



CENTRE FOR MEDIA TRANSITION

Media Pluralism
Research Project

University of Sydney
University of Technology Sydney

A New Framework for Measuring Media Diversity in Australia

Consultation Paper, January 2023

**Joint Submission from Centre for Media Transition and Media
Pluralism Research Project to the Australian Communications and
Media Authority**

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About the Centre for Media Transition

The Centre (CMT) was established in 2017 as an applied research unit based at the University of Technology Sydney (UTS). It is an interdisciplinary initiative of the Faculty of Arts and Social Sciences and the Faculty of Law, sitting at the intersection of media, journalism, technology, ethics, regulation and business.

Working with industry, academia, government and others, the CMT aims to understand media transition and digital disruption, with a view to recommending legal reform and other measures that promote the public interest. In addition, the CMT aims to assist news media to adapt for a digital environment, including by identifying potentially sustainable business models, develop suitable ethical and regulatory frameworks for a fast-changing digital ecosystem, foster quality journalism, and develop a diverse media environment that embraces local/regional, international and transnational issues and debate.

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Executive Summary

- We think the framework, with some modifications, will be an effective tool in measuring and tracking levels of media diversity and the health of local news in Australia. A crucial part of its design is its movement beyond availability as the single measure of media diversity.
- For the most part, we support the proposed scope, although some initial work will be needed to ensure that emergent forms of journalism will be recognised. This may involve disaggregation of the single category of 'digital platforms (online)'.
- We support the proposal that international news sources that do not otherwise qualify on account of the presence of an Australian team would only be included if consumer research indicated a particularly high level of popularity, consumption, or reliance among Australians.
- Broadly, we support the design of the framework, although we make some suggestions for amendments, including: expansion of Indicator 2 (Availability of Journalists) beyond local news; the addition of a measure of 'contextual factors'; enhancements to the measuring of viewpoint diversity; and the addition of a 'share of attention measure'.
- We cite a number of recent studies emphasising the importance of enhanced recognition of the role of digital platforms including social media. We think the framework needs to take account of both the impact of platforms on distribution of news content and the nature and effects of automated curation within a digital platform environment. As an example, we think the framework should include metrics for the role and impact of question answering (QA) systems on access to local news and information.
- The Australian Newsroom Mapping Project by the Public Interest Journalism Initiative (PIJI) is a crucial source of data and could form the basis of the local news database and online map that ACMA identifies as one of the three core outputs of the framework. It could also assist in the development of the diversity baseline. PIJI's content sampling work could contribute to the area of News Output. With ACMA's support, the Digital News Report produced by the University of Canberra could address some of the data requirements for the framework.
- An output of the Media Pluralism Research Project was a classifier and dashboard that provide a method of computationally evaluating media pluralism relevant for assessments of multi-platform news ecosystems. Further development of this tool could extend it beyond its existing reliance on a static, historical dataset of articles collected during 2019, enabling it to be used on 'live' content. Further development could also take its content sub-classification function beyond a genre analysis to assist in measuring viewpoint diversity. The tool could be used in establishing a baseline measure of media pluralism and in charting change over time.

Introduction

Thank you for the opportunity to contribute to this consultation. We were pleased to see the ACMA take the next stage in its research and development of a news measurement framework. As we noted in 2020 in a submission to the Senate Inquiry into Media Diversity in Australia, we believe the ACMA framework – in its combination of localism and diversity – has the potential to be world-leading. Although some researchers have, in the past, connected these aspects of media policy,¹ they are more commonly seen as separate issues. For a country like Australia, where diversity is so closely linked to the challenges of providing local content in regional areas, it is no longer feasible to approach them as unrelated policy issues. It is clear that levels of local content need to be considered alongside structural aspects such as who provides that content and whether the provider is part of a larger media group.

Our comments in this submission draw on the recently completed Media Pluralism Research Project, a Discovery Project funded by the Australian Research Council in 2018 with investigators from both the University of Sydney (Tim Dwyer and Jonathan Hutchison) and University of Technology Sydney (Saba Bebawi and Derek Wilding), with Kari Karppinen from the University of Helsinki. A book from the project *Media Pluralism and Online News: The Consequences of Automated Curation for Society*, will be published by Intellect later this year. The project also supported a doctoral scholarship, with the degree of PhD recently conferred by UTS on Tim Koskie for his thesis, *Below the Line: Media Pluralism Through Comments on Public Affairs News Stories*.

Scope of the news measurement framework

Question 1. Do you consider the framework, as outlined in the paper, would be an effective tool in measuring and tracking levels of media diversity in Australia?

Question 2. Do you consider the framework, as outlined in the paper, would be an effective tool in measuring and tracking the health of local news in Australia?

- We think the framework, with some modifications, discussed below, will be an effective tool on both counts. It combines the two topics of diversity and localism by interlinking various sub-categories: within diversity, consumption and source are related measures; within localism, connection and civic journalism are related measures; across the two categories, content diversity is related to civic journalism and source diversity is related to originality, as well as content diversity and originality being related to one another. The indicators and framing questions should assist in measuring the sub-categories, and by extension, the two overarching categories of diversity and localism. In our view, this approach is both innovative and likely to yield an insight into the state of news media in Australia.
- Another reason we support the framework is that it goes beyond measuring *availability* of sources. In embracing other aspects including consumption, the ACMA framework has the capacity to recognise significant sources of news and opinion. It represents a shift away from supply, towards the kind of exposure diversity that has been identified as a crucial factor in a more effective assessment of plurality. In the UK, Ofcom has stressed that availability is only one measure of plurality/diversity; it offers an indication only of the *potential* for diversity of viewpoints. In advice to the Secretary of State, Ofcom described this measure as a reflection of ‘the “shelf space” occupied by titles or news organisations’:

¹ See, for example, Napoli, Philip M. (ed) (2007), *Media Diversity and Localism: Meaning and Metrics*, New York: Routledge.

At the most extreme, adopting a count of the number and range of owners of media enterprises, without taking account of their ability to influence opinion would mean that all news and current affairs providers would be included as contributing to plurality simply by being available, regardless of whether they were used by several million or very few consumers.²

- In Australia, the inherent limitations of a simple count of owners are seen in the 'media diversity' points scheme that underpins the Register of Controlled Media Groups in Part 5 of the *Broadcasting Services Act 1992* (Cth), where a syndicated racing radio station has the same value as a local newspaper.

Question 3. Do you agree with the proposed scope of the news market?

- In its 2020 paper,³ ACMA proposed the scope would extend to professional news sources with an Australian connection and would embrace both hard and soft news and opinion. A 'professional news outlets' would include an outlet that:
 - maintains independence from those it covers
 - demonstrates a commitment to accuracy, transparency and journalistic ethics
 - is devoted primarily to reporting and publishing timely, originally produced news or informed opinion about people, places, issues and events.
- For the most part, we support the proposed scope, but there are three observations we make about this.
 - First, in order to cover the diversity aspects, the framework should serve to identify sources of public affairs content (this term is explained further in our response to question 13 below) or a broadly equivalent concept such as 'core news'. The framework should be expansive enough to include originating sources of such content even if they are not conventional news media businesses, provided the producers are subject to a suitable media standards scheme. This is likely to exclude (as noted in the Consultation Paper) personal blogs, the work of advocacy groups, and, as ACMA observed in the 2020 paper, sources that are primarily dedicated to entertainment, specialised industry or trade publications, and news stories that are directly produced or distributed by government bodies, including local councils. But it may embrace some forms of online journalism (eg some YouTube channels) that would not conventionally be regarded as professional news sources. Some initial work will be needed on the criteria used to bring sources within the scope of the framework to ensure that they can be applied both to established and emerging sources of journalism.
 - Second, sources of local information that are highly valued by a community might not fall within the criteria described above. Our preferred approach would be for the framework to at least identify all valued sources, even if they do not provide public affairs content. As a matter of policy, some funding or other support programs might not apply to non-public affairs content, but that is a separate matter from mapping significant sources of local information.
 - Third, the representation of categories of news and opinion on pp 22-23 of the 2020 ACMA paper could be amended so that the category of 'digital platforms (online)' is disaggregated. This category currently features news aggregators and the social media sites of existing news producers, but it is

² Ofcom (2012), *Measuring Media Plurality Ofcom's Advice to the Secretary of State for Culture, Olympics, Media and Sport*, 19 June, Ofcom, London. London: Ofcom. <https://www.ofcom.org.uk/consultations-and-statements/category-1/measuring-plurality>, 19.

³ ACMA (2020), *News in Australia: Diversity and Localism – News Measurement Framework*. <https://www.acma.gov.au/publications/2020-12/report/news-australia-diversity-and-localism>. See p.23.

unclear whether it also accommodates original sources of journalism that do not operate on traditional platforms or even via news websites. In his doctoral research on what he characterises as ‘platform journalism’, Chris Hall is currently examining sources such as Friendlyjordies which publish via YouTube. Hall’s contention is that while not all of this content is journalism, some of it is.⁴

- We support the proposal that international news sources that do not otherwise qualify on account of the presence of an Australian team would only be included ‘if consumer research indicated a particularly high level of popularity, consumption, or reliance among Australians’ (p.24).
- We support ACMA’s proposal to change the geographic unit used to assess local media from radio licence areas to local government areas. Combining geographic sample from all local news sources in twenty localities should enable it to compare ‘geotypes’.

Question 4. Do you agree with the proposed key measures of diversity and localism?

- Broadly, we support the design of the framework, although we make some suggestions in our responses to Q5 and Q6 below for amendments.
- In particular, we support the development of a measure such as Ofcom’s ‘share of references’ (which ACMA includes in its methodology for Indicator #7 Consumption) or its more recent proposal for ‘share of attention’. Share of references, as a measure of consumption, combines the elements of use and frequency. In the Trinity Mirror merger assessment (where Ofcom combined the shares for the separate sources subject to the transaction), this form of analysis was used to show that the print sources subject to the transaction would have a combined *share of references* of 3 per cent (compared to 42 per cent for the BBC) even though they had a combined *reach* of 10 per cent (compared to 77 per cent for the BBC).⁵
- That said, we note there has been some criticism from researchers on the limitations of the share of references measure. Stephen Barnett forcefully criticizes this methodology which he notes resulted in the conclusion in 2013 that in overall group of news sources the BBC had a 44 per cent share of references, while the News Corp newspapers had 4 per cent.⁶ Among other points raised, Barnett notes the campaigning nature of the newspapers and a tendency towards a more balanced and detached tone in BBC news reports. He concludes: ‘the power to exercise [...] passion and thus to influence hearts and minds is missing from [Ofcom’s] purely consumption-based and perception-based calculation based on responses to consumer surveys’ (54).
- Ofcom has itself recognised some limitations with share of references. In its recent discussion document on how to account for online news, Ofcom raised the idea of a new measure of ‘**share of attention**’ which it said might provide a more accurate guide to the potential influence of a news source.⁷
- We also note the importance of a measure addressing impact (ACMA’s Indicator #8. Impact). Impact is designed to extend the measure of consumption and allows for some insight into the influence of a media source. Ofcom acknowledges that influence and impact are difficult concepts to measure and that certain proxy

⁴ See: Chris Hall (2022), ‘Friendlyjordies Leading the Way for New Public Interest Journalism’, *Independent Australia* 7 September 2022. <https://independentaustralia.net/business/business-display/friendlyjordies-leading-the-way-for-public-interest-journalism.16743>

⁵ Ofcom (2018), *Public Interest Test for the Acquisition by Trinity Mirror Plc of the Publishing Assets of Northern and Shell Media Group Limited: Ofcom’s Advice to the Secretary of State*, Ofcom, 31 May, 26–27.

<https://www.gov.uk/government/news/statement-merger-between-trinity-mirror-plc-and-northern-shells-publishing-assets>.

⁶ Steven Barnett (2015), ‘Plurality and Public Service Broadcasting: Why and how PSBs deserve protection’, in S. Barnett and J. Townend (eds), *Media Power and Plurality: From Hyperlocal to High-Level Policy*, London: Palgrave Macmillan, 53.

⁷ Ofcom (2022), *Media Plurality and Online News*, Discussion Document, Ofcom, 16 November, 40-41. <https://www.ofcom.org.uk/research-and-data/multi-sector-research/media-plurality>.

measures should be used to gauge them. Ofcom uses ‘personal importance’ as a principal measure, complemented with ‘perceived impartiality’, ‘reliability’, ‘trust’ and ‘the extent to which sources help make up their mind about the news’. In the Sky/21C Fox matter,⁸ Ofcom used its data to conclude:

‘the evidence suggests that Sky News is held in similar regard to the public service broadcasters in terms of importance, trustworthiness and impartiality. We may therefore be more concerned about a transaction involving Sky News than we would be were a less trusted news provider involved.’

Question 5. Would you recommend any additions or changes to the proposed framework and/or its underlying key indicators?

News Infrastructure

- We question the proposal to limit the scope of Indicator #2 Availability of Journalists to local news. We appreciate ACMA’s reasons for emphasising the importance of local sources, but we think the mapping of journalists should extend to national sources such as news.com.au and *The Australian Financial Review*. These sources are important for a range of reasons including their reach and their influence. Where journalists are working across newsrooms or across outlets within the one newsroom, media businesses could be asked to provide an estimate of the FTE allocation to avoid double-counting.
- We recommend that ACMA include a measure of ‘contextual factors’ within the framework. This could be a fourth indicator under News Infrastructure, or it could sit as a fourth top level indicator. It would include aspects such as governance models, internal plurality, membership of an independent standards scheme, and the potential power or editorial control exercised by owners, proprietors or senior executives within news organisations. Ofcom argues that, ‘The importance of contextual factors arises from the fact that the operating environment can differ between news sources and news organisations’.⁹ To this end, while quantitative metrics are an important part of assessing plurality, ‘a purely mechanistic approach may fail to appreciate these differences between news organisations. In the Australian context – where recent legislative and policy initiatives have placed too much reliance on the existence of internal ethical standards – membership of an independent news standards scheme that includes independent complaints handling (as one aspect of contextual factors) has enhanced value.
- The Sky/21C Fox matter in the UK illustrates the value of considering contextual factors. After conducting its assessment of the availability, consumption and impact elements, and before considering contextual factors, Ofcom examined the aspect of ‘preventing any one media owner or voice having too much influence over public opinion and the political agenda’ (78). It considered the potential for influence by individuals within the media group following the proposed transaction. Ofcom concluded that there was a risk that the editorial stance of Sky News could be made to align with other news sources in the combined group ‘through the selection and omission of stories or through the choice of commentators invited on to Sky News’ (87). In its view, there were aspects of internal plurality that could mitigate this level of influence. These included the impartiality rules in the UK Broadcasting Code (an instrument developed by Ofcom, unlike the Australian co-regulatory codes of practice), the likely adverse reaction of audiences to any interference, and

⁸ Ofcom (2017), *Public Interest Test for the Proposed Acquisition of Sky plc by 21st Century Fox, Inc: Ofcom’s Report to the Secretary of State*, Ofcom, 20 June, 70. <https://www.ofcom.org.uk/consultations-and-statements/category-3/public-interest-test-sky-fox>.

⁹ Ofcom (2015), *Measurement Framework for Media Plurality: Ofcom’s advice to the Secretary of State for Culture, Media and Sport*, Statement, Ofcom, 5 November, 13. <https://www.ofcom.org.uk/consultations-and-statements/category-1/media-plurality-framework>.

a culture of editorial independence at Sky. Yet, overall, Ofcom argued that these were not sufficient to address its concerns about the potential for influence.

News Output

- We think there could be enhancements on the measuring of viewpoint diversity. The 2020 ACMA paper suggests that ‘a sample of news content could be assessed for both originality and the range and types of topics that are reported on’ (30). It suggests the geographic sample from twenty localities could be classified and analysed according to criteria such as hard or soft news, originality, referenced or quoted sources, and whether it relates to the local area. A limitation in the approach, however, is that ‘viewpoint’ diversity is represented by the number of quoted sources, without any further analysis of the content (eg, political coverage). The paper recognises that there may be some possible stakeholder concerns with the regulator assessing news content, although it also makes the point that it could commission work, citing Ofcom’s commissioning of research from Cardiff University as an example. We think that at least some sampling of viewpoint diversity is an important component of a framework for measuring media diversity more generally. The classification tool we have developed (see response to Q13 below) could be adapted to reduce the subjectivity that has characterised some past attempts to measure viewpoint diversity.

News Engagement

- We recommend that ACMA follow Ofcom’s lead and consider the development of a ‘share of attention’ measure (see above).

Question 6. Do you have views on whether the framework adequately considers the impact of social media and other digital platforms on media diversity, or if new or alternative measurement approaches are required

- The framework needs to take account of (at least) two aspects of the role of digital platforms. Firstly, it should take account of the impact of platforms on distribution of news content. This is an aspect of supply (eg, 1. Availability of Sources or a separate indicator for Delivery/Distribution, as part of News Infrastructure) and of consumption (eg, 7. Consumption, under News Engagement). Secondly, it needs to take account of the nature and effects of automated curation within a digital platform environment – something that does not neatly fit into any of the three ACMA categories. We think ACMA should have access to data on the significance of automated curation and digital platform delivery. ACMA could then investigate whether the effect of specific recommender systems is to expose users only to information within their existing expectations or whether they achieve a greater level of exposure. While this could be an aspect of Contextual Factors (discussed above), it would be preferable for it to be a measure in its own right.
- International research clearly suggests that impacts of algorithmic curation on how news articles surfaced and are prioritised is an area which needs to be much better understood and measured. Methods for data collection are urgently needed in this area.
- In the UK, Schlosberg and Freedman have argued that Ofcom’s approach to platforms is deficient in that it disguises the actual sources of news content.¹⁰ They give the example of a user who obtains news from the BBC website and the BBC’s Facebook page: in order to include Facebook as a distribution source, Ofcom’s approach effectively double counts the BBC as a content source. The effect is that there appears to be more plurality than really exists. On the other hand, if the user obtains news from a variety of content sources via Facebook, Ofcom’s approach will under represent the level of plurality because it will identify only one source –

¹⁰ Justin Schlosberg and Des Freedman (2020), ‘Opening the Gates: Plurality regulation and the public interest’, *Journal of Digital Media & Policy*, 11:2, pp. 115–32.

Facebook Schlosberg and Freedman (121) note that this limitation in the Ofcom model became apparent during the assessment of the Sky/21C Fox transaction by the Competition and Markets Authority in 2018, with the result that the CMA reallocated some intermediary shares (in the share of references measure) to conventional news sources. The authors argue that while platforms such as Facebook and Google are important gateways to news, they should not be counted as news sources in their own right.

- In the EU, the recent *Study on Media Pluralism and Diversity Online* argues media pluralism needs to be adapted to the online media context to better recognise exposure diversity and the role of general interest content.¹¹ It is noted in the report that the lack of comprehensive data sources on EU media markets is an important obstacle to a better understanding of the EU media landscape. The report focused on (i) the prominence and discoverability of general interest content and services, and on (ii) market plurality and the concentration of economic resources. The report notes (165):

A key part of this background research work should be focused on investigating the impacts that current content prioritisation and curation measures have, firstly, on media markets more generally; secondly, on national and local media content providers (including AVM services and news services); and, thirdly, on audiences' access and consumption of content.

- It also observes:

Data and evidence are, indeed, in the hands of technology manufacturers, platforms organisations and AVM services, and it is therefore pivotal to conduct collaborative research projects with these industry actors, complemented by independent users' experiments and audience studies.

- Similarly, Ofcom notes:

Our preliminary view is that there may be a case for new remedies – including tools to provide greater transparency over the choices intermediaries make and to give people more choice about the news...¹²

- Ofcom also says (48):

Greater transparency about how online intermediaries deliver news content and the consumption habits of their users would help to foster greater understanding of the role they play in the news ecosystem. For users, transparency may help them to make more informed choices about where they get their news. For publishers, it will provide insight into how platforms' systems affect the visibility and accessibility of their content.

- Ofcom notes different forms of how this data could become available: through reporting requirements to the regulator (eg, as required by the DSA for recommender systems) and the Council of Europe provides for guidance on reporting requirements for online intermediaries' curation and selection processes.
- Therefore, it can be seen that a number of developments in various jurisdictions in the EU and UK have advanced the position for the increased need for algorithmic auditing within the automated news space. In that regard, the Digital Regulation

¹¹ European Commission (2022), *Study on Media Pluralism and Diversity Online*, May. <https://op.europa.eu/en/publication-detail/-/publication/475bacb6-34a2-11ed-8b77-01aa75ed71a1/language-en/format-PDF/source-266738523>

¹² Ofcom (2022), *Media Plurality and Online News*, Discussion Document, *Ofcom*, 16 November, 2. <https://www.ofcom.org.uk/research-and-data/multi-sector-research/media-plurality>.

Cooperation Forum (2022a; 2022b) in the United Kingdom is pursuing this problem in multi-disciplinary teams and across regulatory bodies.¹³

- In a very recent report of the Forum on Information and Democracy, it was recommended that:
 - Further research is required to understand the impacts of platforms and recommender systems on how audience self-selection, consciously or unconsciously, influences the news and information they consume. Independent researchers should be granted reasonable access to platform data so this research can be conducted in a safe but rigorous manner.¹⁴
- The report's authors make several important recommendations to states in relation to transparency and accountability of platforms. 'Supervisory authorities should build capacity to be able to analyse and understand the complex technical systems and algorithms that are being deployed by platforms'. They also recommend (41) they:
 - Develop adequate accountability frameworks, including empowering supervisory authorities with powers of inspection so that platforms can be required to hand over the data necessary to conduct a comprehensive independent inspection into their activities.
- They make the following recommendations in relation to possible platform initiatives (74):
 - 'Very Large Online Platforms and/or the developers of recommender systems should evaluate existing professional standards and criteria for defining public interest news media, and might consider increasing the visibility of such sources through their recommender systems, reducing in turn the circulation and amplification of dis- and misinformation.
 - Recommender systems do not need to offer news. However, if a system does curate news, it should elevate acts of journalism from sources that respect professional norms and ethics.
 - Very Large Online Platforms should give priority and prominence to matters of vital public interest, in the same way that legacy media were required to broadcast public service announcements. This must not be imposed as a mandate to prioritize government information.'
- Finally, we think the framework should include metrics for the role and impact of question answering (QA) systems on access to local news and information. QA systems are now popular and ubiquitous: they are a common feature of chatbots (like Chat GPT), virtual and smart assistants (like Alexa, Siri and Google Assistant) onboard most smart phones, PCs and smart speakers, as the sale of these devices continues to rise across the globe. QA features enable users to ask informational questions of our devices like 'Who won the NSW election?' and issue commands such as 'Give me the latest news'. Australians are increasingly using QA systems to access news and information. In a 2021 Edison Research report it was estimated that 42% of Australians use a voice assistant, 53% have used their smart speaker to ask answer to general questions and 41% have asked their smart speaker about

¹³ DRCF (2022), 'Auditing Algorithms: The existing landscape, the role of regulators and future outlook', 28 April, <https://www.gov.uk/government/publications/findings-from-the-drcf-algorithmic-processing-workstream-spring-2022/auditing-algorithms-the-existing-landscape-role-of-regulators-and-future-outlook>. DRCF (2022), 'The Benefits and Harms of Algorithms: A shared perspective from the four digital regulators', 28 April, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1071221/DRCF_-_Algorithmic_Harms_and_Benefits_Paper.pdf.

¹⁴ Forum on Information and Democracy (2023), *Pluralism of News and Information in Curation and Indexing Algorithms*, February. See p.11, 'Key Recommendations'. <https://informationdemocracy.org/2023/02/21/breaking-the-filter-bubbles-recommendations-from-the-forum-on-information-and-democracy-to-promote-pluralism-online/>

the news.¹⁵ Recent research has started to explore how QA systems respond to questions about Australian individuals finding significant gaps in their ability to respond to local queries.¹⁶ A Reuters Institute for the Study of Journalism report indicated that news provision on smart speakers ‘will be characterised by heavy winner-takes-all dynamics because of platform defaults’ and ‘the limitations of voice as output’.¹⁷ Current problems in citation or acknowledgement of the source of news (or the inability of users to recall the source of news) also has significant implications for Australians’ access to diverse news sources. It is therefore vital to assess the increasing role of such devices in delivering local news and information and the extent to which it offers opportunities for diverse news and information content necessary for informed public participation.

Existing data and research

Question 7: Is there any additional third-party research or data that could be relevant to help inform the final design and/or implementation of the ACMA’s news measurement framework?

- The Australian Newsroom Mapping Project by the Public Interest Journalism Initiative (PIJI) is a crucial source of data and could form the basis of the local news database and online map that ACMA identified in the 2020 paper as one of the three core outputs of the framework. It could also assist in the development of the diversity baseline. This work could contribute to the indicators that are part of News Infrastructure. PIJI’s News Sampling project offers a methodology that, if scaled up, could meet some of the indicators for News Output.¹⁸
- Although some data are available from existing sources, there is no comprehensive Australian source as there is with Ofcom in the UK. Roy Morgan produced a useful ‘cross-platform audience’ report (a four-week estimate of Australians who have read or accessed individual newspaper content via print, web, app or Apple News) for some publications. The February 2021 report showed that *The Sydney Morning Herald* had the largest cross-platform audience.¹⁹ The reach measure is also to some extent available in the annual reports included in the Digital News Report published by the University of Canberra,²⁰ but ACMA will need to supplement this work for the purposes of measuring diversity as opposed to news consumption in general. The 2021 report includes a useful set of two tables showing ‘offline news brands accessed’ and ‘online news brands accessed’, recording access in the previous week at a national level.²¹ ACMA could support the extension of this work with an indication of importance via a measure of time spent. Similarly, the DNR’s results showing the growth in social media as a main source of news (53) and which social media platforms are used for news (63) could be extended for further interrogation as a measure of diversity. Other aspects of this work, such as the results for modes of interaction with news (66), political orientation and news use (Chapter 8), and attitudes towards impartiality in news (Chapter 2) demonstrate that there is already a rich source of consumption data in Australia that could be used as the platform for the development of Ofcom-style metrics.

¹⁵ Edison Research (2021), *The Smart Audio Report 2021*, 13 July. <https://www.edisonresearch.com/the-smart-audio-report-australia-2021/>

¹⁶ Heather Ford, Simon Knight & Simon Chambers (2023), Question Machines (website), <https://www.questionmachines.net/about/>.

¹⁷ Nic Newman with Richard Fletcher, Antonis Kalogeropoulos, David A. L. Levy and Rasmus Kleis Nielsen (2018), Reuters Institute Digital News Report 2018, <https://reutersinstitute.politics.ox.ac.uk/our-research/digital-news-report-2018>.

¹⁸ See <https://piji.com.au/category/australian-newsroom-mapping-project/>

¹⁹ Roy Morgan (2021), ‘New Roy Morgan Cross-platform Audience Results Show 2020 was a Year of Growth for Australia’s Leading Mastheads’, Roy Morgan, 12 February, <http://www.roymorgan.com/findings/8624-roy-morgan-cross-platform-audiences-december-2020-202102120412>.

²⁰ See <https://www.canberra.edu.au/research/faculty-research-centres/nmrc/digital-news-report-australia-2022>.

²¹ Sora Park, Caroline Fisher, Kieran McGuinness, Jee Young Lee, and Kerry McCallum (2021), *Digital News Report: Australia 2021*, 23 June, News & Media Research Centre, University of Canberra, 55. <https://apo.org.au/node/312650>.

Question 8: Should the ACMA seek to incorporate and build on existing third-party data when implementing its news measurement framework?

- Yes, we think that the headway made by PIJI in particular should be acknowledged and further supported in implementation of the framework.

Question 9: Are there any restrictions or barriers to the acquisition, sharing or use of proposed third-party research or data that we should be aware of?

- We are not able to comment on this.

Further measurement activities

Question 10: What are the most significant outstanding data gaps, and how should these be prioritised?

- In the 2020 paper, ACMA identified three distinct outputs: a news diversity baseline, a local news assessment, and a local news database and online map. We think these all remain important activities although, as discussed above, considerable work has now been undertaken by PIJI on the third. In our view, it would be sensible for ACMA to support the continuation of PIJI's work while itself prioritising the news diversity baseline.
- We think the development of a metric for evaluating the role and impact of algorithmic curation in online intermediaries (as noted above) should be a priority.

Question 11: Do you have views on potential pilot projects that the ACMA could undertake in 2023? What should be the ACMA's ongoing role in relation to these news measurement activities?

- We think the question of which components should be pursued as pilots is better considered once the threshold aspects of framework design are decided.

Question 12: Are there opportunities for the ACMA to collaborate with research organisations to help implement the news measurement framework?

- There is a clear case for working with PIJI on its newsroom mapping and sampling work. The *Digital News Report* produced by the University of Canberra is also a crucial source of data that ACMA could support. In our response to Q13 below, we explain how our own work on measuring public affairs content could contribute. We also agree with the statement in the 2020 paper that certain work, for example the study of viewpoint diversity, might be better undertaken by researchers independent of government.

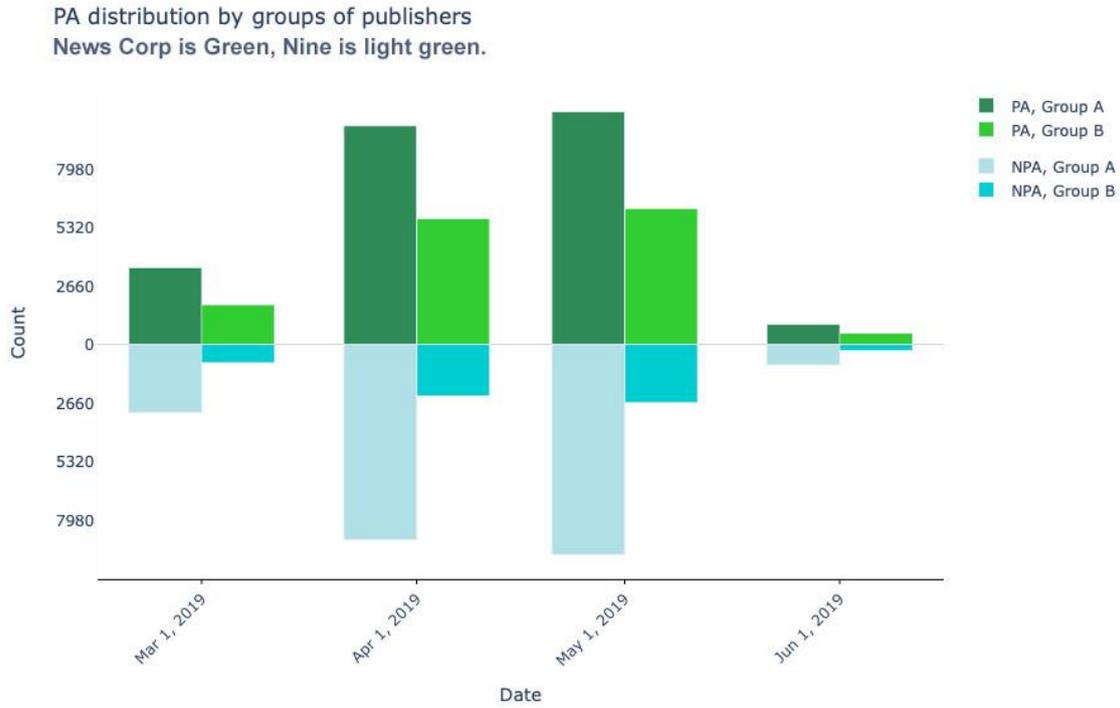
Question 13: Are there any current or emerging technologies that could be considered by the ACMA to assist in content analysis or to help implement other aspects of the news measurement framework?

- One of the key aims of the Media Pluralism Research Project was to discover methods of computationally evaluating media pluralism that are relevant for assessments of multi-platform news ecosystems. The concept of 'public affairs content' (which we explain in the book) allows us to separate out and identify the categories of content that contributes to media pluralism. We define public affairs (relative to non-public affairs) in the following way:
 - Public affairs reporting conveys timely, factual and opinion-based information about events and issues in government, politics, business and public administration. This will include education, health, science and other matters that have broad social significance. Examples are items that cover contentious public debates on climate change, immigration and land use.

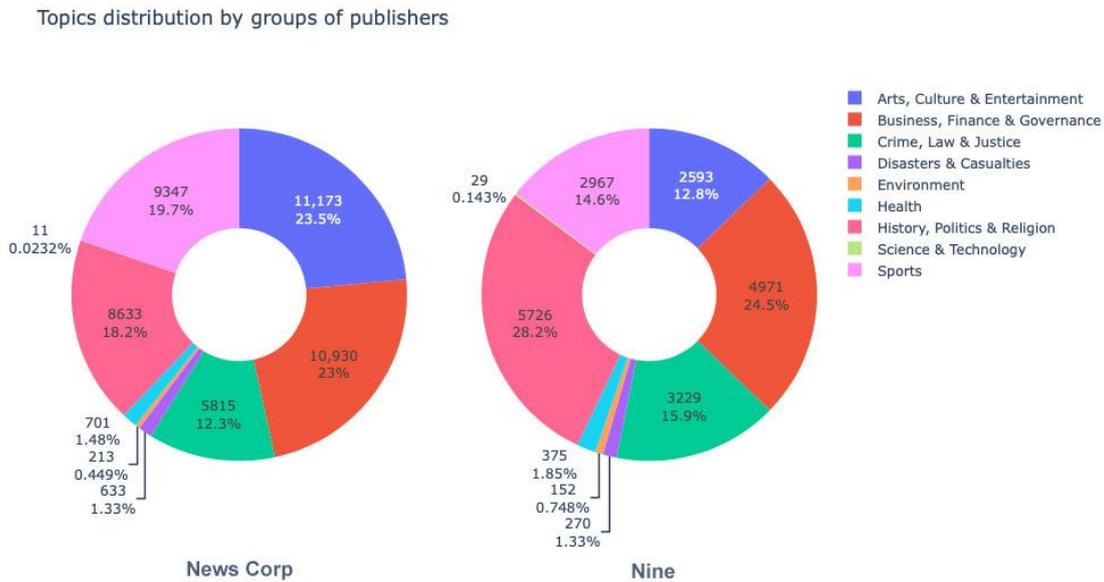
- Non-public affairs reporting conveys timely, factual and opinion-based information about topics of entertainment, art and culture, leisure and lifestyle. This will include sport, well-being, fashion and music. A sports article that just gives sports results or commentary, for example, will be non-public affairs, unless it has a public affairs angle such as government funding or health concerns.
- Our main dataset was the scrape of the homepages of the top twenty Australian news sources as identified by Roy Morgan Single Source News data.²² The timeframe was across three months in 2019, and the Australian Federal election was underway. We used four cross sections of the data: six-hourly, daily, weekly and monthly. The tool we developed classifies the content into public affairs and non-public affairs, and provides the proportion of the total number of articles that are considered public affairs for each publication. To analyse the data the Sydney Informatic Hub (SIH) data scientists in consultation with project investigators built a basic text classifier for Public Affairs (PA) versus Non-Public Affairs (NPA) classification of media articles. The project made iterative ‘machine learnt’ improvements on previous project classifiers in terms of robustness of a PA/NPA classifier to changes in time of publication.
- The Media Pluralism Project Dashboard represents those top twenty online media outlets, and then groups them together to highlight the media ownership of these outlets, for example ‘Nine Entertainment’ or ‘Born Digitals’. This enables the analyst to select a particular aspect of the media market based on the purpose of the research. The data group for News Corp, for example, included data from adelaidenow.com.au, couriermail.com.au, dailytelegraph.com.au, heraldsun.com.au, news.com.au and theaustralian.com.au. The data group for Nine Entertainment included data from 9news.com.au, afr.com, smh.com.au and theage.com.au. The timeframe selected was across the three months of data capture, which was the entire PA/NPA dataset.
- The first parse of these data enabled us to determine the PA/NPA distribution of the two media groups, as represented by Figure 1 below, where Group A is News Corp and Group B is Nine Entertainment, noting that the former includes six ‘mastheads’ while the latter only includes four.
- From Figure 1, we can determine that most of the media publication occurred within April and May, which was a critical moment in the Australian Federal election. Despite different publication rates ($n \cong 2600$ article per month), we noted that News Corp published just as much NPA, if not more, than it did PA. In contrast, Nine Entertainment published significantly more PA content than NPA content. (We should note here that different results would be returned if, within these groups, the more ‘tabloid’ mastheads in each were compared to the more ‘broadsheet’ mastheads.)
- In terms of the topic analysis comparison between these two media groups, it is possible to then drill into the PA/NPA content to understand the sort of content that these two media organizations publish. Figure 2 below is the topic distribution graph of the two media groups.

²² Roy Morgan (2018), ‘It’s Official: Most Australians now visit news or newspaper websites’, Press Release, 24 May 2018, <http://www.roymorgan.com/findings/7595-top-20-news-websites-march-2018-201805240521>.

○ Figure 1: PA distribution by groups of publishers



○ Figure 2: Topic distribution by groups of publishers.



- The top topics News Corp was concerned with during this period are: Arts, Culture & Entertainment; Business, Finance & Governance; Sports; and History, Politics & Religion. Nine Entertainment was similarly interested in these areas, however, it had a greater interest in History, Politics & Religion and less of an interest in Arts, Culture & Entertainment.

- In a sense, this research task took us to 'proof of concept' stage for computationally evaluating media diversity. Currently, it relies on a static, historical dataset of article collected during 2019. Further investment is needed to update it so that analysis can be based on current ('live') content, and to take the sub-classification beyond a genre analysis. Ultimately, we expect the tool to be able to provide an analysis of range of viewpoints. Such a tool could be used to establish a baseline measure of media pluralism and to chart change over time.