negotiations based on statutory objectives. This can be described as a ‘fair bargaining’ approach to prominence.
* In contrast, the radio prominence framework will require the providers of voice assistants (rather than device manufacturers) to provide a user with access to a specified radio station, and will prohibit those providers from charging UK radio stations for facilitating user access to live radio stations, or from altering the content of the live service (as opposed to facilitating a bargaining outcome or arbitrating an access dispute). This can be described as a ‘no-cost’ access framework.

Secondly, the UK’s radio prominence framework applies to smart speakers, and not car audio systems. While the UK Government has agreed to keep in-car infotainment systems under review, it is not currently the key focus for its radio prominence framework.[[41]](#footnote-42)

### Conclusions

1. **Radio broadcasting services are, and will remain, important in achieving media policy objectives.** They provide trusted news and emergency information, access to local content, and high-quality entertainment that reflects national identity and cultural diversity. However, the ways in which consumers are able to access radio services are changing rapidly. While dedicated radio devices (i.e. a device with a radio frequency tuner) are almost exclusively used for live radio broadcast listening, this type of device is becoming less and less common in Australian households.
* Ownership of traditional ‘in-home’ radio sets fell from 70 per cent in 2017 to 44 per cent in 2023.[[42]](#footnote-43)
* Ownership of smart speakers is reported to have increased from 5 per cent in 2018 to 32 per cent of Australian households in 2023.[[43]](#footnote-44)
1. **Smart speakers are internet-enabled devices that provide access to audio content through voice activation software (or ‘voice assistants’).** Smart speakers ‘actively mediate’ access to radio services and can facilitate (or alter, or block) the delivery of radio content from the provider to the listener.
2. **The smart speaker market in Australia is dominated by three digital platforms – Google, Amazon and Apple**. This is in terms of smart speaker devices (Google Nest, Amazon Echo and Apple HomePod), and the voice assistants that facilitate access to services and content (Google Assistant, Amazon’s Alexa and Apple’s Siri).
3. **The key prominence issue for smart speakers is the accurate surfacing of radio stations.** This marks a key point of difference with television prominence, where the key prominence issue is the visual positioning of services.
4. **Regulation to support the prominence of broadcasting services is relatively novel.** To date, most regulatory interventions have focused on the prominence and discoverability of content, rather than services. The UK has legislated separate prominence frameworks for television and radio. The radio framework will require the providers of voice assistant platforms (rather than device manufacturers) to provide a user with access to a specified radio station, and will prohibit those providers from charging UK radio stations for facilitating user access to live radio stations, or from altering the content of the live service. This can be described as a ‘no-cost’ access framework.

# Part 2 — The case for a radio prominence framework

This part of the paper discusses the need for a regulatory framework to address the emerging radio prominence issue, drawing on relevant regulatory and industry developments in Australia and overseas.

## A radio prominence framework in Australia

### 3.1 The policy context

As outlined in Part 1 of this paper, the market for media services in Australia has changed significantly in recent years. Developments in technology have fundamentally altered the ways in which media content is created, distributed and consumed.

* Content owners and content creators are able to tell stories in new ways and extract greater value from their assets across multiple markets and jurisdictions.
* Media firms can attract audiences using multiple platforms and realise synergies in acquiring and distributing content.
* Advertisers can target their messaging to potential customers more efficiently and more accurately.
* Audiences have agency over when and how they consume content and access to a wide range of services and content.

Much of this is positive, however there are challenges for both industry and for regulatory policy. Although media markets are growing, value generation has shifted from the traditional creators and aggregators of content (broadcasters and publishers) to the newer conduits for accessing content and reaching consumers: digital platforms.

In this environment, many of the entities that create news and entertainment content – whether traditional media or newer, online-only services – are struggling to generate a return sufficient to justify that investment. This is a challenge for industry, but it also has knock-on effects for public policy and the achievement of important economic and cultural objectives: an informed citizenry; a strong and vibrant democracy; and engaged and cohesive local communities.

The Government is committed to a program of work to modernise media regulations and fulfil the legitimate expectations of consumers and industry for consistency, transparency and equity in our regulatory environment. This is part of a broad media reform agenda to enhance the ability of the Australian media to keep us informed, reflect our diverse cultures and perspectives, uphold and respect community standards and ensure access to services.

There are a number of interrelated objectives that support this overall goal, and two in particular are relevant in considering the need for prominence frameworks for broadcasting services:

* a level playing field: creating an operating environment in which Australian media outlets can thrive while maintaining Australia’s well-earned reputation as a desirable place to invest and grow new businesses; and
* equitable access: the ability for all Australians to be able to access media services and content, regardless of financial means or location.

### 3.2 Smart speakers as gateway devices

The Australian Competition and Consumer Commission (ACCC), in its Digital Platform Services Inquiry, found that smart speakers (along with other smart home devices) are ‘gateway devices’: playing an important role in governing how consumers access content and services through the internet, and also how consumers use other smart home devices.[[44]](#footnote-45)

At noted in section 1.2, Google, Amazon and Apple are the leading providers of voice assistants in Australia, and integrate these assistants into their own-brand smart speakers and also make them available for other device manufacturers. Google, Amazon and Apple also dominate the market for smart speakers in Australia.

Radio stations and smart speaker providers can benefit from interoperating in a mutually beneficial way.

* Radio stations can protect and gain incremental listening, which enables them to increase reach and (for commercial entities) to earn incremental commercial revenues.
* Smart speaker providers can gain from having radio present on devices through incremental product sales, the familiarisation of users with voice commands and apps that support the interface, and through the use of data.[[45]](#footnote-46)

However, the ACCC has identified competition issues that can arise where digital platform service providers have a gatekeeper role in relation to particular markets or particular products.

**Steering through gatekeeper positions**

Interconnected products such as smart speakers can create a range of benefits for consumers, enabling a seamless experience across products and services and greater personalisation and tailoring of services. They can also provide media firms with additional avenues to audiences and the capacity to generate additional revenue.

However, digital platform service providers that hold a gatekeeper position may also have an increased ability and incentive to engage in ‘steering’ practices that direct a user’s attention to particular first-party or third-party services that generate higher profits for the platform.[[46]](#footnote-47) Of relevance to this paper, first-party audio services include: Amazon Music and Audible; Apple Music and Apple Podcasts; and YouTube Music and Google Podcasts.

The ACCC notes that voice assistants can provide a further opportunity for digital platforms to steer users in favour of first-party products and services.[[47]](#footnote-48) Browsing products by voice also tends to provide consumers with fewer options and less information compared with websites, particularly when using smart speakers.[[48]](#footnote-49)

**Pre-installation of apps and default settings**

Pre-installation and default settings can have positive impacts for consumers, enabling them to use products ‘out of the box’ and reducing search, setup and learning costs. They can also offer convenience for consumers by supporting a consistent user experience. However, pre-installation and default settings can also raise competition concerns when they are used to enhance a position of market power in a core market, or are used to leverage a position of market power into related markets.[[49]](#footnote-50)

The European Commission has noted that pre-installation of apps and default settings on smart home devices tends to provide a competitive advantage to first-party services by vertically-integrated device providers such as Google, Amazon and Apple.[[50]](#footnote-51) Separately, the ACCC provides a number of examples:

* The Apple HomePod Mini smart speaker will, in response to the command ‘Hey Siri, play pop hits in the bedroom’ open Apple Music (rather than an alternative music streaming service); while ‘Hey Siri, how long would it take me to get to the airport’ will open Apple Maps (rather than an alternative map service).[[51]](#footnote-52)
* Similarly, Amazon positions Audible (ebooks) and Amazon.com.au (marketplace) services as features of Alexa. For example, the voice command ‘Alexa, read The Hobbit’ will open the relevant title via Audible.[[52]](#footnote-53)

### 3.2 Expected shifts in bargaining power

As noted in section 2.2, the UK’s Media Act includes a radio prominence framework to protect the availability of UK radio stations on connected audio devices and ensure that they are accessible in response to a user’s voice request. A key factor in the design of the UK’s radio prominence framework is the expected shift in the bargaining power between smart speaker providers and radio stations. [[53]](#footnote-54)

A report from Frontier Economics, commissioned by Bauer Media in the context of the UK’s Digital Radio and Audio Review, found that the value exchange between the two parties – which has tended to be mutually beneficial to date – is expected to shift in favour of the platforms over the coming years as the share of listening carried on these devices grows.[[54]](#footnote-55) This is because:

* smart speakers will become less reliant on radio (due to the maturation of the smart speaker market and the development of alternative streaming services); while
* radio broadcasters will likely be more dependent on voice assistant platforms (due to a higher share of radio listening being via voice assisted platforms, and a decline in the number of households with traditional analogue or digital radio sets).[[55]](#footnote-56)

The Impact Analysis undertaken by the Department of Culture, Media and Sport for the UK’s radio prominence framework found that there is likely to be a ‘tipping point’ whereby radio will become dependent on the platforms for access to its listeners, which would provide the platforms with a clear economic incentive to seek to monetise the provision of radio services.[[56]](#footnote-57)

*“Although relationships have been benign since the emergence of voice activated smart speaker devices in 2016, it is this risk - the risk that the public value inherent in continued access to live, licensed radio services will be intermediated and monetised by the platforms - that the new measures to regulate radio access across voice assistant interfaces in the draft Media Bill seek to address.”* [[57]](#footnote-58)

The Impact Analysis further noted that although the tipping point is unlikely to have been reached at this point, other media sectors – such as news publishing – highlight how quickly and dramatically market changes can impact content providers’ long-term sustainability.[[58]](#footnote-59)

### 3.3 Inaccurate surfacing of radio stations by voice assistants

As discussed in Section 2, there are a number of ways in which the voice assistant functions of smart speakers may process a user’s voice command. However, regardless of the process used to fulfil the user request, the accuracy of the response is important for the user, device manufacturer, and the radio service.

Research commissioned by Ofcom in 2022 found that consumers were generally positive about voice activated smart speakers citing convenience, integration and a wide range of functions as key benefits (among others).[[59]](#footnote-60) However, the research identified a number of drawbacks or downsides to the technology. The two most commonly identified were:

* the speaker misunderstanding or not understanding the commands of the user; and
* the speaker playing inaccurate or wrong results in response to a request.[[60]](#footnote-61)

A Voice Request Audit undertaken by Commercial Radio & Audio (CRA) in 2018 suggests that there have been significant shortcomings in the past with the accuracy of voice search results for Australian radio stations.[[61]](#footnote-62)

The Audit was conducted by CRA to determine if radio station call IDs would be recognised by the Google Assistant on Google Home and, if so, through which aggregator or nominated station app it would be played.

CRA requested a Google Home device to play some 370 Australian radio stations, either online streams of terrestrial radio services (such as 702 ABC Sydney or 2GB), or popular online- or digital-only services (such as SBS Chill or Coles Radio).

According to CRA, the Audit found that only 43 per cent of requests resulted in the requested station being played (a failure rate of 57 per cent, or 210 of the 370 stations). The Google Assistant reportedly responded to the call ID requests with responses such as: ‘[call ID] isn’t available or can’t be played right now;’ ‘Sorry, I don’t know how to help with that’; or asked for further information such as which devices to use. In other cases, a playlist or song (often unrelated) was reported to have been played from YouTube or Google Music.

Subsequent to the Audit, CRA entered into a commercial agreement with Google and a separate arrangement with Amazon to improve the identification of Australian radio stations. CRA has indicated that the request accuracy on Google and Amazon smart speakers has improved substantially, but remains concerned that there is no guarantee that the large digital platforms will continue to provide access to Australian radio if and when those agreements expire. The commercial radio industry also reports ongoing problems, such as the inability to access radio through specific station apps on Google devices. Instead, the voice assistant selects the apps, or pathway used to access Australia radio stations on smart speakers.

### 3.4 The Senate Committee inquiry report

On 9 April 2024, the Senate Environment and Communications Legislation Committee (the Committee) released the report of its inquiry into the provisions of the Communications Legislation Amendment (Prominence and Anti-siphoning) Bill 2023.[[62]](#footnote-63) The Bill sought, in part, to implement the Government’s election commitment to legislate a prominence framework to ensure Australian TV services can easily be found on connected TV platforms.

While the Bill did not seek to regulate radio prominence, the Committee heard views that it should do so.

* CRA sought obligations similar to those being considered for smart TVs via the proposed prominence framework, including a ‘must carry’ obligation and a prohibition on any advertising or content not agreed by the broadcaster. CRA suggested that the obligations should initially apply to smart speakers with inbuilt flexibility for future expansion to cars and other devices.
* The Community Broadcasting Association of Australia argued that the policy reasons for television prominence protection apply equally to radio. The considerable work done to develop a scheme for protecting free-to-air prominence on television can now be easily translated to the radio environment.

In the report of the inquiry, the Committee formed the view that swift action could be taken in relation to certain devices such as smart speakers, although others will take a longer timeframe, such as the impact on cars. The Committee recommended that the Minister for Communications request that the Department of Infrastructure, Transport, Regional Development, Communications, and the Arts prioritise the implementation of radio prominence on devices such as smart speakers.

### Conclusions

1. **Smart speakers are ‘gateway devices’ for access to audio content:** **critical conduits for radio stations to reach listeners.** Radio stations need to pass through the smart speaker ‘gateway’ in order to reach their audiences. While the take up of these devices by Australian consumers is positive for consumers and industry, there are potential competition concerns. The ACCC has noted that there is both the opportunity and incentive for providers of gateway devices to ‘steer’ users to first-party or third-party services that generate higher profits for the platform. The European Commission has noted that pre-installation of apps and default settings on smart home devices tends to provide a competitive advantage to first-party services by vertically-integrated device providers such as Google, Amazon and Apple.[[63]](#footnote-64)
2. **There is an asymmetric relationship between radio stations and the providers of smart speakers.** There is no directory or consumer browsing option to enable radio stations to bypass the need to integrate services within the smart speaker platform, and there is an increasing level of vertical integration of platforms and content. A radio service carried across a voice assistant interface is dependent on the platform – in contrast to the situation with a traditional RF radio device, or even a website or an app.[[64]](#footnote-65) This, in turn, requires some form of direct relationship between the radio station and the platform, or between the radio station and an aggregator, who then manages the relationship with the platform. To date, the relationship has been mutually beneficial:
* Radio stations can protect and gain incremental listening and (for commercial operators) earn incremental revenues.
* Smart speaker providers can gain from having radio present through incremental product sales, the familiarisation of users with voice commands and apps that support the interface, and through the use of data.[[65]](#footnote-66)

However, there is a risk that this will change over the coming years. A key factor in the design of the UK’s radio prominence framework is the expected shift in the bargaining power between smart speaker providers and radio stations. Smart speakers are forecast to become less reliant on radio; while radio broadcasters will likely be more dependent on voice assistant platforms.[[66]](#footnote-67)

1. **The inaccurate surfacing of radio stations in response to user requests is a concern for the radio industry and radio consumers.** This was an issue identified in consumer research commissioned by Ofcom in the UK. It was also found to be a problem in 2018 through a Voice Request Audit undertaken by CRA. According to CRA, only 43 per cent of requests for 370 station call IDs by the Google Assistant on a Google Home device returned accurate results. This accuracy has reportedly improved substantially as a result of subsequent commercial arrangements, but there is no guarantee that this outcome will be maintained if and when those arrangements expire.
2. **The Senate Environment and Communications Legislation Committee recommended that the Government prioritise the implementation of radio prominence on devices such as smart speakers.** The Committee formed the view that although swift action could be taken in relation to smart speakers, others – such as the impact on cars – will take a longer timeframe.
3. **There is a reasonable case for the development of a regulatory framework to support access to Australian radio services on smart speakers.** The possible elements of this radio prominence framework are considered in Part 3 of this paper.

# Part 3 – Elements of possible radio prominence framework

This part of the paper discusses the possible elements of a radio prominence framework and puts forward specific proposals with respect to a number of key design issues. It then seeks views on the impacts of this proposed framework and on timing and application issues.

## Elements of a radio prominence framework

Part 2 of this paper established the case for the development of a regulatory framework to support access to Australian radio services on smart speakers. Part 3 seeks views on the possible elements of that framework.

Table 5 describes a prominence framework in terms of eight key design issues:

1. Level of prominence – the level of prominence afforded to regulated radio services under the framework.
2. Payment for prominence – the extent to which the framework governs the exchange of money between regulated access providers and regulated radio service providers in relation to the specified level of prominence.
3. Service integrity – the degree to which the framework permits regulated access providers to alter a regulated radio service, including in relation to advertising or sponsorships.
4. Regulated radio service providers – the entities that are afforded prominence under the framework.
5. Regulated radio services – the specific services that are afforded prominence under the framework.
6. Regulated access providers – the entities required to provide prominence to regulated radio service providers.
7. Access pathways – the degree to which the framework stipulates how (via what pathway) regulated access providers facilitate access to regulated content services.
8. Minimum technical standards – the degree to which the framework stipulates minimum technical and other operational standards that regulated radio services need to meet to be afforded prominence on regulated access devices.

A number of options are presented for each key design issue, along with a proposed approach for each.

Table 5: Possible elements of a radio prominence framework

|  |  |  |  |
| --- | --- | --- | --- |
| Key design issue | Description | Potential options | Proposed approach |
| 1. Level of prominence
 | The level of prominence afforded to regulated radio services under the framework. | A framework that requires:* **Basic availability**: a regulated radio service is required to be played on a smart speaker in response to a user request for the particular service via voice activation software, but without stipulations in relation to the consistency or reliability of the response by the voice activation software.
* **Consistent and reliable access**: a regulated radio service is required to be played on a smart speaker consistently and reliably in response to a user request for the particular service via voice activation software, where a consistent and reliable response by the voice activation software is reasonable in the circumstances.
* **Enhanced promotion:** a regulatedradio service is required to be played on a smart speaker consistently and reliably in response to a user request for the particular service via voice activation software, and regulated radio services are to be played preferentially over other non-regulated radio services in response to general requests (such as “play pop music”).
 | **‘Consistent and reliable access’**As outlined in section 3.3, the inaccurate surfacing of radio stations in response to user requests on smart speakers is a concern for the radio industry and radio consumers; identified in consumer research commissioned by Ofcom in the UK, and also found to be a problem in 2018 through a Voice Request Audit undertaken by CRA.Smart speakers are gateway devices for access to radio services, and their popularity is expected to grow. It is reasonable that Australian consumers should be able to access an Australian radio service without error when they request it on a smart speaker, provided the request is clear and unambiguous (i.e. where the request is reasonable in the circumstances).It is understood that a high level of accuracy has been achieved over recent years as a result of commercial agreements and arrangements between the Australian radio industry and both Google and Amazon. As such, the ‘reliable access’ approach would seek to ensure that this outcome is not eroded over time, noting the evidence presented in the context of the development of the UK’s radio prominence framework that smart speaker providers (digital platforms) are expected to gain a bargaining power advantage relative to radio stations in the coming years.The framework would not require voice activation software to be 100 per cent accurate, 100 per cent of the time. There are myriad reasons why the response of a voice assistant may not be accurate, such as:* an unclear or ambiguous user request;
* background noise in the vicinity of the smart speaker; and
* technical issues and problems that are outside the control of the provider of the voice assistant.

The framework would therefore require regulated access providers to respond to a user request for a particular regulated radio service and to play the service consistently and reliably to the extent that this is reasonable in the circumstances. The ACMA would have the capacity to issue guidelines on what constitutes consistent and reliable responses to user requests, and the circumstances in which responses would, and wouldn’t, be reasonable. The ACMA would also have the capacity to make a binding determination as to what constitutes a reasonable response in the circumstances, should this be warranted.The framework would also provide an exception from the ‘consistent and reliable access’ obligation where the failure to comply on the part of a regulated access provider is because of circumstances that are outside their control. For example, where a third-party device has a technical fault that results in a station not being played, or where an internet outage prevents the stream from being sourced.The ‘consistent and reliable access’ approach is consistent with the UK’s radio prominence framework. The UK framework will require a regulated access provider (a ‘regulated radio selection service’) to, within a reasonable period from the making of a list of radio stations (‘relevant internet radio services’) by Ofcom, ensure that the service deals effectively with the request and causes the station to play (and only the relevant station), so far as reasonably possible.The ‘basic availability’ and ‘enhanced promotion’ are not put forward as preferred options at this time. The former would do little to address the potential for inaccurate and inconsistent responses to user requests, while the latter would potentially distort the results of user queries and may be anti-competitive. |
| 1. Payment for prominence
 | The extent to which the framework governs the exchange of money between regulated access providers and regulated radio service providers. | A framework that provides for:* **open negotiation**: regulated access providers and regulated radio service providers would negotiate terms (including payments) for the provision of the required level of prominence (‘consistent and reliable access’, as proposed under element 1), without any regulatory oversight under the prominence framework.
* **regulated bargaining**: regulated access providers and regulated radio service providers would be required to negotiate fairly with respect to providing ‘consistent and reliable access’, with payments permissible to or from either party following negotiation.
* **no cost**: regulated access providers must provide regulated radio services with the required level of prominence (‘consistent and reliable access’) without the imposition of a fee, charge or other form of monetary payment.
 | **‘No cost’**A prohibition on payment for reliable access to radio services on smart speakers would effectively replicate the access and charging arrangements that apply to terrestrial radio broadcasts, under which radio services are generally made available on traditional radios without explicit charges to broadcasters.A prominence framework that seeks to support reliable access to radio services on smart speakers would not unduly favour radio broadcasters over other providers of audio content. Rather, it would require generally accurate responses to requests for specific stations made to voice assistants.This ‘no cost’ approach forms part of the prominence framework for smart TVs, under which the provider of a regulated television device cannot require a provider of a regulated television service to pay a fee, charge or any other consideration in connection with the device complying with the minimum prominence requirements.This ‘no cost’ approach is also part of the UK’s radio prominence framework. The UK model will provide that a regulated access provider (a ‘regulated radio selection service’) may not impose a charge on the radio station (a ‘relevant internet radio service’) that is attributable (whether directly or indirectly) to the service operating as required by the framework.The ‘open negotiation’ and ‘regulated bargaining’ approaches are not considered to be reasonable options at this time. Both options would rely on Australian radio providers negotiating with large voice assistant platforms to ensure consumer access to vital services. As noted in section 3.4, evidence presented in the context of the development of the UK’s smart speaker framework suggests that, over the coming years, smart speakers will become less reliant on radio, while radio broadcasters are expected to become more dependent on voice assistant platforms. If, as predicted, bargaining power shifts further in favour of the voice assistant platforms, there is a risk that Australian radio services would be unable to secure a fair and reasonable access outcome. |
| 1. Service integrity
 | The degree to which the framework permits regulated access providers to alter a regulated radio service, including in relation to advertising or sponsorship. | A framework that provides for:* **unrestricted service alteration**: regulated access providers would be able to alter the content provided on a regulated radio service, including in relation to advertising or sponsorship, unilaterally (without the consent or agreement of the radio service provider) in providing the required level of prominence.
* **mutually agreed service alteration**: regulated access providers would be able to alter the content provided on a regulated radio service, including in relation to advertising or sponsorship, with the consent or agreement of the radio service provider, in providing the required level of prominence.
* **no alteration**: regulated access providers would be prohibited from altering the content provided on a regulated radio service, including in relation to advertising or sponsorship, in providing the required level of prominence.
 | **‘No alteration’**As outlined in section 3.2, smart speakers are gateway devices for accessing radio services. Radio stations need to ‘pass through’ the smart speaker gateway in order to reach their audiences. In this way, a radio service carried across a voice assistant interface is dependent on the platform – in contrast to the situation with a traditional RF radio device, or even a website or an app, which generally don’t provide for the conduit to alter the content.It is therefore reasonable that smart speaker providers should not be able to alter the content of radio services, including in relation to advertising that forms part of the radio service.This ‘no alteration’ approach forms part of the prominence framework for smart TVs, under which the provider of a regulated television device must take all reasonable steps to ensure that the audiovisual content provided by the regulated television service, including advertising, it not altered or interfered with.The ‘no alteration’ approach is also part of the UK’s radio prominence framework. The UK’s model will provide that a regulated access provider (a ‘regulated radio selection service’) must cause a radio station, and only that station, to play when requested by a user. A provider may not include advertisements prior to playing the service (i.e. ‘pre-rolls’) nor may they insert advertisements into a station’s existing commercial breaks, or by overlaying them onto any other part of a station’s stream.The ‘unrestricted service alteration’ and ‘mutually agreed service alteration’ approaches would run contrary to the above and are not put forward as viable alternatives. |
| 1. Regulated radio service providers
 | The entities that would be afforded prominence under the framework. | A framework that provides the required level of prominence for:* **national, commercial and community broadcasters**
* **other internet radio providers** that cater to Australians and play significant amounts of Australian music and content.
 | **‘National, commercial and community broadcasters’**This proposed approach would support the availability of ‘mainstream’ radio broadcasting services on smart speakers. Commercial, national and community radio broadcasters play an important role in achieving media policy objectives, providing news, local content, emergency information and entertainment content to almost all Australians.There are a range of internet radio providers that contribute to the diversity of radio available to Australian listeners, including in relation to the provision of Australian content. However, they are not required to adhere to particular standards in terms of content provision or community safeguards, nor do they have any obligation to provide Australian content or any particular quantum of Australian music. There is also little to suggest that there is a prominence issue for internet radio services. It is therefore not proposed that the radio prominence framework regulate these services.The ‘national, commercial and community broadcasters’ approach to regulated radio services forms part of the prominence framework for smart TVs, under which a regulated television service includes: a broadcasting service provided by a national, commercial or community television broadcaster; a broadcasting video on demand service provided by a national or commercial broadcaster; or a service specified by the Minister.This approach is also consistent with the UK’s radio prominence framework. Under the UK model, an ‘internet radio service’ (the service that ‘radio selection services’ are required to make available in response to a user request) corresponds to a BBC radio service, or a licensed radio service. |
| 1. Regulated radio services
 | The specific services that are afforded prominence under the framework. | A framework that provides the required level of prominence for:* **online simulcasts of radio broadcasts** provided by regulated radio service providers.
* **all online linear audio services** provided by regulated radio service providers.
* **all linear and on-demand audio services and content** provided by regulated radio service providers (including podcasts).
 | **‘Online simulcasts’**Commercial, national and community radio broadcasters provide a wide range of online services and content, including (although not limited to): online simulcasts of broadcast radio services (such as simultaneous streams of Hit Network stations or ABC News Radio provided over the internet); on-demand ‘catch-up’ content recently broadcast on radio services (such as breakfast and drive shows); and podcasts of particular programs or series (such as SCA’s ‘Hamish & Andy’ or ARN’s ‘The Imperfects’).This is a significant amount of streaming and on-demand content. It would be unreasonable to require the providers of smart speakers to accurately surface all of this content, particularly when it may be ephemeral (available for only a limited time period), and may not be identifiable as being provided by a particular broadcaster.The ‘online simulcasts’ approach to regulated radio services is consistent with the UK’s model for radio prominence. Under the UK model, an online radio service (a ‘relevant internet radio service’) is required to ‘correspond’ with a radio service provided by the BBC or by a licensed broadcaster (a ‘relevant radio service’). To correspond, the relevant internet radio service and the relevant radio service must have the same programs (excluding advertising) and must be provided at the same time (i.e. simulcast). |
| 1. Regulated access providers
 | The entities required to provide prominence to regulated radio service providers. | A framework that applies to:* **voice assistant platforms**: providers of the voice activation software that interprets the user’s voice command and surfaces the radio service on smart speakers.
* **manufacturers**: entities that manufacture smart speakers that are supplied to Australia.
 | **‘Voice assistant platforms’**The availability of audio content on smart speakers is predominately controlled by voice activation software: Google Assistant, Amazon’s Alexa, and Apple’s Siri. Google, Amazon and Apple also dominate the market for smart speaker devices – in Australia and in major overseas markets – and their voice assistants are licensed for use in the majority of other third-party smart speaker devices on the market in Australia (Bose, JBL, Edifier, among others).The framework would require the providers of voice activation software (‘voice assistant platforms’) to adhere to the access obligations for radio services on smart speakers, irrespective of whether the smart speakers are first-party devices (supplied by the provider or the voice assistant platform), or third-party owned (supplied by another party).This approach differs to the prominence framework for smart TVs, which would impose the regulatory obligation for prominence on the manufacturers of smart TVs, rather than the providers of operating systems or other software. This difference in regulatory approach reflects differences in the underlying technology. For smart speakers, access to services and content is almost entirely mediated via voice activation software. For smart televisions, user-driven, voice activation software is a feature, but visual cues (lists, carousels, banners) – where consumers can browse from a range of programs and services – are the predominant means by which users select and access content.The approach of regulating voice assistant platforms is consistent with the UK’s radio prominence framework. Under the UK model, a ‘radio selection service’ is a service which enables listeners to select an ‘internet radio service’ (BBC and licensed radio services) and cause the radio service to play by giving voice commands to a device connected to the internet (commonly known as a ‘smart speaker’). |
| 1. Access pathway
 | The degree to which the framework stipulates how (via what pathway) regulated access providers facilitate access to regulated content services. | A framework that provides for:* **open access pathway**: regulated access providers to have discretion to determine the mechanism by which devices provide access to regulated radio services.
* **nominated access pathway**: regulated access providers to provide access to regulated radio services via the mechanism nominated by a regulated radio service provider.
 | **‘Open access pathway’**The proposed approach would allow regulated access providers (voice assistant platforms) to use a source or pathway of their choice to provide access to regulated radio services, unless a user requested access using a specific source and as long as those services were provided in a manner compliant with the framework.For example, a user request to “Play Triple M Sydney” would result in the stream of the radio service being played. However, the radio prominence framework would not stipulate the source of that stream. As long as the response to the request was accurate (i.e. Triple M Sydney was played consistently and reliably, in a manner reasonable in the circumstances), then the regulated access provider would have met the requirements of the framework. The access provider could seek to use an aggregator service like iHeartRadio, or could directly integrate the radio stream in conjunction with the regulated radio service provider. This would allow access providers to surface content in the most efficient and effective way possible.The alternative approach – a ‘nominated access pathway’ – would impose additional obligations on regulated access providers, requiring them to provide access to the requested radio station via the source (‘pathway’) nominated by the regulated radio service provider. The radio prominence framework would need to include a nomination process for regulated radio service providers to nominate, to each regulated access provider, the access pathway for each radio station, with appropriate time periods for nominations and any changes to nominations. This framework would also provide an exception to using the nominated source where the user of the smart speaker explicitly requested a different source.It is unclear whether a regulated nomination process would result in any material enhancement in prominence for radio services for listeners, given the proposed framework includes a requirement for a radio station to be accurately surfaced (the ‘consistent and reliable access’ level of prominence), and also prevents a regulated access provider from imposing a charge, or otherwise altering the content of, the regulated radio service. For this reason, it is not included in the proposed model.However, the UK’s radio prominence framework will provide for radio stations to nominate their preferred source for surfacing radio stations. Under the UK model, a radio station (a ‘relevant internet radio service’) may request a regulated access provider (a ‘regulated radio selection service’) to operate in a way requested, including to provide access to a station through a preferred route. The regulated radio selection service must make all reasonable efforts to ensure that the service operates as requested. This requirement can be overridden if this is in response to a selection of the user of the regulated radio selection service. |
| 1. Minimum technical standards
 | The degree to which the framework stipulates minimum technical and other operational standards that regulated radio services need to meet to be afforded prominence on regulated access devices. | A framework that includes:* regulated standards: an obligation for regulated radio services to meet technical and other operational requirements as determined by the regulator.
* negotiated standards: an obligation for regulated radio services to meet technical and other operational requirements as determined by the access providers, with the capacity for the regulator to issue guidance and make determinations as necessary.
 | Negotiated standardsThe ‘negotiated standards’ approach would require that regulated radio services be technically capable of integration with a voice activation software if they are to be afforded prominence, but would not seek to regulate the precise standards which regulated radio services have to meet.This reflects the technical complexity involved with service integration, and the rapid changes in technology in this market. It is understood that there are varying technical requirements for different devices and services, which would be challenging for the regulator to determine in advance.This approach forms part of the television prominence framework, under which regulated television devices are required to adhere to minimum prominence requirements for regulated television services that are offered by regulated television service providers. The ACMA may, as required, determine the circumstances in which a regulated television service is, or is not, taken to be offered.The UK’s radio prominence framework does not contain a parallel arrangement in relation to technical standards, but does require Ofcom to issue a code of practice to set out the steps they recommend that regulated access providers (‘regulated radio selection services’) take in order to comply with the requirements of the framework. |

## Potential impacts and timing considerations

### 5.1 The consolidated radio prominence proposal

The elements of the radio prominence proposal – outlined in Table 5 – are consolidated in Table 6. Taken together, this framework would seek to ensure that radio services that provide local content, news and emergency information would be available when Australian audiences ask their voice-assisted smart speakers to play them. In this way, Australians would continue to have equitable access to the radio services they rely on in the digital age.

To achieve this outcome, the proposed framework would address the barriers that may make it difficult for radio broadcasters to be accessed on these devices, now and in the future. Specifically, the model would mitigate the risk that the major providers of voice activation software used on smart speakers – currently Google, Amazon and Apple – leverage their bargaining power on these gateway devices to restrict the availability of Australian radio services or otherwise impose fees or charges for a basic level of access. This proposed approach is closely aligned with the UK’s radio prominence framework, sharing a number of key elements.

* Under both frameworks, the online streams of ‘mainstream’ broadcasting services would be subject to regulation when those services are accessed on smart speakers.
* The level of prominence would be calibrated to ‘consistent and reliable access’ (i.e. accurately responding to voice commands to play a radio station).
* There would be no payment for prominence, or any alteration to the services that radio broadcasters provide.
* Responsibility for adherence to the prominence framework would sit with voice assistant platforms – the providers of voice activation software on smart speakers.

Only in two areas would there be any substantive differences between the two approaches.

* Under the UK model, radio services would have a right to nominate to regulated radio selection services their preferred source for accessing a radio stream on a smart speaker. This wouldn’t be a feature of the radio prominence framework proposed in this paper, for the reasons outlined in Table 5.
* The UK framework won’t seek to explicitly regulate the technical aspects of the online stream provided by a radio station, while the proposed Australian framework would provide the regulator with the capacity to determine matters related to the ‘offer’ of a radio stream (including technical matters), if this proved to be necessary.

The proposed model for radio prominence summarised in Table 5 also shares a number of key features with the television prominence framework included in the Part 9E of the BSA. These points of commonality include:

* the application of the framework to mainstream broadcasting services;
* the ‘no cost’ stipulation for prominence under each framework;
* the restriction on any alterations to services – content and advertising; and
* the ability for the regulator to stipulate what constitutes an offer of an online stream, as required.

Neither framework would seek to promote broadcasting services ahead of, or before, other providers of audio or audiovisual content, but would instead focus on ensuring reasonable access by consumers and a ‘level playing field’ for Australian television and radio broadcasters in terms of the provision of their services on gateway devices.

The key differences between the proposed radio and the current television prominence frameworks relate to the type of prominence afforded to Australian broadcasters. The differing regulatory approaches reflect (and accommodate) the underlying differences between the two technologies.

* Access to services and content on connected TV devices is predominantly by means of visual cues, where the user browses from a range of content presented in different visual layouts, depending on the device. Hence the television prominence framework regulates the position and placement of services on the primary user interface of these devices. The television prominence framework places the regulatory obligation on the device manufacturer, rather than the supplier of the operating system or other software on the device.
* For smart speakers, access to audio content is predominantly driven by voice activation software (voice assistants), where the user needs to be explicit with their request and cannot generally browse a range of service and content offerings. Hence, the proposed radio prominence framework (and the UK framework) seeks to ensure that those requests for services are received and accurately processed. The proposed radio prominence framework would place the regulatory obligation on the providers of voice assistant platforms, as these services are responsible for responding to user requests and playing audio content on smart speakers.

Table 6: Consolidated elements of the proposed radio prominence framework

|  |  |
| --- | --- |
| Key design issue | Proposed approach |
| 1. Level of prominence
 | Consistent and reliable access – the framework would require a regulated access provider (a voice assistant platform) to respond to and play a specific regulated radio service when requested to do so by the user of a smart speaker, where the provision of this level of access is reasonable in the circumstances. |
| 1. Payment for prominence
 | No cost – the framework would require voice assistant platforms to provide the required level of prominence for a regulated radio service (as above) without the imposition of a fee, charge or other form of consideration. |
| 1. Service integrity
 | No alteration – the framework would prohibit voice assistant platforms from altering the content (including advertising or sponsorship) of a regulated radio service when providing prominence for the service. |
| 1. Regulated radio service providers
 | Australian national, commercial and community broadcasters – the framework would provide prominence for ‘mainstream’ Australian radio broadcasters. |
| 1. Regulated radio services
 | Online simulcasts – the framework would apply to the online simulcasts of the broadcasting services provided by mainstream Australians radio broadcasters. |
| 1. Regulated access providers
 | Voice assistant platforms – the prominence obligations would apply to the providers of voice activation software used in smart speakers. |
| 1. Access pathway
 | Open access pathway – a regulated access provider would be able to determine the source or pathway for users to access a regulated radio service, unless the user requests a particular source. |
| 1. Minimum technical standards
 | Negotiated standards – the framework would enable the relevant parties to determine any technical standards for the integration of regulated radio services and voice activation software, with the ACMA to have the capacity to determine ‘offer’ requirements, should this prove to be necessary. |

### 5.2 Potential impacts of the proposed radio prominence framework

The proposed framework would have a range of impacts on industry and consumers. The main affected parties would be voice assistant platforms – currently Google, Amazon and Apple – who would have to comply with the new obligations to provide prominence to the online streams of national, commercial and community broadcasting stations on smart speakers. Conversely, it is these broadcasters who can be expected to benefit from the guarantee of access to the platform (accurate surfacing by voice assistants in response to user requests). Consumers would also benefit from being able to listen to services when they request them from voice assistants operating on smart speakers.

Views are sought on the nature and quantum of these impacts. Interested parties are invited to be as specific and detailed as possible in providing estimates of these impacts, as this will assist the Government’s consideration of the overall proposal for radio prominence and each of the key elements. A number of questions are presented in the following tables to assist submitters in considering these impacts and providing responses.

Potential costs and benefits are described in Tables 7 and 8 respectively. These tables outline a number of potential categories of costs and benefits, the affected parties, and seek specific views on these matters.

Table 7: Potential costs associated with the proposed radio prominence framework

|  |  |  |  |
| --- | --- | --- | --- |
| Potential cost | Description  | Potentially impacted parties | Consultation questions |
| 1. Understanding the framework and managing this in a business context
 | Business planning; systems design; in-house and external legal advice; ongoing management of regulatory compliance. | Voice assistant platformsRadio broadcasters | 1. What resources would be required and / or costs incurred by potentially impacted parties in initially understanding the new framework and implementing new business processes and systems during the ‘phase in period’ (i.e. the 6 to 12 months prior to the commencement of the new legislation)?
2. What resources would be required and / or costs incurred by potentially impacted parties in complying with the framework on an ongoing, annual basis (i.e. after the initial phase in period, once the new framework has commenced)?
 |
| 1. Adapting products and services to adhere to the new requirements
 | The costs of ensuring that voice assistant platforms comply with the framework. | Voice assistant platformsThird-party providers of smart speakers | 1. What technical changes to voice assistants would be required to adhere to the proposed framework?
	1. What would these changes involve?
	2. Could they be implemented via updates to software?
	3. What hardware changes, if any, would be required?
	4. How long would they take to develop and implement?
	5. What resources and / or costs would be involved?
2. Would any increase in the consumption of live radio content as a result of the framework have an effect on the consumption of on-demand audio content?
	1. If so, in what way, and which entities or services would be affected?
3. What impact would the framework have on third-party suppliers of smart speakers that use voice activation software?
4. What impact would the framework have on the range and features of voice assistants and / or smart speakers made available in the Australian market?
 |
| 1. Restriction on levying fees or charges for access or altering services
 | Foregone revenue (or other opportunity costs) arising from the inability to levy fees or alter radio content. | Voice assistant platforms | 1. What charges or fees are currently levied on radio stations by voice assistant platforms, or any related entities in order to facilitate, enable or otherwise support the access to radio services on smart speakers?
2. To what degree do voice assistant platforms or related entities currently generate revenue from in-stream advertising, or advertising before or after a consumer accesses a radio station (i.e. pre- or post-roll advertising)?
3. To what extent do voice assistant platforms or any related entities generate other monetary or non-monetary benefits from radio stations that may be foregone as a result of the implementation of the framework?
 |

Table 8: Potential benefits associated with the proposed radio prominence framework

|  |  |  |  |
| --- | --- | --- | --- |
| Potential benefits | Description  | Potentially impacted parties | Consultation questions |
| 1. Access to radio services
 | The benefits to consumers from being able to reliably access radio stations on smart speakers. | Radio users | 1. To what extent will the framework make it easier, simpler and more convenient for radio listeners to access radio stations?
	1. Would these benefits be realised by particular types of radio listener, based on age, income, location or other demographic factors, or would they be realised uniformly by all radio listeners?
	2. Would the improved user experience be likely to drive future radio listening on voice assistant platforms? If so, to what extent?
 |
| 1. Protecting or gaining incremental listening
 | The financial and other benefits from maintaining or growing the listening base. | Radio stations | 1. Would the framework support the ability of commercial and community radio stations to maintain or grow radio listening?
	1. If there is an expectation of audience growth, by how much would this increase?
	2. Would this enable commercial radio stations to increase advertising rates? What is the expected value of this increase?
	3. Would this enable community radio stations to increase sponsorship revenues? What is the expected value of this increase?
2. To what extent would the framework result in an increase in radio listening for national broadcasters?
	1. Would this increase be expected for all radio services provided by the national broadcasters, or for particular stations?
	2. To what extent would the framework support the capacity of the national broadcasters to fulfil their respective charters?
	3. Would this enable the SBS to increase advertising revenue? What is the expected value of this increase?
 |
| 1. Restriction on levying fees or charges for access or altering services
 | The financial and other benefits from reducing overheads for access to platforms. | Radio stations | 1. What impact would the restriction on levying fees or altering services (including in relation to advertising) have on commercial, national and community broadcasters?
	1. Would this remove or reduce costs currently being incurred by broadcasters, or remove the potential for the imposition of additional costs or alterations to services to be imposed in the future?
	2. Would this cost reduction (or the removal of the potential incurrence of costs in the future) support the sustainability of radio services, or change the type and range of radio services provided to Australian listeners?
	3. Would this benefit all radio broadcasters equally, or would there be differential impacts based on the type of station, location and size?
 |

### 5.3 Application considerations

In addition to the design questions considered in the preceding sections of this paper, there are also questions about the timing and initial extent of the application of the framework. A radio prominence framework will be novel, with no precedent in Australian media law and only the UK implementing a similar regime internationally.

Specifically, consideration will need to be given to the date from which the prominence obligations should apply. Depending on the range and nature of implementation issues, it may be desirable to include an implementation period of 6, 12 or 18 months, following the commencement of the enabling legislation, to allow regulated access providers time to ensure compliance.

A related issue is whether the new prominence obligations should apply to the operation of voice activation software on devices supplied in Australia after the implementation period has elapsed (i.e. 6, 12 or 18 months from the commencement of the relevant legislation), or whether they should apply to voice activation software operating on devices that are already in the Australian market (i.e. devices that have already been purchased by Australian consumers).

In part, this question will turn on whether the radio prominence framework can be implemented by software updates, or whether it would necessitate changes in hardware or chipsets operating in smart speakers. Specific questions in relation to the implementation method were canvassed in Table 7.

Table 9: Application considerations

|  |  |  |
| --- | --- | --- |
| Issue | Description  | Consultation questions  |
| 1. Application period
 | The period from the commencement of the relevant enabling legislation and the application of the obligations. | 1. What is the appropriate application period for the radio prominence framework:
	1. 6 months;
	2. 12 months;
	3. 18 months; or
	4. another period?
 |
| 1. Devices in scope
 | Which smart speakers the radio prominence framework should apply to. | 1. Should the radio prominence framework apply to:
	1. voice assistants operating on devices supplied in Australia after the relevant application period has elapsed;
	2. voice assistants operating on devices that are already supplied in the Australian market (i.e. in Australian homes), provided that the device is capable of software updates; or
	3. voice assistants operating on some other grouping of smart speakers?
 |

1. Telsyte Australian IoT@Home Market Study 2022, as referenced in Australian Competition & Consumer Commission (ACCC) (September 2023) ‘[Digital Platform Services Inquiry, Interim report 7](https://www.accc.gov.au/about-us/publications/serial-publications/digital-platform-services-inquiry-2020-2025/digital-platform-services-inquiry-september-2023-interim-report)’ *Digital platform services inquiry* (accc.gov.au), p 73, accessed 12 June 2024. [↑](#footnote-ref-2)
2. UK Government (2024) [Media Act 2024 (UK)](https://bills.parliament.uk/bills/3505), accessed 12 June 2024. See radio framework – Parts 5 (Regulation of radio services) and 6 (Regulation of radio selection services). [↑](#footnote-ref-3)
3. UK Department of Digital, Culture, Media & Sport (DCMS) (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 7-8, accessed 6 June 2024. [↑](#footnote-ref-4)
4. Commercial Radio and Audio (CRA) (2018), Voice Request Audit. Unpublished. [↑](#footnote-ref-5)
5. Parliament of the Commonwealth of Australia, Senate Standing Committee on Environment and Communications (2024) [Communications Legislation Amendment (Prominence and Anti-siphoning) Bill 2023 [Provisions] – Report April 2024, Parliament of Australia (aph.gov.au)](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/ProminenceAntiSiphoning/Report), accessed 3 June 2024. See Recommendation 2 and discussion at 2.145. [↑](#footnote-ref-6)
6. Social Research Centre (2023), ‘[Television & Media Survey 2023 - summary report’ *Television and Media Survey* (infrastructure.gov.au)](https://www.infrastructure.gov.au/media-communications-arts/television/television-and-media-surveys), p 67, accessed 12 June 2024. [↑](#footnote-ref-7)
7. Park S, McGuinness K, Fisher C, Lee JY, McCallum K, Cai X, Chatskin M, Mardjianto FXLD, & Yao (Pinker) S (2023), [‘Digital News Report: Australia 2023*’ Digital News Report: Australia*](https://www.canberra.edu.au/research/faculty-research-centres/nmrc/digital-news-report-australia), Canberra: News & Media Research Centre, University of Canberra, p 76, accessed 15 May 2024 [↑](#footnote-ref-8)
8. Ibid, p 82. [↑](#footnote-ref-9)
9. Australian Communications and Media Authority (ACMA) (2022), [What audiences want - Audience expectations for content safeguards (acma.gov.au)](https://www.acma.gov.au/publications/2022-06/report/what-audiences-want-audience-expectations-content-safeguards), p 17, accessed 1 May 2024. [↑](#footnote-ref-10)
10. Parliament of the Commonwealth of Australia, Senate Standing Committee on Finance and Public Administration (2020), [Lessons to be learned in relation to the Australian bushfire season 2019-20: Interim report – Parliament of Australia (aph.gov.au)](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Finance_and_Public_Administration/Bushfirerecovery), Chapter 8, accessed 29 May 2024. [↑](#footnote-ref-11)
11. Ibid. [↑](#footnote-ref-12)
12. Health Direct (2024), [Emergency apps and online tools (healthdirect](https://www.healthdirect.gov.au/emergency-apps-and-online-tools).gov.au), accessed April 2024. [↑](#footnote-ref-13)
13. ABC (2024), [Your mobile phone could help save your life. Here's how (abc.net.au/emergency)](https://www.abc.net.au/emergency/how-your-phone-can-keep-you-safe-in-an-emergency/12830330), accessed April 2024. [↑](#footnote-ref-14)
14. Social Research Centre (2023) ‘[Television & Media Survey 2023 – summary report’ *Television and Media Survey* (infrastructure.gov.au)](https://www.infrastructure.gov.au/media-communications-arts/television/television-and-media-surveys), p 69, accessed 5 June 2024. [↑](#footnote-ref-15)
15. Social Research Centre (2023) ‘[Television & Media Survey 2023 – summary report’ *Television and Media Survey* (infrastructure.gov.au)](https://www.infrastructure.gov.au/media-communications-arts/television/television-and-media-surveys), p 71-72, accessed 29 May 2024. [↑](#footnote-ref-16)
16. ACMA (2023), ‘[Communications and media in Australia: How we watch and listen to content November 2023 – Executive summary and key findings](https://www.acma.gov.au/publications/2023-12/report/communications-and-media-australia-how-we-watch-and-listen-content)’, *Communications and Media in Australia* (acma.gov.au), p 7, accessed 16 May 2024. [↑](#footnote-ref-17)
17. Social Research Centre (2023), ‘[Television & Media Survey 2023 – summary report’ *Television and Media Survey* (infrastructure.gov.au)](https://www.infrastructure.gov.au/media-communications-arts/television/television-and-media-surveys), p 53, accessed 29 May 2024. [↑](#footnote-ref-18)
18. ACMA (2023),’[Communications and media in Australia: Trends and developments in viewing and listening 2022–23](https://www.acma.gov.au/publications/2023-12/report/communications-and-media-australia-trends-and-developments-viewing-and-listening-2022-23)’ *Communications and Media in Australia* (acma.gov.au), p 11, accessed 16 May 2024. [↑](#footnote-ref-19)
19. Social Research Centre (2023), ‘[Television & Media Survey 2023 – summary report’ *Television and Media Survey* (infrastructure.gov.au)](https://www.infrastructure.gov.au/media-communications-arts/television/television-and-media-surveys), p 54, accessed 29 May 2024. The figure of 9 per cent is a net from the use of smart speakers to listen to FM Radio, AM Radio, DAB, and Radio via the internet or an app. [↑](#footnote-ref-20)
20. CRA (2022), ‘[GfK Australian Share of Audio 2022’, *Share of Audio* (commercialradio.com.au)](https://www.commercialradio.com.au/Research/Share-of-Audio), accessed 13 May 2024. [↑](#footnote-ref-21)
21. Ibid, p 20. [↑](#footnote-ref-22)
22. Ibid. [↑](#footnote-ref-23)
23. Tolliday, T (23 December 2019), [Creating Voice Skills For Google Assistant And Amazon Alexa](https://www.smashingmagazine.com/2019/12/voice-skills-google-assistant-amazon-alexa/)  (smashingmagazine.com), accessed 26 April 2024. [↑](#footnote-ref-24)
24. ACMA (2023), ‘[Communications and media in Australia: How we watch and listen to content](https://www.acma.gov.au/publications/2023-12/report/communications-and-media-australia-how-we-watch-and-listen-content) November 2023’ *Communications and Media in Australia* (acma.gov.au), Chapter 8, accessed 16 May 2024. [↑](#footnote-ref-25)
25. CRA (2021), [The Smart Audio Report Australia 2021 (commercialradio.com.au)](https://www.commercialradio.com.au/Research/Other-Research-Insights/The-Smart-Audio-Report-Australia/2021), p 4, accessed 26 April 2024; Telsyte Australian IoT@Home Market Study 2022, as referenced in ACCC (September 2023) ‘[Digital Platform Services Inquiry, Interim report 7](https://www.accc.gov.au/about-us/publications/serial-publications/digital-platform-services-inquiry-2020-2025/digital-platform-services-inquiry-september-2023-interim-report)’ *Digital platform services inquiry* (accc.gov.au), p 73, accessed 3 May 2024. [↑](#footnote-ref-26)
26. Statista Consumer Insights (2024), [Smart speaker ownership by brand in Australia as of December 2023](https://www.statista.com/forecasts/1187985/smart-speaker-ownership-by-brand-in-australia) (statista.com). [↑](#footnote-ref-27)
27. Ibid. [↑](#footnote-ref-28)
28. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 9 and 17, accessed 10 May 2024. [↑](#footnote-ref-29)
29. Fortune (2024), [Smart Speaker Market Size, Share & COVID-19 Impact Analysis (fortunebusinessinsights.com)](https://www.fortunebusinessinsights.com/smart-speaker-market-106297). [↑](#footnote-ref-30)
30. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 9, accessed 10 May 2024. [↑](#footnote-ref-31)
31. Telsyte Australian IoT@Home Market Study 2022, as referenced in ACCC (2023) ‘[Digital Platform Services Inquiry, Interim report 7](https://www.accc.gov.au/about-us/publications/serial-publications/digital-platform-services-inquiry-2020-2025/digital-platform-services-inquiry-september-2023-interim-report)’ *Digital platform services inquiry* (accc.gov.au), p 74, accessed 3 May 2024. [↑](#footnote-ref-32)
32. Tristan S, Sharma S, Gonzalez R (2020) Digital Forensic Education, [Alexa/Google Home Forensics](https://www.researchgate.net/publication/334681479_AlexaGoogle_Home_Forensics), p 104, accessed 17 April 2024. [↑](#footnote-ref-33)
33. Telsyte Australian IoT@Home Market Study 2022, as referenced in ACCC (September 2023) ‘[Digital Platform Services Inquiry, Interim report 7](https://www.accc.gov.au/about-us/publications/serial-publications/digital-platform-services-inquiry-2020-2025/digital-platform-services-inquiry-september-2023-interim-report)’ *Digital platform services inquiry* (accc.gov.au), p 75, accessed 3 May 2024. [↑](#footnote-ref-34)
34. Statista Consumer Insights (2023), [Industries & Markets: Consumer electronics in Australia](https://www.statista.com/study/78228/consumer-electronics-in-australia/), p 34, accessed 1 May 2024. [↑](#footnote-ref-35)
35. Laborde S, (2023) [Key Voice Search Statistics [2023 Updated Data] (techreport.com)](https://techreport.com/statistics/voice-search-statistics/), accessed 8 May 2024. [↑](#footnote-ref-36)
36. Telsyte, as referenced by Statista Consumer Insights (2023), [Industries & Markets: Consumer electronics in Australia](https://www.statista.com/study/78228/consumer-electronics-in-australia/), p 8. [↑](#footnote-ref-37)
37. Warren T (2021), [Microsoft shuts down Cortana on iOS and Android (theverge.com)](https://www.theverge.com/2021/4/1/22361687/microsoft-cortana-shut-down-ios-android-mobile-app), accessed 26 April 2024. [↑](#footnote-ref-38)
38. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 10, accessed 10 May 2024. [↑](#footnote-ref-39)
39. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 11, accessed 10 May 2024. [↑](#footnote-ref-40)
40. UK Government (2024) [Media Act 2024](https://bills.parliament.uk/bills/3505), accessed 12 June 2024. [↑](#footnote-ref-41)
41. UK Government (2023), [Draft Media Bill: Government Responses to the Committee’s Twelfth and Thirteenth Reports of Session 2022–23 (committees.parliament.uk)](https://committees.parliament.uk/publications/42125/documents/209447/default/), p 11, accessed 10 May 2024. [↑](#footnote-ref-42)
42. ACMA (November 2023) ‘[Communications and media in Australia: How we watch and listen to content](https://www.acma.gov.au/publications/2023-12/report/communications-and-media-australia-how-we-watch-and-listen-content) November 2023’, *Communications and Media in Australia* (acma.gov.au), chapter 8, accessed 17 May 2024. [↑](#footnote-ref-43)
43. CRA (2021), [The Smart Audio Report Australia 2021 (commercialradio.com.au)](https://www.commercialradio.com.au/RA/media/General/Documents/Research%20Documents/TheSmartAudioReportAU2021.pdf?ext=.pdf), p 4, accessed 5 May 2024; Telsyte Australian IoT@Home Market Study 2022, as referenced in ACCC (September 2023) ‘[Digital Platform Services Inquiry, Interim report 7](https://www.accc.gov.au/about-us/publications/serial-publications/digital-platform-services-inquiry-2020-2025/digital-platform-services-inquiry-september-2023-interim-report)’ *Digital platform services inquiry* (accc.gov.au), p 73, accessed 3 May 2024. [↑](#footnote-ref-44)
44. ACCC (September 2023), [‘Digital platform services inquiry, Interim report 7](https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf)’ *Digital platform services inquiry* (accc.gov.au), p 70, accessed 1 May 2024. [↑](#footnote-ref-45)
45. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 7-8, accessed 1 May 2024. [↑](#footnote-ref-46)
46. ACCC (September 2023), [‘Digital platform services inquiry, Interim report 7](https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf)’ *Digital platform services inquiry* (accc.gov.au), p 130, accessed 1 May 2024. [↑](#footnote-ref-47)
47. Ibid, p 131. [↑](#footnote-ref-48)
48. Ibid. [↑](#footnote-ref-49)
49. ACCC (September 2023), [‘Digital platform services inquiry, Interim report 7](https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf)’ *Digital platform services inquiry* (accc.gov.au), p 132, accessed 10 May 2024. [↑](#footnote-ref-50)
50. European Commission (2022), [Final report – sector inquiry into consumer Internet of Things (europa.eu)](https://competition-policy.ec.europa.eu/document/download/c74fd54d-7cbb-41c5-aad5-0175be7b8a99_en), p 11, accessed 19 April 2024. [↑](#footnote-ref-51)
51. ACCC (September 2023), [‘Digital platform services inquiry, Interim report 7](https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf)’ *Digital platform services inquiry,* (accc.gov.au), p 134, accessed 10 May 2024. [↑](#footnote-ref-52)
52. European Commission (2022), [Sector Inquiry into Consumer Internet of Things, Commission staff working document (europa.eu)](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_402), accessed 14 September 2023, para 444, included in ACCC (September 2023), [‘Digital platform services inquiry, Interim report 7](https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf)’ *Digital platform services inquiry* (accc.gov.au), p 134, accessed 10 May 2024. [↑](#footnote-ref-53)
53. UK Government (2024), [Media Act 2024](https://bills.parliament.uk/bills/3505), accessed 12 June 2024. [↑](#footnote-ref-54)
54. Frontier Economics (2021) [Frontier Economics for Bauer Media Audio: The value exchange between voice assistant platforms and radio broadcasters August 2021 (getdigitalradio.com)](https://getdigitalradio.com/wp-content/uploads/2021/10/Frontier-Economics-for-Bauer-Media-Audio-The-value-exchange-between-voice-assistant-platforms-and-radio-broadcasters-August-2021.pdf), p 5, accessed 8 May 2024. [↑](#footnote-ref-55)
55. Ibid. [↑](#footnote-ref-56)
56. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 12, accessed 19 May 2024. [↑](#footnote-ref-57)
57. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 12, accessed 10 May 2024. [↑](#footnote-ref-58)
58. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 12-13, accessed 10 May 2024. [↑](#footnote-ref-59)
59. Ofcom (2022), [Smart speakers research with the public research report (ofcom.org.uk)](https://www.ofcom.org.uk/__data/assets/pdf_file/0022/249142/Smart-speakers-research.pdf), p 21-25, accessed 13 May 2024. [↑](#footnote-ref-60)
60. Ibid, p 26-27. [↑](#footnote-ref-61)
61. CRA (2018), Voice Request Audit. Unpublished. [↑](#footnote-ref-62)
62. Parliament of the Commonwealth of Australia, Senate Standing Committee on Environment and Communications (2024), [Communications Legislation Amendment (Prominence and Anti-siphoning) Bill 2023 [Provisions]](https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/RB000302/toc_pdf/CommunicationsLegislationAmendment%28ProminenceandAnti-siphoning%29Bill2023%5BProvisions%5D.pdf)-Report April 2024, Parliament of Australia (aph.gov.au), accessed 9 April 2024. [↑](#footnote-ref-63)
63. ACCC (September 2023), [‘Digital platform services inquiry, Interim report 7](https://www.accc.gov.au/system/files/DPB%20-%20DPSI%20-%20September%202023%20Report%20-%20Interim%20Report%207%20-%20Final%2815835612.1%29.pdf)’ *Digital platform services inquiry* (accc.gov.au), p 130, accessed 10 May 2024; European Commission (2022), [Final report – sector inquiry on consumer Internet of Things (europa.eu)](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_402), p 11, accessed 10 May 2024. [↑](#footnote-ref-64)
64. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 10, accessed 16 May 2024. [↑](#footnote-ref-65)
65. UK DCMS (2023), [Impact Assessment - Regulation of radio services across voice assistant platforms [PDF 1,627KB] (assets.publishing.service.gov.uk)](https://assets.publishing.service.gov.uk/media/653f90a6d10f35000d9a6b5f/Radio_over_voice_assistant_platforms_IA_-_Published_Version__2_.pdf), p 7-8, accessed 16 May 2024. [↑](#footnote-ref-66)
66. Frontier Economics (2021), [Frontier Economics for Bauer Media Audio: The value exchange between voice assistant platforms and radio broadcasters August 2021 (getdigitalradio.com)](https://getdigitalradio.com/wp-content/uploads/2021/10/Frontier-Economics-for-Bauer-Media-Audio-The-value-exchange-between-voice-assistant-platforms-and-radio-broadcasters-August-2021.pdf), p 5, accessed 17 May 2024. [↑](#footnote-ref-67)