Constituting Australia's International Wireless Service: 1901-1922

Ricky Charles Umback

Declaration

I hereby declare that this thesis is comprised of my own original work, and that due acknowledgement has been made in the text to all other material used.

Rick Umback

19th December 2016

Acknowledgements

During my long enrolment in the Ph.D. programme there were innumerable times in which I thought this project would never be completed. Without the support of the following people, it is certain that it never would have been.

Above all, I must offer heartfelt thanks to Dr Maria Maley, under whose supervision the thesis was completed. The study is much stronger thanks to her considered feedback, and it has been a great pleasure to work under her supervision. She has also been a constant source of encouragement and good cheer throughout our time working together.

I must also thank Dr Rick Kuhn, who had been supervising me until his retirement. His feedback on drafts was always valuable, and although the emphasis of the study has changed considerably since his involvement, he deserves credit for helping me to shape the project in its early stages. Thanks also to Professor John Warhurst, under whose supervision I was for a brief period at the beginning of the programme, and who started my exploration of early twentieth century Australian history on the right course.

I would also like to thank the two other members of my supervisory panel – Dr Douglas Craig and Dr Jeremy Shearmur – for reading drafts and offering helpful comments. Dr Kim Huynh and Dr William Coleman were also kind enough to read a couple of draft chapters, despite not being on my supervisory panel. All were sources of useful feedback and encouragement.

Thanks also to those under whom I had the pleasure of teaching while at the ANU: Dr Wayne Errington, Dr Rick Kuhn, Dr David West, Dr Alastair Greig, and Professor Larry Saha.

Indispensable thanks are due to Mrs Sue Connor, and Dr Ray Burn, for their ready support over the last three years.

Abstract

This study is focused on the origins of the 1922 agreement between the Commonwealth government and Amalgamated Wireless (Australasia) to establish a wireless communications service between Australia and Britain. This agreement, which saw a partnership between the government and Australia's principal wireless firm, represented a dramatic departure from the preceding history of Australian communications, which had hitherto been organised around the principle of government monopoly. The thesis explores the causes of this paradigmatic shift in policy through an analysis of wireless' history in Australia from its origins to the enactment of the 1922 agreement. It is principally based on analysis of primary documents from the collections of the Postmaster-General's, Prime Minister's, and Navy departments held by the National Archives of Australia.

The thesis finds that the 1922 agreement reflected the complex interaction of large, underlying structural forces and small, immediate factors. In relation to the former category, there were strong and constant international influences on domestic policymaking, related to the geopolitical dimensions of wireless and Australia's place in the British Empire. The 1922 agreement also bore the indelible imprint of the Great War. One wartime development was the power accumulated by Prime Minister Hughes during the conflict, who became the leading advocate of the agreement within the government. Another was the economic disruption unleashed by the conflict, which spurred a rise in economic nationalism and efforts to promote the development of industries of strategic significance within Australia. In addition to its consideration of structural influences, the thesis uses Multiple Streams Analysis to examine the process through which the agreement became enacted as policy. Multiple Streams Analysis is a model of policymaking which shows how the actions of individuals and groups, political conditions, and timing combine to produce policy outcomes.

Overall, the thesis argues that major shifts in policy cannot be solely attributed to the actions of interested groups or other powerful actors, and that it is necessary to situate those actions within a dynamic process of policymaking that is given shape by a wider context, and in which other factors such as framing and timing are pivotal to the outcome. It also demonstrates the value of policymaking theory, such as Multiple Streams Analysis, to understanding major historical policy decisions.

Table of Contents

Abbreviations

AWA – Amalgamated Wireless (Australasia)

MSA – Multiple Streams Analysis

RAN – Royal Australian Navy

RANRS – Royal Australian Navy Radio Service

Key Figures

John Graeme Balsillie – Head of the Wireless Telegraphy Branch of the Postmaster-General's Department: 1911-1915

Frank Brennan – Labor Parliamentarian: 1911-1931

Stanley Bruce – Treasurer: 1921-1923, Prime Minister: 1923-1929

Matthew Charlton – Labor Leader: 1921-1928

Joseph Cook – Prime Minister: 1913-1914, Navy Minister: 1917-1920

Frank Cresswell – Head of the Royal Australian Navy Radio Service: 1915-1920

Alfred Deakin – Prime Minister: 1905-1908, 1909-1910

Hugh Denison – AWA Managing Director: 1913-1917

Andrew Fisher – Prime Minister: 1908-1909, 1910-1913, 1914-1915

Ernest Fisk – AWA Managing Director: 1917-1944

Charles Frazer – Postmaster-General: 1911-1913

Frederick Golding – Chief Electrical Engineer of the Postmaster-General's Department: 1917-1923

John Hesketh – Chief Electrical Engineer of the Postmaster-General's Department: 1901-1917

William Morris 'Billy' Hughes – Attorney-General: 1910-1913, 1914-1921, Prime Minister: 1915-1923

Thomas Hughes – AWA Chairman: 1913-1922

Godfrey Isaacs – Marconi Company Managing Director: 1910-1924

Earle Page – Country Party Leader: 1921-1939

William Watt – Acting Prime Minister: 1918-1919

William Webster – Postmaster-General: 1915-1920

George Wise – Postmaster-General: 1920-1921

Part I – Introduction and Framework

Introduction

In April 1927 the 'beam' shortwave wireless service between Australia and Britain commenced operation. Enabling swift and direct wireless transmission of telegraphic messages between the antipodes and the heart of the Empire, the service's opening marked the biggest advance in Australia's international communications since the first submarine cable connecting Darwin with Singapore was put ashore in 1871. In the inaugural message, Australian Prime Minister Stanley Bruce, writing to his British counterpart, rhapsodised about the blow struck against Australia's isolation by beam wireless:

> It must be a source of deep pride to every member of our race that we should be associated in the provision of the longest and most important direct telegraphic service in the world. It is a tribute to British imagination, enterprise, and skill. We in the antipodes realise, perhaps even more than the people of Britain, the full significance of this great achievement. From the dawn of our history, when communication lay across thousands of miles of trackless ocean, and took months of hazardous and uncertain travel, we have striven incessantly to annihilate distance, and bring our two countries closer together. To-day marks the culmination of a great phase of effort, and ushers in a new era.[1]

The opening of the service, and its promise to strengthen the flow of trade and people between Australia and Britain, was met with universal approbation by the Australian press. "The possibilities of the wireless system are well nigh boundless", opined an editorial in the Brisbane *Telegraph*, "the nearer this country is brought by the agencies of science to Britain the more will the feeling of remoteness lose its influence to deter people making the big journey out here, and in a more direct way Imperial trade will be expanded".[2]

---

[1] "The Beam – First Day's Work" in *Sydney Morning Herald*, 9th April 1927.
[2] "Beam Wireless" in *The Telegraph*, 9th April 1927.

The acclaim with which the opening of the beam wireless service was met belied the controversy that had surrounded the question of international wireless since its first appearance on the agenda of Australian policymakers almost two decades earlier. At the heart of this dispute was a pivotal question of policy: what, if any, role would private enterprise play in the provision of an Australian international wireless service? This question had been decisively settled years before the service's realisation, over the course of 1921 and 1922, when Parliament assented to an agreement to entrust its construction and operation to Australia's major wireless firm, Amalgamated Wireless (Australasia) (hereafter AWA). The terms of this agreement saw the company receive a substantial financial investment from the Commonwealth government, in exchange for a majority stake in the company. A new Board of Directors, comprised of representatives from the Commonwealth and AWA's private shareholders, was also established to oversee the 'hybrid' enterprise's operations.

This novel arrangement, formally ratified in March 1922, represented a paradigmatic shift in the organisation of Australian communications. Up to the early twentieth century the "major distinguishing characteristic" of the establishment and operation of communications in Australia was the central role played by government.[3] Prior to Federation in 1901 the colonial governments were instrumental in the creation of Australia's postal, telegraphic, and telephonic communications networks, and, in the case of the telegraph, also the largest customer base.[4] The first submarine telegraph cable put ashore at Darwin in 1871 was an initiative of British private interests, the Eastern Extension group, but the Overland Telegraph Line connecting it with Australia's major population centres was a project of the South Australian government.[5] By 1901, the year of Federation, the new Commonwealth government attained constitutional authority over "postal, telegraphic, telephonic, and other like services" and the Postmaster-General's Department was established to supersede the hitherto separate colonial post and telegraph departments.[6] That year also saw the passage of the *Post and Telegraph Act* through Parliament, granting the Commonwealth "monopoly powers over the provision of Australia's internal and external communications services" and signifying its place

---

[3] G. Osborne and G. Lewis, *Communication Traditions in 20th-century Australia*, Oxford University Press, Melbourne, 1995, p. 13.

[4] See chapters 1-4 in A. Moyal, *Clear Across Australia: A History of Telecommunications*, Thomas Nelson Australia, Melbourne, 1984; J. Hirst, "Distance in Australia – Was it a Tyrant?" in *Australian Historical Studies*, Vol. 16, 1974-5, p.444.

[5] T. Barr, "Broadband Bottleneck: History Revisited" in *Media International Australia*, No. 129, 2008, pp. 131-132.

[6] *Commonwealth of Australia Constitution Act 1900*, s.51 (v).

as "the dominant policy-maker in the telecommunications" field.[7] The Commonwealth was also heavily involved in the laying of the government-owned Pacific cable connecting Australia with Canada's western coast that was opened in 1902.[8] Thus, prior to 1922 there was a tradition, hardened by over a century of practice, of government participation in the development of Australia's communications services.

The first years after Federation saw this organisational trend extended to cover wireless telegraphy as well. In 1905 the *Wireless Telegraphy Act* was passed by Parliament "to make", in the words of one supporting Senator, "a Government monopoly of wireless telegraphy in the Commonwealth".[9] Illustrative of this, when Australian policymakers first turned their attention towards the prospect of an international wireless service in the years preceding the Great War, there was a strong consensus regarding the inadvisability of *any* collaboration with private enterprise in the area. The pivot towards cooperation between the government and private enterprise under the 1922 agreement was therefore not only a marked departure from policies towards other Australian communication services, but also from those that had been in place since the first appearance of wireless on Australian shores at the dawn of the twentieth century.

This thesis is focused on explaining this change in paradigm; how the involvement of private enterprise in Australia's international wireless service came to be accepted by Australian policymakers despite the established history of government monopoly in the medium. The central development under consideration is the triumph of an idea, but it is not a history of ideas, nor are ideas its primary focus. Instead, it is concerned with how an idea in conflict with the established tradition of Australian communications policy up until that point came to be adopted. The thesis considers ideas in relation to their political fortunes, and bound to the

---

[7] K.T. Livingstone, *The Wired Nation Continent: The Communication Revolution and Federating Australia*, Oxford University Press, Melbourne, 1996, p. 185.
[8] See chapter 7 in E. Harcourt, *Taming the Tyrant: The first one hundred years of Australia's international communication services*, Allen and Unwin, Sydney, 1987.
[9] Quoted in R. Curnow, "The Origins of Australian Broadcasting: 1900-1923", in I. Bedford and R. Curnow (eds), *Initiative and Organisation*, Sydney Studies in Politics 3, F.W. Cheshire, Melbourne, 1963, p. 53.

political conditions enabling them to be rendered from abstractions into the foundations of policy.[10]

The years under focus in the study, between 1901 and 1922, marked the formative period of wireless communication. Over the course of the twentieth century, wireless came to be synonymous with broadcasting. However, the adoption of broadcasting around the world from the early 1920s followed more than two decades of experience with communication through the airwaves. The use of wireless as a means of broadcasting news and entertainment to the general public was unanticipated by its pioneers.[11] Instead, the original use for wireless was as a means for point-to-point telegraphic communication. Invented at the close of the nineteenth century, wireless telegraphy was a novel means of transmitting primitive electrical signals, such as Morse code, through the airwaves. In this sense it superseded an earlier nineteenth century invention, the (wired) telegraph. However, unlike the telegraph, wireless was not constrained by the need for fixed lines. This simple difference brought hitherto unknown capabilities. It enabled communication with ships and other vehicles beyond line-of-sight for the first time in human history. It unlocked the potential to transform trans-oceanic communication, offering improvements in speed, reliability, and cost compared with submarine telegraph cables. Furthermore, because it sent transmissions out into the airwaves indiscriminately, rather than along a line, it later enabled the creation of broadcasting as a mass medium that delivered news and entertainment into the home.[12] Because of the new possibilities its creation opened, wireless was, in the words of Susan Douglas, "arguably the most important electronic invention of the century", with profound implications for politics, culture, and economics.[13] Through the new capabilities it offered, never before seen in human history, the spread of wireless around the world in the early twentieth century was a development of great historical import. It saw the ability to communicate at a distance without the need for connecting wires transformed from an unproven and small-scale venture to an

---

[10] P. Cairney, *Understanding Public Policy: Theories and Issues*, Palgrave Macmillan, Basingstoke, 2012, pp. 222-223.

[11] H. Aitken, *Syntony and Spark: The Origins of Radio*, John Wiley and Sons, New York, 1976, pp. 306-307.

[12] D. Headrick, *The Invisible Weapon: Telecommunications and International Politics 1851-1945*, Oxford University Press, Oxford, 1991, p. 116; L. Gorman and D. McLean, *Media and Society in the Twentieth Century: A Historical Introduction*, Blackwell Publishing, Melbourne, 2003, p. 45.

[13] S. Douglas, *Listening In: Radio and the American Imagination*, University of Minnesota Press, Minneapolis, 2004, p. 9.

established, growing and diversified global industry that had begun to revolutionise communication within and between countries.

As is revealed in the commentary surrounding the opening of the international service in 1927, the adoption of wireless carried a particular importance in the Australian context. This came from what Geoffrey Blainey famously dubbed 'the tyranny of distance'. Australia's immense and sparsely-populated landmass, in conjunction with its isolation from Europe – the origin of most of its "people, equipment, institutions and ideas" – made distance, and its overcoming, one of the foremost themes of Australian history.[14] Though Blainey's work largely neglected the ameliorative effects of communications technology upon distance, his central point is indisputable.[15] Entwined with broader concerns relating to national survival in a potentially hostile region, overcoming distance was a crucial dimension of Australia's development from the colonial era until the mid-twentieth century.[16] The establishment of electrical communications services, beginning with the erection of the first telegraph line in 1854, represented one of the principal responses to the challenges posed by distance.[17] The coming of wireless in the early twentieth century was another means by which some of these challenges could be overcome.

The connection between advances in communication and the uses to which they would be put is one of the major themes of this study. Wireless communication was made possible by scientific, technological, and engineering progress from the mid-nineteenth century. Achievements in these fields demonstrated new possibilities of communicating through the airwaves, and formed the foundation upon which the medium's subsequent history was erected. The steady march of technological change is an indispensable aspect of the story of wireless' development into a medium of global significance. Yet it is not *solely* a story of technology. It also involves the response of human beings to the appearance of new technological forms, and the settling of questions regarding how technology would be organised socially; how it would be used and towards which ends. While much depended on

---

[14] G. Blainey, *The Tyranny of Distance: How Distance Shaped Australia's History*, Sun Books, Melbourne, 1966, p. viii.
[15] G. Osborne, "Communication – see Transport" in G. Osborne and W.F. Mandle (eds), *New History: Studying Australia Today*, George Allen and Unwin, Sydney, 1982, p. 158.
[16] G. Osborne and G. Lewis, *Communication Traditions in 20th-century Australia*, pp. 4-5, 11-17.
[17] J. Hirst, "Distance in Australia – Was it a Tyrant?", p. 442.

the specific properties of wireless communications technology, namely the capabilities it offered compared to existing forms of communication, "the nature of the technology itself did not unambiguously indicate the economic uses to which it could be put".[18] The utilisation of wireless telegraphy, initially as a form of maritime communication, and then, with further technological progress, as a way to communicate across the ocean, reflected the properties of the new technology combined with decisions regarding the way its capabilities should be harnessed.

Paul Starr discusses this concept in *The Creation of the Media*, which offers a wide-ranging examination of the political aspects of communications' developmental history in the United States and Europe between the seventeenth and twentieth centuries. He identifies the notion of 'constitutive choices' that must be made in response to the creation of new forms of communications technology. Constitutive choices relate to "the material and institutional framework" erected around technology.[19] Because there are often numerous potential ways for a technological breakthrough to be put to practical application, decisions regarding its use must be made between its initial creation in a workshop or laboratory and its adoption by society at large. These decisions relate to basic questions of organisation. For instance, should the new technology be the preserve of the government or the private sector? Should it act as a commercial or a public service?[20] The power intrinsic to the control of communications make constitutive decisions fundamentally political. They are the result of the different potential applications of a form of technology interacting with "constellations of power, pre-existing institutional legacies, and models from other countries".[21] The importance of the constitutive choices made with regard to a medium means that the story of the expansion of wireless communications is irremovable from the political decisions that were made in relation to it. As Daniel Headrick, writing in a similar vein, summarises, "the history of radio cannot be told simply in terms of devices, inventors, and manufacturers, but must be integrated with the history of political power".[22]

---

[18] H. Aitken, *Syntony and Spark*, p. 306.
[19] P. Starr, *The Creation of the Media: Political Origins of Modern Communications*, Basic Books, New York, 2004, p. 1.
[20] P. Starr, *The Creation of the Media*, pp. 1-6.
[21] P. Starr, *The Creation of the Media*, pp. 1-2.
[22] D. Headrick, *The Invisible Weapon*, p. 116; K. Ward, *Mass Communications and the Modern World*, Macmillan Education, Basingstoke, 1989, pp. 18-20.

Following in this manner, the study examines the Commonwealth government's policy response to the appearance of wireless in Australia from Federation in 1901 to the enactment of the 1922 agreement with AWA. It surveys the early history of a communications medium initially constituted as the preserve of government – with little opportunity for private participation – subsequently transformed into one in which private enterprise came to be the main driver of development. Its principal goal is to explain why this paradigmatic shift occurred; what factors were most influential in the formation of Australian policy towards wireless telegraphy. Its aim is to expand our understanding of the political considerations surrounding the introduction of this important medium in Australia.

Explanations for major shifts in public policy, such as that embodied by the 1922 agreement, must account for the combined influence of the large-scale and long-term, and the small-scale and short-term. Recognising this, the thesis portrays the form of the 1922 agreement as an outcome of powerful structural influences and a dynamic policymaking process. In other words, it assigns causal significance to large-scale pressures, as well as the small-scale actions of individuals and groups operating within a fluid process of policy formation.

The thesis' structure is based around this analytical approach, the basis for which is outlined in Part I of the study. Part II of the study, consisting of Chapter Two, examines the structural context within which Australia's international wireless service was constituted, documenting influences that would prove to be of great importance to the process of policy formation examined in Part IV of the study. Those involved in policymaking in relation to wireless were not endowed with complete autonomy of action, but were influenced by larger factors beyond their direct control. Though the actions of individuals and groups are indispensable aspects of explaining the policy outcome, they are not sufficient in and of themselves. The policymaking process under examination in Part IV of the study was bounded and influenced in myriad ways by the context in which it took place.

There were constant international influences on Australian wireless, and from the very beginning policy decisions made in Australia concerning wireless were intrinsically linked with different dimensions of the international environment. Most significant of these was wireless' potential as a geopolitical asset that allowed for the coordination of naval forces and rapid

trans-oceanic communication. In an era of escalating great power rivalries, culminating in the Great War, the medium's unique capabilities were of great interest to governments. As a result, the global development of wireless in the early twentieth century largely reflected the priorities of governments, rather than those of business. This is not to say that international business was without influence over the development of Australian wireless – from its very beginning AWA was bound with international wireless companies and, though it evolved into a national company over the years under focus in the study, it retained important advantages through its continued relationships with foreign enterprises. Nevertheless, wireless companies around the world required the acquiescence of governments for their commercial activities.

The geopolitical situation in the early 1920s was an important influence over the Commonwealth government's decision to abandon the paradigm of government enterprise and partner with AWA for the provision of international wireless. With the British Empire lagging behind its great power rivals in the field, and the evident inadequacy of Australia's exclusive reliance on submarine cables for its international communications, the government made a pragmatic decision to secure its geopolitical interests. This involved the adoption of a ready-made scheme for international communication in partnership with AWA, and a rejection of the schemes promoted by British Imperial authorities. In this sense the 1922 agreement represented a confluence of government and private interests. While AWA was motivated by the commercial opportunities offered by control of Australia's international wireless service, those actors within the Commonwealth government – most notably Prime Minister William Morris 'Billy' Hughes – were interested in the strategic benefits of the service. The scheme for collaboration with AWA won Hughes' support in large part because it was seen as a better means of securing Australia's national interest than the alternative proffered by the British government. His promotion of the scheme was motivated by Australia's geopolitical position.

The study also identifies Hughes' power as Prime Minister and the rise of economic nationalism as key dimensions of domestic context which influenced the direction of wireless policy in the early 1920s. Though neither were directly related to Australian wireless, each in its own way exerted a significant influence over the policymaking process covered in Part IV of the study. The power exercised by Hughes while Prime Minister proved important in light of the widespread resistance to any collaboration with AWA evident within other parts of the Commonwealth government, including the Cabinet and bureaucracy. Prior to Hughes'

ascension to the office, bureaucratic officials had exercised a good deal of influence over wireless policy. However, his autocratic style consigned bureaucratic influence to the margins, and his willingness to entertain a deal with AWA gave the company an opportunity to promote its scheme as the best way to establish a wireless link between Australia and Britain. Hughes also played an important role in securing the agreement's passage through Parliament, through his ability to set the agenda, and to frame the issue in terms capable of securing majority support.

Economic disruption resulting from structural changes in the global economy triggered by the Great War was another important contextual factor in relation to policymaking in the field of wireless. The abandonment of government enterprise in favour of government support for private sector growth in the wireless sector came at a time of pervasive restructuring of the relations between government and business in Australia. This structural change saw the adoption of government support for new secondary industries for the purpose of encouraging industrialisation, particularly in relation to industries of strategic significance. The replacement of one paradigm by another in the field of wireless was eased by fact that it took place within a broader context of changes in the government's form of encouraging development, as it enabled proponents of the 1922 agreement to promote it as a means to further boost Australia's economic development. It allowed AWA to frame the agreement as a means to inspire the growth of a national industry, consistent with a prevailing ethos of economic nationalism and a desire for 'self-sufficiency'.

Part III of the study, Chapters Three and Four, surveys the preceding history of Australian wireless prior to Part IV's consideration of specific schemes for the international service between 1918 and 1922. Part III focuses on the development of the field between 1901 and 1918. It shows that although wireless' earliest days were marked by public sector dominance, in accordance with the established Australian communications tradition, the seeds of private involvement that would later germinate in the 1922 agreement were planted a decade earlier, as AWA gained a small foothold in the field of maritime wireless and steadily expanded its operations. This portrays the 1922 agreement as the culmination of an evolutionary process that unfolded over the course of years. The evolution of the sector, marked by a steady increase in private involvement, saw AWA in the position to credibly position itself as capable of constructing and operating the international service by the time the subject came up for

consideration in the post-war years. The study traces the sector from its initial establishment as the domain of government, with virtually no scope for private participation, to the point where private industry was established enough to push for a greater role for itself.

The thesis places considerable emphasis on the Great War as instrumental to the subsequent development of the Australian wireless industry. The conflict represented a pivotal episode that saw dramatic changes which fed into the policy decisions made in the post-war years. The structural factors covered in Part II were each influenced by wartime experience. The conflict confirmed the strategic importance of communications networks, within which wireless was emerging as a crucial component. Furthermore, it exposed the limitations of submarine cables as a means of trans-oceanic communication, exposing the imperative to embrace wireless as a means of remaining competitive against strategic rivals and securing Australia's means of external communication in the post-war years. In addition, Hughes' attainment of unrivalled power within the Australian political system from 1915 – which would prove so decisive to international wireless policy in the post-war years – was a direct result of the crisis. Wartime circumstances allowed the Prime Minister to break free from traditional constraints upon the power of the office. The massive disruption to the world economy resulting from the conflict was also instrumental by way of promoting widespread changes in the role of government in relation to the Australian economy, leading to an upswing in government support for new industries and a climate of economic nationalism.

The war's impact was not, however, limited to the structural considerations presented in Part II of the study. As Part III outlines, it also led to considerable changes within the newborn Australian wireless sector itself. The war proved to be a powerful solvent, breaking down the arrangements that had characterised the industry prior to August 1914, and creating opportunities for policymakers to recast the industry following the resumption of peace. The war led to a recasting of the relationship between AWA and the Commonwealth government. Whereas it had previously been characterised by antagonism, the pressures of wartime circumstances saw the first steps towards cooperation between the two entities; something which was later entrenched in the 1922 agreement. Furthermore, the war prompted changes in the company's ownership that would later allow it to portray itself as an Australian enterprise deserving of governmental support.

Part IV – Chapters Five and Six – represents the core of the study. It adopts a specific focus on the policymaking process surrounding international wireless between 1918 and 1922, using the analytical framework of Multiple Streams Analysis. This framework emphasises the varying roles played by different actors in policymaking, the existence of relatively-independent 'streams' of problems, policies, and politics that come together to present opportunities for policy change, and the importance of timing to policy outcomes. Part IV details how the notion of entrusting AWA with control of Australia's international wireless service was transformed from an idea with few supporters into formal policy. The level of investigation offered by Multiple Streams Analysis is granular and small-scale; focused on the actions of individuals and groups within a "complex, messy and…unpredictable" policymaking process.[23]

Part IV of the study reveals the importance of AWA's efforts to lay the foundation for policy change years before any formal decision, by constructing detailed plans for an international service, honing arguments in support of their plans, and identifying the Prime Minister as a supporter. Because of the preliminary work done by the company's executives, by the time that the subject of wireless appeared on the political agenda in 1921, AWA was able to promote its scheme as the basis for future policy. It also reveals the important role that Hughes played in placing the subject on the agenda at an opportune time, and framing the issue in terms calculated to secure the agreement's passage through Parliament in a challenging political environment. Part IV of the study demonstrates the importance of immediate considerations at the moment of decision – the availability of specific policy options, the political environment – to the eventual outcome.

Overall, the thesis argues that in order to understand major policy decisions, it is necessary to account for the influence of long-term, underlying factors as well as short-term, proximate factors. The structural context within which decisions are made exerts strong pressures on the actions of individuals and groups. However, although policy change is influenced by structural factors, they are not determinative. Explanations of policy change must retain space for immediate factors, such as individual agency, choice, and chance. Nevertheless, because policymaking takes place within a dynamic process with multiple inputs, it eludes the direct control of individual and group actors. Because of this, it is necessary to combine different

---

[23] P. Cairney, *Understanding Public Policy*, p. 4.

levels of analysis – focused on large, underlying structural forces and small, immediate factors that combine within a dynamic process – to explain policy change.

Related Literature

The development of Australian wireless telegraphy in the early twentieth century has not been widely-researched. The subject occupies a virtual 'no man's land' in the literature on Australian communications. On one side there are studies on various dimensions of telegraphy, the preceding medium of electrical communication pioneered in the nineteenth century.[24] On the other side there is a wide literature covering different aspects of broadcasting, which formally commenced in 1923.[25] In comparison to these subjects, wireless telegraphy has received scant

---

[24] See, in chronological order, F. Clune, *Overland Telegraph: The Story of a Great Australian Achievement and the Link Between Adelaide and Port Darwin*, Angus and Robertson, Sydney, 1955; J. Hirst, "Distance in Australia – Was it a Tyrant?"; K.S. Inglis, "The Imperial Connection: Telegraphic Communication between England and Australia, 1872-1902" in A.F. Madden and W.H. Morris-Jones (eds), *Australia and Britain: Studies in a Changing Relationship*, Sydney University Press, Sydney, 1980; P. Taylor, *An End to Silence: The Building of the Overland Telegraph Line from Adelaide to Darwin*, Methuen Australia, Sydney, 1980; K.T. Livingstone, "Anticipating Federation: The Federalising of Telecommunications in Australia" in *Australian Historical Studies*, Vol. 26, No. 102, 1994; K.T. Livingstone, *The Wired Nation Continent*; K.T. Livingstone, "Charles Todd: Powerful communication technocrat in colonial and federating Australia" in *Australian Journal of Communication*, Vol. 24, No. 3, 1997; T. Barr, "Broadband Bottleneck: History Revisited"; P. Putnis, "The Early Years of International Telegraphy in Australia: A Critical Assessment" in *Media International Australia*, No. 129, 2008.

[25] See, in chronological order, I.K. Mackay, *Broadcasting in Australia*, Melbourne University Press, Melbourne, 1957; W.H.N. Hull, "The Public Control of Broadcasting: The Canadian and Australian Experiences" in *The Canadian Journal of Economics and Political Science*, Vol. 28, No. 1, 1962; R.R. Walker, *The Magic Spark: The story of the first fifty years of Radio in Australia*, Hawthorn Press, Melbourne, 1973; A. Thomas, *Broadcast and Be Damned – The ABC's First Two Decades*, Globe Press, Fitzroy, Vic., 1980; M. Counihan, *The Construction of Australian Broadcasting: Aspects of Radio in Australia in the 1920s*, M.A. Thesis, Monash University, 1981; L. Johnson, "Radio and everyday life: The early years of broadcasting in Australia, 1922-1945" in *Media, Culture and Society*, Vol. 3, No. 2, 1981; G. Mundy, "'Free Enterprise' or 'Public Service'? The Origins of Broadcasting in the U.S., U.K. and Australia" in *The Australian and New Zealand Journal of Sociology*, Vol. 18, No. 3, 1982; A. Barnard, "Broadcasting in the 1920s: Government and Private Interests" in *Prometheus*, Vol. 1, No. 1, June 1983; K.S. Inglis, *This is the ABC: The Australian Broadcasting Commission 1932-1983*, Melbourne University Press, Melbourne, 1983; J. Kent, *Out of the Bakelite Box: The Heyday of Australian Radio*, Angus and Robertson, Sydney, 1983; W. Muscio, *Australian Radio: The Technical Story 1923-83*, Kangaroo Press, Kenthurst, NSW, 1984; L. Johnson, *The Unseen Voice: A Cultural Study of Early Australian Radio*, Routledge, London, 1988; J. Potts, *Radio in Australia*, NSW University Press, Kensington, NSW, 1989; P. Geeves, *The Dawn of Australia's Radio Broadcasting*, Federal Publishing Company, Alexandria, NSW, 1993; C. Jones, *Something in the Air: A History of Radio in Australia*, Kangaroo Press, Kenthurst, NSW, 1995; J. Ross, *Radio Broadcasting Technology: 75 Years of Development in Australia*, John F. Ross, Port Macquarie, 1998; chapter 3 in D. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, Johns Hopkins University Press, Baltimore, 2000; B. Harte, *When Radio Was The Cat's Whiskers*, Rosenberg Publishing, Dural, NSW, 2002; B. Griffen-Foley, *Changing Stations: The Story of*

attention from scholars. This is despite the fact that the first form of wireless communication was vital link between the telegraph and broadcasting – freeing the signalling capabilities of the former from its need for fixed wires, and subsequently enabling the latter.

Only two authors have presented analyses of the constitution of Australia's international wireless service: Ross Curnow and Jock Given. Their works represent the principal sources related to this study. The approaches of these scholars, though different, both emphasise the actions of individuals and groups directly involved in the sector as the drivers of policy. This study differs by placing a greater emphasis on the context within which these actors operated, and through providing a more detailed examination of how their actions related to the process of policy formation. It aims to complement, not revise, the accounts provided by Curnow and Given.

Ross Curnow

The pioneering work on Australian wireless telegraphy is a monograph published by Ross Curnow in 1963. Curnow is the only political scientist to have examined the matter until now, and his study is based on a combination of archival sources, contemporary newspapers, and Hansard. Curnow surveys Commonwealth government policy towards wireless telegraphy between 1901 and 1923 as a way to explain the initial creation of Australian broadcasting. He contends that the history of policy towards wireless telegraphy "helps to explain why Australia's peculiar system of broadcasting evolved as it did: certain established interests and attitudes moulded in the development of 'point to point' communication exercised a marked influence on the growth of the new medium".[26] Though his study's primary focus is the origins of broadcasting, most of its content deals with the Commonwealth government's approach to wireless telegraphy.

Curnow's narrative, the first examination of the major developments in this area, is durable. However, its explanatory power is undermined by its reliance upon pluralism as an analytical

---

Australian Commercial Radio, University of New South Wales Press, Sydney, 2009; B. Carty, *Australian Radio History*, Bruce Carty, Gosford, 2011.

[26] R. Curnow, "The Origins of Australian Broadcasting", p. 47.

tool. His pluralist analysis is limited by a narrow conception of politics and a neglect of the contextual factors which influenced the events under consideration, treating the field of wireless as largely self-contained. In comparison to this study, Curnow overemphasises the importance of interest groups to policy outcomes and underemphasises the capacity for those outcomes to be affected by external factors.

Curnow describes policymaking as influenced by "the interplay of political parties, administrative agencies and interested groups".[27] However, his narrative portrays the actions of interest groups as having disproportionate influence over policy outcomes when compared to either the Parliament or the Commonwealth bureaucracy. In contrast to the actions of interest groups, he concludes that "neither political parties nor the Postmaster-General's Department took the initiative in developing wireless".[28] He attributes little importance to political or bureaucratic actors with regard to the settling of constitutive decisions over the medium. Curnow also briefly mentions two other considerations that helped to influence the development of Australian wireless. At the beginning of his study he describes some of the larger structures that shaped the environment in which policy was made, such as the relationship between events in Australia and the international wireless business, the technological improvements in wireless spurred by the Great War, and the displacement of smaller entrepreneurial firms by larger, more complex commercial organisations.[29] In addition, he concludes with a passing remark on the importance of individual leadership to developments, but this notion is not developed any further.[30] However, consideration of these themes comprises a tiny fraction of the overall study, most of which is concentrated upon the minutiae of interest group advocacy. This weighting demonstrates the degree to which Curnow's explanation of policymaking is linked to the small-scale actions of individuals and groups.

One consequence of Curnow's emphasis on the importance of interest group advocacy upon policymaking is that it marginalises other potential considerations. For instance, with the "possible exception" of the second Fisher government, in office from 1910-1913, he attributes

---

[27] R. Curnow, "The Origins of Australian Broadcasting", p. 103.
[28] R. Curnow, "The Origins of Australian Broadcasting", p. 103.
[29] R. Curnow, "The Origins of Australian Broadcasting", pp. 47-49.
[30] R. Curnow, "The Origins of Australian Broadcasting", p. 105.

little influence over policy to political factors, noting that "the claim that the policies of Australian political parties evolve in a pragmatic, piecemeal fashion is supported by the history of wireless telegraphy".[31] Though he describes some variance in policy preferences expressed by the Labor and non-Labor parties, these are portrayed as functions of those parties' alignment with different interest groups.[32] In his assessment, neither Parliament nor the bureaucracy possessed any inclination to shape policy themselves: "the Government and Postmaster-General's Department were content to wait until the pressures and demands of interested groups became sufficiently strong to require a decision".[33] The acceptance of the 1922 agreement between the Commonwealth and AWA – the central focus of this study – is claimed to be the result of "a reasonable compromise" between the preferences of political actors and AWA.[34] However, he portrays the interest of politicians in the field of policy as motivated by little more than political opportunism: "more as political footballs than as matters which should be viewed according to some consistent policy".[35] This claim is further confirmation of Curnow's assumption that the content of policy is driven by the preferences of interest groups.

Curnow's analysis is based upon pluralist theory. It interprets policy as open to influence by different, competing interest groups with the role of the government being "to uphold the general or public interest against the inevitably narrow and selfish interests of organised groups".[36] This theme pervades Curnow's study through references to one or another policy decision as representing a compromise between different demands. Although different interest groups varied in their capacity to influence policy, the policies that were instituted reflected a balance between competing interests. Curnow's assessment is that the Commonwealth's approach to wireless was characterised by "procrastination" and a preference "to avoid contentious issues".[37] Its willingness to only act in response to the demands of interest groups is taken as axiomatic by Curnow, and presented as one of the major factors explaining the development of policy towards wireless telegraphy.

---

[31] R. Curnow, "The Origins of Australian Broadcasting", p. 103.
[32] See, for instance, R. Curnow, "The Origins of Australian Broadcasting", pp. 63-66.
[33] R. Curnow, "The Origins of Australian Broadcasting", p. 103.
[34] R. Curnow, "The Origins of Australian Broadcasting", p. 83.
[35] R. Curnow, "The Origins of Australian Broadcasting", p. 89.
[36] B. Head and S. Bell, "Understanding the modern state: Explanatory approaches" in S. Bell and B. Head (eds), *State, Economy and Public Policy in Australia*, Oxford University Press, Melbourne, 1994, pp. 28-29.
[37] R. Curnow, "The Origins of Australian Broadcasting", p. 105.

In the years since his study was published pluralist theory has come under sustained assault from several directions. One avenue of criticism relates to pluralism's emphasis on, as expressed by Robert Dahl, "the careful examination of a series of concrete decisions…taken in the political system".[38] This focus on the realm of formal decision-making – 'concrete decisions' – has been criticised for embodying a narrow conception of power and the political.[39] By restricting its analysis to the formal political system, it only considers those aspects of politics that are most easily observable. Through emphasising the outcomes of formal decisions, it neglects the political considerations involved in an issue ever becoming the subject of formal decision-making. Pluralism does not consider the notion of agenda-setting: that which determines which matters will, or will not, be subject to formal deliberation in the political system, and the terms in which they are framed.[40]

Another weakness of pluralist analysis, stemming from its conception of power and focus on outcomes, is its privileging of certain actors over others. Pluralism places a strong emphasis on the advocacy efforts of interest groups as determinants of policy.[41] Though interest groups vary in their degree of influence in accordance with their possession and use of 'political resources', they are seen to influence the outcomes of formal decision-making through applying pressure to decision-makers within the political system. In this view governance is characterised by "the steady appeasement of relatively small groups" by elected officials.[42] This conceptualisation depicts elected officials as highly responsive to the overtures of interest groups, although they often have to balance the competing demands of different groups. Nevertheless, the political system is portrayed as "permeable, [and] capable of being penetrated by any group" which can mobilise sufficient 'power resources' to advance its interests.[43] One corollary of this view is that elected officials, those who are responsible for formal decisions, are effectively stripped of their capacity for making those decisions autonomously. This is a questionable assumption. Furthermore, with respect to pluralism's depiction of bureaucratic involvement in policymaking, bureaucracies are usually portrayed as

---

[38] R. Dahl, "A Critique of the Ruling Elite Model" in *The American Political Science Review*, Vol. 52, No. 2, 1958, p. 466.

[39] P. Bachrach and M. Baratz, "Two Faces of Power" in *The American Political Science Review*, Vol. 56, No. 4, 1962; S. Lukes, *Power: A Radical View*, Macmillan, Basingstoke, 1974.

[40] C. Hay, *Political Analysis: A Critical Introduction*, Palgrave, Basingstoke, 2002, pp. 172-176.

[41] P. Dunleavy and B. O'Leary, *Theories of the State: The Politics of Liberal Democracy*, Macmillan Education, Basingstoke, 1987, p. 32.

[42] R. Dahl, *A Preface to Democratic Theory*, University of Chicago Press, Chicago, 1956, p. 145.

[43] P. Dunleavy and B. O'Leary, *Theories of the State*, p. 37.

a 'weathervane' – responsive to the prevailing winds of interest group advocacy – or as 'neutral' – the upholder of the 'public interest' against the sectional preferences of interest groups; a "mediator, balancer and harmonizer of interests".[44] In pluralist theory, it is interest groups, and the conflicts between them, that are the key determiners of policy outcomes. In contrast, politicians and bureaucrats are credited with little capacity to influence the shape of policy.

This view is untenable. Though few would dispute that interest groups function as important players in policy formation, they represent only one part of a wider array of actors that can influence the shape of policy in their own ways, including ministers, other politicians, political parties, bureaucrats, and the media.[45] To depict interest groups as the dominant forces, and other actors as in thrall to their demands, is to engage in an unjustifiable oversimplification.

Furthermore, pluralism's narrow conception of the political renders it poorly equipped to address external influences on political outcomes. Its view of politics as an arena of interest group struggle does not conceptualise the participation of any forces in a particular field of policy that do not have a direct interest in the area.[46] As a result, it depicts policymaking in a given field as essentially self-contained; restricted to the elected officials responsible for formal decisions and the interest groups with a stake in the matter.[47] As a consequence, it has no capacity to explain the influence of external factors upon political outcomes. Related to this, it does not appreciate the context in which policy decisions are made, and the various ways in which this context itself can shape matters such as the relative influence of interest

---

[44] P. Dunleavy and B. O'Leary, *Theories of the State*, p. 46; B. Head and S. Bell, "Understanding the modern state", pp. 28-29.

[45] The importance of wide range of actors is a prominent theme in the literature on Australian public policy. See, for example, M. Edwards, "The policy-making process" in D. Woodward, A. Parkin and J. Summers (eds), *Government, Politics, Power and Policy in Australia*, Ninth Edition, Pearson Australia, Frenchs Forest, NSW, 2010, p. 425; G. Davis, J. Wanna, J. Warhurst and P. Weller, *Public Policy in Australia*, Second Edition, Allen and Unwin, St Leonards, NSW, 1993, pp. 1-7; P. Bridgman and G. Davis, *The Australian Policy Handbook*, Third Edition, Allen and Unwin, Crows Nest, NSW, 2004, pp. 9-12.

[46] See C. Hay, *Political Analysis*, pp. 72-74.

[47] See, for example, C.J. Hewitt, "Elites and the Distribution of Power in British Society" in A. Giddens and P. Stanworth (eds), *Elites and Power in British Society*, Cambridge University Press, Cambridge, 1974.

groups in a particular policy field, the policies given consideration, or the predisposal of decision-makers towards particular choices.[48]

All of the above are characteristics of Curnow's analysis of early Australian wireless policy. His pluralistic account of policy change in the area is a narrow one that overemphasises the preferences of interest groups when it comes to explaining the developments under scrutiny. It also treats the field of wireless as largely self-contained, with little consideration of how the policy decisions that were made were influenced by context.

This study follows the trail that was blazed by Curnow over half a century ago. It revisits the subject of Commonwealth government policy towards wireless communications between 1901 and 1922, discarding the pluralist underpinnings of his analysis in favour of an approach that conceptualises policymaking as a multifaceted process. It demonstrates that the influence of interest groups – principally AWA – over policy came through their crafting of policies, but that they were dependent on support within the political system to see those policies enacted. In contrast to the pluralist approach, this thesis places a strong emphasis on the role of political and bureaucratic actors within the Commonwealth. It does not present the 1922 agreement as the triumph of sustained interest group pressure, but as a result of a dynamic policymaking process with a range of inputs. It also rejects the pluralist characterisation of bureaucratic actors as either 'weathervanes' or neutral, instead demonstrating that the early history of the field saw the establishment of bureaucratic control, the steady erosion of which was a vital factor in the 1922 outcome. Unlike Curnow's, this study also places a greater emphasis on the importance of context, and portrays the policymaking process as contextually-embedded. Policymaking does not – cannot – proceed in isolation and according to its own dynamics. Instead, it is enmeshed with, and irremovable from, a larger context.

The study is a re-examination of the area covered by Curnow in his pioneering work on early Australian wireless. Like Curnow's, it covers the evolution of Commonwealth policy towards wireless telegraphy prior to the emergence of broadcasting. However, unlike Curnow's, its

---

[48] M. Smith, "Pluralism" in D. Marsh and G. Stoker (eds), *Theory and Methods in Political Science*, Macmillan, Basingstoke, 1995, pp. 215-216.

primary focus is the subject of international wireless and it does not broach the subject of broadcasting.

Jock Given

After an extended absence of new offerings, Jock Given has re-opened research into the history of Australian wireless telegraphy with a number of publications in the early twenty-first century. These include a history Ph.D. thesis submitted in 2007, and a range of other articles. Given's thesis covers the life and career of Ernest Fisk, the Managing Director of AWA for more than two decades and one of the central figures in the early history of Australian wireless. It is a wide-ranging study based largely upon primary documents, including Fisk's personal papers, dealing with aspects of "technology, law, economics, culture, politics and public policy" as it explores his stewardship of AWA, and other organisations.[49] Because of Fisk's heavy involvement in the establishment of the wireless industry in Australia, Given covers many of the events and developments that had previously featured in Curnow's study and are also central to this one. It differs from Curnow's, and this, study by placing a much greater emphasis on industry and business history. It is by far the most thorough analysis of these aspects of the medium's history in Australia that has been written.

Given's thesis is highly relevant to this study because of common content, but it contains a different primary focus and analytical approach. His work places a greater emphasis on the industrial and commercial aspects of early Australian wireless, exploring government policy insofar as it intersected with the expansion of AWA as a business under Fisk's leadership. Government is one of the four major themes around which Given organises his study, along with distance, empire, and industry.[50] However, unlike this study, Given's focus on government is principally on policy assessment rather than policymaking. His major research questions in this area are concerned with the outcomes, rather than the origins, of policy decisions.[51] This thesis, in contrast, is concerned with explaining the origins of policy. It also inverts Given's

---

[49] J. Given, *Transit of Empires: Ernest Fisk and the World Wide Wireless*, Ph.D. Thesis, University of Melbourne, 2007, p. 1.
[50] J. Given, *Transit of Empires*, p. 17.
[51] J. Given, *Transit of Empires*, pp. 27-29.

focal balance between business and government, examining AWA's activities insofar as they came to influence government policy.

Given's description of his thesis as "a trans-national business biography" encapsulates the major thrust of his work.[52] As a biography it places a greater emphasis on the importance of individuals to the industry's development. This is most obvious in the case of his subject, Fisk, but also with regard to other major figures featured in his narrative. For example, he pays a good deal of attention to the relationship between Fisk and Hughes during the latter's tenure as Prime Minister, a relationship he describes as "close though wary" and also "decisive in Australian communications history".[53] His research highlights, and ascribes importance to, the particular qualities of individual actors to a much greater degree than Curnow, and identifies such qualities as important factors that influenced the industry's development.[54] A corollary of Given's individualist focus is the importance of leadership, and the difference that a leadership change in an organisation can make to the direction of that organisation. This is evident, for instance, in his treatment of Fisk's acquisition of AWA's Managing Director role in 1917 and the subsequent change in the company's direction that this spurred.[55] The trans-national aspect of Given's analysis is also prominent. Because "AWA was closely linked to overseas companies" he investigates the connections between the industry's development in Australia and the international context.[56] This is featured in his discussion of the connection between AWA and its British parent, the Marconi Company, and also through his analysis of the relationship between wireless development and Australia's place in the British Empire.[57] The international dimensions of the subject provide an important background to the individual actions at the centre of his thesis. This study concurs with Given's conclusion that it is vital to appreciate the international context surrounding the early development of Australian wireless.

Though it is not his principal focus, Given's approach adds an extra dimension to our understanding of policymaking in the area by assessing the motivations of those actors in the Commonwealth government with whom Fisk engaged in his career. In contrast to Curnow's

---

[52] J. Given, *Transit of Empires*, p. 1.
[53] J. Given, *Transit of Empires*, p. 161. Hughes is a constant feature in pp. 111-163 of the thesis.
[54] Chapter 2 in J. Given, *Transit of Empires*.
[55] J. Given, *Transit of Empires*, pp. 96-101, 119-120.
[56] J. Given, *Transit of Empires*, p. 17.
[57] J. Given, *Transit of Empires*, pp. 21-24.

portrayal of the government as a mediator between the competing demands of interest groups, Given depicts the Commonwealth officials as possessing policy goals of their own, and a greater capability of implementing them. In his analysis, AWA was less able to steer Commonwealth policy than its leadership was able to capitalise on specific opportunities presented by a convergence of interests between the two organisations.[58] This study's findings support this view, and situate it within an understanding of policymaking based upon Multiple Streams Analysis wherein policies can originate from inside or outside the government apparatus. It adds further weight and depth to Given's conclusion that "the timing of the initiative, and the unusual political circumstances, were critical" factors in the execution of the 1922 agreement.[59]

Given has also published a range of articles addressing various aspects of early Australian wireless. These include accounts of those prominent early industry leaders besides Fisk; the opening of Australia's first wireless telephone service with Britain; the history of the partnership between AWA and the Commonwealth government from 1922; AWA's attempts to establish an Australian system of international shortwave broadcasting; the first public demonstration of wireless telegraphy in 1906; and AWA's transition to a national enterprise from its multi-national roots.[60] The last of these is of particular importance because of its description of AWA's transformation into a national company in the years after its formation – one of the developments at the centre of this study.

Given's contribution to the field is substantial. Foremost of his achievements is providing the most detailed account of the industry's early history that is available. In relation to the subject of the following study – the origins of the 1922 agreement – his account stresses the

---

[58] This is most evident in chapter 4 of J. Given, *Transit of Empires*, particularly pp. 161-163.

[59] J. Given, *Transit of Empires*, p. 162.

[60] J. Given, "Not Being Ernest: Uncovering Competitors in the Foundation of Australian Wireless" in *Historical Records of Australian Science*, Vol. 18, No. 2, 2007; J. Given, "Talking Over Water: History, Wireless and the Telephone" in *Media International Australia*, No. 125, 2007; J. Given, "A 50/50 Proposition: Public-Private Partnerships in Australian Communications" in *Media International Australia*, No. 129, 2008; J. Given, "Another Kind of Empire: The Voice of Australia, 1931-1939" in *Historical Journal of Film, Radio and Television*, Vol. 29, No. 1, 2009; J. Given, "Wireless Politics: Marconi and the Parliament at Point Lonsdale, 12 July 1906" in *Telecommunications Journal of Australia*, Vol. 60, No. 4, 2010; J. Given, "Born Global, Made Local: Multinational Enterprise and Australia's Early Wireless Industry", *Australian Economic History Review*, Forthcoming.

partnership between Fisk and Hughes as pivotal to the outcome.[61] Distinct from Curnow's analysis, he does not portray the activities of interest groups as the chief determinant of policy changes but notes the degree to which Commonwealth preferences shaped policy, often in opposition to the objectives of interest groups such as AWA. His analyses, therefore, depict government as having its own interests rather than simply being a mediator between commercial groups. He also emphasises the qualities of individuals, their relationships and beliefs, as important determinants of policymaking.

This study complements Given's by focusing on different aspects of the early history of wireless in Australia. Though each is concerned with the same broad subject, there are substantial differences between them. The emphases Given places on the technological and commercial dimensions of early Australian wireless are not replicated in this study. Instead, it places a stronger emphasis on the subject's political dimensions, examining the passage of the 1922 agreement through the lens of public policy, and the manner in which the policymaking process that produced the decision was influenced by the surrounding political context. As a result of its primary focus on the determinants of policy, the study outlines a number of key developments in early Australian wireless history that either only receive passing reference in Given's work, or are neglected entirely.

This thesis also demonstrates the importance of developments during the Great War, both within the wireless sector and in its wider impact on the aforementioned political context, to explaining the pivot in policy brought about by the 1922 agreement. Wartime developments, though covered by Given in relation to AWA's operations, do not represent a major emphasis of his work.[62] In contrast, Chapters Two and Four of this study demonstrate the crucial importance of the conflict to the 1922 outcome. This study also places a greater weight upon the inability of individuals and groups to control the policymaking process, because of the multiplicity of factors that contribute to policy outcomes.

---

[61] J. Given, *Transit of Empires*, pp. 161-163.
[62] J. Given, *Transit of Empires*, pp. 103-111; J. Given, "Born Global, Made Local", p. 9.

Other Research

In addition to the detailed works of Curnow and Given, a number of general histories provide important background to the study. Edgar Harcourt's 1987 book *Taming the Tyrant*, a history of the first century of Australia's international communications services between 1872 and 1972, dedicates a chapter to covering the early development of Australian wireless telegraphy up to the enactment of the 1922 agreement.[63] Harcourt's account is distinguished by its incorporation of structural influences over Australian wireless policy, principally the influence of the international environment upon domestic decision-making, and the challenge that the appearance of the new medium posed to the pre-existing technology of submarine cables. Though his account is more descriptive than analytical, Harcourt interprets the 1922 agreement as reflecting "Hughes's enthralment by wireless", and his desire to free the medium from the bureaucratic control it had been under since its first appearance in Australia for the purpose of encouraging the sector's further development.[64] This thesis similarly emphasises the importance of this motivation behind the Prime Minister's actions, incorporating it within a larger context of Australian economic nationalism in the early 1920s.

Ann Moyal's history of Australian communications, *Clear Across Australia*, integrates the history of wireless telegraphy into the larger story of Australia's communications services from the establishment of the first mail service in 1788 to the launch of satellites in the 1980s.[65] Like Harcourt's, however, her work is largely descriptive, though it provides important background detailing the history of government control over communications from the colonial period and notes the degree to which the 1922 agreement marked a departure from this tradition.[66] Graeme Osborne and Glen Lewis' *Communication Traditions in 20th-century Australia* is largely focused on the cultural dimensions of Australian communications, but outlines essential information on communications as a means of "building an economic infrastructure and bolstering national defence" in the first decades of the twentieth century – another major theme in this study.[67] In addition, Lawrence Durrant's *The Seawatchers* is a history of Australia's coastal wireless network, an important early element of the development of

---

[63] Chapter 8 in E. Harcourt, *Taming the Tyrant: The first one hundred years of Australia's international communication services*, Allen and Unwin, Sydney, 1987.
[64] E. Harcourt, *Taming the Tyrant*, p. 201.
[65] A. Moyal, *Clear Across Australia*.
[66] A. Moyal, *Clear Across Australia*, p. 132.
[67] G. Osborne and G. Lewis, *Communication Traditions in 20th-century Australia*, p. 5.

wireless telegraphy covered in Chapter Three.[68] Denis Cryle has also written on Australia's international wireless service in relation to the Empire Press Union.[69]

Finally, the study is influenced by a number of authors with a more prominent international focus. Aitor Anduaga's *Wireless and Empire* is a strong conceptual influence. Though principally focused on scientific research on the ionosphere throughout the British Empire in the interwar period – including two chapters dedicated to Australia – its analysis is predicated on the rejection of "direct causal effects" and "simple causal relationships", instead situating causation within a wide range of complex and interlinking areas.[70] This study, though containing a different primary focus, similarly seeks causation within a range of "interconnected categories", each of which has "a limited explanatory scope when analysed separately".[71] In addition, Daniel Headrick's scholarship on the relationship between communications and geopolitics from the mid-nineteenth through mid-twentieth centuries informs the study's understanding of this fundamental influence on Australian wireless development.[72] The works of Jill Hills, Peter McMahon, Peter Hugill, and Dwayne Winseck and Robert Pike also provide important background on the international political economic dimensions of communications development during this period of time.[73] W.J. Baker's *A History of the Marconi Company*, focused on AWA's British parent company, contains important background that informs the study, as do the works of S.G. Sturmey and Hugh Aitken.[74]

---

[68] L. Durrant, *The Seawatchers: The Story of Australia's Coast Radio Service*, Angus and Robertson, North Ryde, NSW, 1986.

[69] D. Cryle, "'Reciprocal and Universal': Robert Donald, the Press Union and Empire Wireless 1920-1933" in *Historical Journal of Film, Radio and Television*, Vol. 30, No. 3, 2010.

[70] A. Anduaga, *Wireless and Empire: geopolitics, radio industry, and ionosphere in the British Empire, 1918-1939*, Oxford University Press, Oxford, 2009, p. xvii.

[71] A. Anduaga, *Wireless and Empire*, p. xix.

[72] D. Headrick, *The Invisible Weapon*; D. Headrick and P. Griset, "Submarine Telegraph Cables: Business and Politics, 1838-1939" in *The Business History Review*, Vol. 75, No. 3, 2001.

[73] J. Hills, *The Struggle for Control of Global Communication: The Formative Century*, University of Illinois Press, Chicago, 2002; P. McMahon, "Early Electrical Communications Technology and Structural Change in the International Political Economy – The Cases of Telegraphy and Radio" in *Prometheus*, Vol. 20, No. 4, 2002; P. McMahon, *Global Control: Information Technology and Globalization since 1845*, Edward Elgar, Cheltenham, 2002; P. Hugill, *Global Communications Since 1844: Geopolitics and Technology*, Johns Hopkins University Press, Baltimore, 1999; D. Winseck and R. Pike, *Communication and Empire: Media, Markets and Globalization, 1860-1930*, Duke University Press, Durham, 2007.

[74] W.J. Baker, *A History of the Marconi Company*, Methuen and Co, London, 1970; S.G. Sturmey, *The Economic Development of Radio*, Gerald Duckworth and Co., London, 1958; H. Aitken, *Syntony and Spark*; H. Aitken, *The Continuous Wave: Technology and American Radio, 1900-1932*, Princeton University Press, Princeton, 1985.

Materials

This study is based upon primary research, with a particular focus on the records of those Commonwealth departments that exercised responsibility over wireless during the early twentieth century: the collections of the Postmaster-General's Department and the Navy Department, both held by the Melbourne office of the National Archives of Australia. Additional research in the collections of the National Archives was undertaken in Canberra involving the materials of the Prime Minister's Department. Taken as a whole, these collections contain a large amount of contemporary material dealing with many aspects of wireless administration. While, to varying degrees, those works covering the area referred to above have engaged with these records, none have done so to the same extent as this study. Most of the fresh insights contained within this thesis come from a more rigorous perusal of these collections.

In addition to the Commonwealth's records, permission was given to the author to examine AWA's collection held by the Mitchell Library in Sydney. The nature of this collection, consisting of those records that have survived up to the present (the company not being as assiduous about record keeping as the Commonwealth government), rendered it less useful to the study. As Phillip Geeves, a former AWA employee-cum-historian, described in a 1974 memorandum, "for a national company of AWA's stature, the Firm's archives are in a lamentable condition".[75] Presumably a good number of documents of historical significance were lost forever prior to Geeves' efforts to archive the company's records. However a number of primary documents containing valuable insights into the company's early activities do survive within the collection and have informed the study.

The thesis also draws upon other primary sources such as Hansard and contemporary newspapers. These often add valuable context to events otherwise obliquely covered in the other primary documents. To a lesser degree, the Hughes collection within the National Library of Australia, covering the former Prime Minister's tenure as a member of the AWA Board of

---

[75] Memorandum to D. Craig from Geeves, 25th August 1972. Mitchell Library: Amalgamated Wireless (Australasia) Ltd Records, 1896-1985; ML MSS 2954/Add-On 1910; Box 26, GEEVES, P. L. (Staff Member), 1913-1979, Correspondence, 1968-1979.

Directors, was also consulted. In addition to these primary sources, the study also refers to a wide variety of secondary literature, much of which was covered above.

Outline

The study is divided into four parts. Part I, consisting of this introduction and Chapter One, establishes the analytical framework for the remainder of the thesis. Part II, composed of Chapter Two, covers elements of the international and domestic context which would prove significant to the developments covered in the remainder of the thesis. Part III, consisting of Chapters Three and Four, begins the archival study by examining the emergence of wireless in Australia between 1901 and 1918, providing essential background to the material covered in subsequent chapters. Part IV, Chapters Five and Six, uses Multiple Streams Analysis to survey the process by which the idea of commissioning AWA to establish Australia's international wireless service was transformed from a proposal into policy. The study then concludes with a survey of the major themes surrounding policymaking in this case study.

Chapter One establishes the study's conceptual approach, designed to be able to explain the influence of both underlying structural factors and short-term, immediate factors on policymaking. It presents the need for any explanation of political outcomes to be grounded in an understanding of the relevant context, and the manner in which structural factors influence policymaking. It then outlines Multiple Streams Analysis as a general theory of policymaking that provides a suitable basis for identifying those factors that have bearing over policy outcomes.

Part II

Chapter Two provides a survey of three relevant pieces of structural context that proved influential to the constitution of Australia's international wireless service: the development of wireless internationally, Prime Ministerial power, and the rise of economic nationalism in post-war Australia. Each of these factors would come to influence the 1922 agreement in its own way. Because of its strategic implications, the international environment exerted strong

pressures on Australian policymakers to develop wireless for geopolitical reasons. The power of Hughes as Prime Minister and the rise of economic nationalism, on the other hand, help to explain the decision to jettison the existing paradigm of government enterprise and rely on AWA to construct the international service.

Part III

Chapter Three launches the archival study. It covers the period from the first appearance of wireless in Australia shortly after Federation to the outbreak of war in 1914. It demonstrates the emphasis on wireless as a means of international communication that was evident from the first appearance of the medium in Australia, and details the Commonwealth's aspiration for monopoly control of the new medium, along with the formation of AWA in 1913. As a prelude to the rest of the study, it covers the extension of the paradigm of government enterprise into wireless that would be overthrown in 1922.

Chapter Four deals with Australian wireless during the Great War. It documents the dismantling of the pre-war status quo in response to the crisis, such as through the emergence of cooperation between the Commonwealth and AWA in support of the war effort. It also reveals failed efforts from within the bureaucracy to bring AWA's activities under government control, the expansion of domestic wireless manufacturing operations, and the exceptions to the otherwise tight Commonwealth control over the medium granted to AWA executives. It demonstrates that the war years were a pivotal turning point that led to a recasting of the hitherto uneasy relationship between AWA and the Commonwealth, which would later contribute to the 1922 partnership between the two organisations.

Part IV

Chapter Five is the first of two chapters examining the policymaking process surrounding the establishment of an international wireless link between Australia and Britain through the lens of Multiple Streams Analysis. It documents the struggle to influence the direction of future policy that erupted shortly after the Armistice, and the emergence of two alternative conceptions of an 'Imperial scheme' of wireless – one the initiative of the British government and the other of private enterprise. It argues that AWA's activities during this period,

developing policy proposals, honing the arguments supporting them, and identifying the Prime Minister as a crucial supporter of its plans, would prove crucial when the subject later appeared on the agenda.

Chapter Six follows the subject of international wireless up to the enactment of a partnership between the Commonwealth and AWA to provide a direct wireless link with Britain. It follows the passage of AWA's scheme through the formal decision-making processes of Parliament, and demonstrates the importance of framing, timing, and immediate political circumstances to the agreement's enactment.

Finally, the study concludes by discussing its major findings, arguing that the 1922 agreement between AWA and the Commonwealth represented a combination of structural factors and short-term proximate factors brought together within a dynamic policymaking process.

Chapter 1 – Analytical Framework

This chapter outlines the analytical framework for the remainder of the study. The study presents a contextual analysis that relates the small-scale actions of individuals and groups to the wider environment in which they took place. Its examination of this field of policy places the actions of individuals and groups within a structural context. It does not seek to diminish the importance of individual and group actions to policymaking, but instead to establish the context within which individual actions took on significance through their relationship with an endogenous environment. It is not solely interested in how the 1922 agreement was brought about by individual initiative, but also in the creation of the conditions under which it became possible.[1] The study therefore assigns explanatory importance to both structural and agential factors.

The chapter begins by discussing the rationale for contextual analysis in political science. It then turns its attention towards Multiple Streams Analysis (hereafter MSA). MSA is presented as a generalisable means of conceptualising the process of policymaking, with a focus on the short-term and small-scale, which nevertheless retains a sensitivity to context and structural influences. The combination of contextual analysis with MSA enables the study to identify the interaction of underlying structural factors and short-term proximate factors in the constitution of Australia's international wireless service in the early 1920s.

Contextual Analysis

To engage in political analysis is, in essence, to provide explanations of political phenomena. For an explanation to be convincing, however, it must take the relevant context into consideration. Context is taken here to simply mean, in the words of Ben-Ami Scharfstein, "that which environs the object of our interest and helps by its relevance to explain it".[2] Of

---

[1] See C. Hay, *Political Analysis*, pp. 100-101.
[2] B. Scharfstein, *The Dilemma of Context*, New York University Press, New York, 1989, p. 1.

course, the question of which pieces of context are most relevant is dependent upon which particular phenomenon, out of the multitude that receive the attention of political scientists, is under investigation. The different segments within the *Oxford Handbook of Contextual Political Analysis* illustrate some of the range of contexts that can bear influence over political phenomena: philosophy, psychology, ideas, culture, history, place, population, and technology.[3] Because all of these 'matter' in their own way, the handbook's editors, Charles Tilly and Robert Goodin, are sceptical about the aspiration to formulate universal laws of politics that "hold good across time and place" associated with the positivist tradition.[4] Instead of pursuing universality, they argue that case studies must account for context to offer valid explanations:

> Inquiries into democratization and de-democratization, civil and international war, revolution and rebellion, nationalism, ethnic mobilization, political participation, parliamentary behaviour, and effective government all raise contextual questions: when, where, in what settings, on what premises, with what understandings of the processes under investigation? Viable answers to questions of this sort require serious attention to the contexts in which the crucial political processes operate…In response to each big question of political science, we reply 'It depends'. Valid answers depend on the context in which the political processes under study occur.[5]

Tilly and Goodin portray attempts to explain political developments divorced from their context as incomplete, employing the metaphor of context as pieces of a puzzle. Much as solving a puzzle is made easier by finding the right piece, identifying the right piece of contextual information can aid the task of political explanation.[6]

Tilly and Goodin are not alone in emphasising the importance of context for convincing explanation of political phenomena. Tulia Falleti and Julia Lynch argue that causation cannot

---

[3] R.E. Goodin and C. Tilly (eds), *The Oxford Handbook of Contextual Political Analysis*, Oxford University Press, Oxford, 2008.
[4] S. Lawson, "Political Studies and the Contextual Turn: A Methodological/Normative Critique" in *Political Studies*, Vol. 56, No. 3, 2008, p. 585.
[5] C. Tilly and R.E. Goodin, "It Depends" in R.E. Goodin and C. Tilly (eds), *The Oxford Handbook of Contextual Political Analysis*, p. 6.
[6] C. Tilly and R.E. Goodin, "It Depends", pp. 20-21.

be demonstrated without reference to the context in which it is located.[7] In relation to historical context, Ian Shapiro and Sonu Bedi caution that "politics is influenced by the contingencies of time and space that scholars ignore at their peril".[8] Similarly, Tilly urges those seeking to understand political phenomena to take history seriously, writing that "every significant political phenomenon lives in history, and requires historically grounded analysis for its explanation".[9] These claims are all manifestations of what Stephanie Lawson has dubbed the 'contextual turn' in political science; a pivot "away from an ahistorical, objectivist and materialist positivism towards more nuanced approaches to political studies" that stress contextual specificity.[10]

The question of context relates to the structure-agency debate, which represents one of the most challenging theoretical puzzles in social science.[11] At the heart of this debate is the extent to which political actors are free to exercise their own agency within the larger structures (context) they inhabit. Colin Hay describes the debate as centred on "the extent to which political conduct shapes and is shaped by political context".[12] On one side of the debate are those who advocate highly agential accounts which endow actors with considerable scope to determine the trajectory of events. On the other side are those thinkers who regard political actors as effectively without agency; their actions determined by structural constraints.[13] Neither of these extremes, whether structural or agential, can provide a realistic portrayal of politics. The most convincing expositions are those that grant the potential for agents to act autonomously, while acknowledging that context can place considerable constraints upon their actions by making some actions inconceivable or prohibitively costly.[14] As Karl Marx famously distilled the concept, "men make their own history, but not just as they please. They

---

[7] T. Falleti and J. Lynch, "Context and Causal Mechanisms in Political Analysis" in *Comparative Political Studies*, Vol. 42, No. 9, 2009.

[8] I. Shapiro and S. Bedi, "Introduction: Contingency's Challenge to Political Science" in I. Shapiro and S. Bedi (eds), *Political Contingency: Studying the Unexpected, the Accidental, and the Unforeseen*, New York University Press, New York, 2007, p. 12.

[9] C. Tilly, "Why and How History Matters" in R.E. Goodin and C. Tilly (eds), *The Oxford Handbook of Contextual Political Analysis*, p. 433.

[10] S. Lawson, "Political Studies and the Contextual Turn", p. 585.

[11] D. Marsh, "Meta-Theoretical Issues" in D. Marsh and G. Stoker (eds), *Theory and Methods in Political Science*, Third Edition, Palgrave Macmillan, Basingstoke, 2010, p. 212.

[12] C. Hay, *Political Analysis*, p. 89.

[13] C. Hay, *Political Analysis*, p. 89.

[14] H. Ward, "Structural Power – A Contradiction in Terms?" in *Political Studies*, Vol. 35, No. 4, 1987.

do not choose the circumstances for themselves, but have to work upon circumstances as they find them".[15]

John Gaddis, a historian interested in the difficult question of explaining causation, draws a distinction between *necessary* and *sufficient* causes.[16] When examining the cause of a particular outcome, the context is all that was *necessary* for it to happen – a potentially limitless number of things. He gives the example, borrowed from the French historian Marc Bloch, of a man falling off a cliff to his death. For this to have happened,

> The man had to have slipped; the path he was walking along had to have been built along the edge of a cliff; geological process had to have uplifted the mountain from the plain; the law of gravity had to have been in effect; and, Bloch might have added, the Big Bang had to have occurred.[17]

In this example, all but the first item in the list represent things that were necessary causes of the outcome under examination – the context. Had the man in question slipped and fallen in a lush meadow instead of from a cliffside path, it would not have had the same fatal result. Contextual factors – the location of the path, the existence of the cliff – were thereby *necessary*, but not *sufficient*, to produce the outcome. "For while context does not directly *cause* what happens", Gaddis writes, "it can certainly determine consequences".[18] The misstep, on the other hand, is sufficient to explain the man's fall, but, in isolation from the context in which the fall happened, cannot explain its consequences. A valid explanation of an event thereby must refer to a combination of what Gaddis labels necessary and sufficient causes.

However, one complication is immediately apparent in this conceptualisation. As the aforementioned list of necessary causes of the cliffside fatality reveals, the elements of context

---

[15] K. Marx, *The Eighteenth Brumaire of Louis Bonaparte*, George Allen and Unwin, London, 1943, p. 23.
[16] J. Gaddis, *The Landscape of History: How Historians Map the Past*, Oxford University Press, Oxford, 2002, p. 97.
[17] J. Gaddis, *The Landscape of History*, p. 94.
[18] J. Gaddis, *The Landscape of History*, p. 97. Emphasis in original.

that go into producing a given outcome are potentially infinite. It is therefore necessary for a scholar to identify those pieces of context that are of greatest relevance to the phenomenon at the centre of analysis.[19] This will vary in accordance with the subject at hand; an answer to the question of which pieces of context will be relevant is itself contextual.

The analysis presented in this thesis endorses the view associated with the 'contextual turn' that context is an indispensable element of explanation in the realm of politics. It places a strong emphasis on context providing the setting for individual and group action. As Paul Cairney describes, this is a prominent theme in public policy literature. Those involved in policymaking are not endowed with complete autonomy, but operate within an environment that may "represent a source of pressure or a direct influence" on their actions.[20] Policymaking can be influenced by a wide range of contextual factors – historic-geographic, demographic, economic, social, technological, institutional – depending on the policy area in question.[21] Akin to Gaddis' notion of necessary causes, such pieces of structural context represent the opening of a "funnel of causality" that feeds into policymaking; creating the conditions under which individual and group action takes place.[22]

This thesis concentrates on two particular structural influences that would influence Australian wireless policy in the early 1920s: the international environment and the domestic impact of the Great War. In relation to the former, there are compelling reasons to examine international conditions in order to understand policy decisions made within a given country. In a famous 1978 article, Peter Gourevitch stresses the considerable effects that international circumstances – particularly the global state system and the global economy – can have on domestic policy choices, along with other aspects of domestic politics.[23] Because no country exists in isolation from others, and is instead one component of a larger international system, restricting analysis to internal factors threatens to overlook the ways in which domestic politics

---

[19] J. Gaddis, *The Landscape of History*, pp. 95-96.
[20] P. Cairney, *Understanding Public Policy*, p. 111.
[21] P. Cairney, *Understanding Public Policy*, pp. 113-114.
[22] P. Cairney, *Understanding Public Policy*, pp. 114-115; R.I. Hofferbert, *The Study of Public Policy*, The Bobbs-Merrill Company, New York, 1974, pp. 228-230.
[23] P. Gourevitch, "The second image reversed: the international sources of domestic politics" in *International Organization*, Vol. 32, No. 4, 1978.

are influenced by that "country's position in the global military and economic orders".[24] Furthermore, though he emphasises the importance of geopolitics and the world economy – "war and trade" – as the principal international forces, Gourevitch also notes the capacity for ideas and ideologies to cross national boundaries and affect a country's domestic politics.[25] The influence of the international system is therefore not limited to the material, but also encompasses the ideational.

The influence of the international system has been of particular importance in relation to Australia. Australia's very origin, from the beginning of British colonisation in the late eighteenth century, came from the decision of a major international power to increase its territorial possessions. From that point, and for most of its subsequent history, Australia's domestic circumstances were greatly influenced by its place within the British Empire, and the Empire's place within the wider international system. In the area of political economy this point has been well-established by scholars. For instance, though the continent was endowed with substantial natural resources, Australia's ability to exploit that endowment for the purpose of economic development was shaped by overseas demand for its resources, as well as the importation of the technology, capital and labour required to extract them. As a result, Australia's economic fortunes were "tied closely to the resource interests of [the international] system, whether through financing development or providing markets".[26] Although the relative importance of different overseas countries has shifted over time, with Britain becoming less important than the United States and East Asia, the Australian economy's dependence on global economic forces has remained a persistent theme.[27] This has led Stuart Harris to conclude that while "Australia's influence on the international system, though not negligible, has been small", the influence of the international system upon Australia has been "overwhelming".[28] Supporting Gourevitch's observations, the global economy's importance to Australia influenced policy decisions in a range of areas, such as tariffs, wages and

---

[24] I. Katznelson, "Rewriting the Epic of America" in I. Katznelson and M. Shefter (eds), *Shaped by War and Trade: International Influences on American Political Development*, Princeton University Press, Princeton, 2002, p. 4. The collection of essays in this book explores Gourevitch's ideas concerning the impact of international factors on domestic politics in the United States.
[25] P. Gourevitch, "The second image reversed", p. 883.
[26] S. Harris, "Resources, development and the international system" in B. Head (ed.), *The Politics of Development in Australia*, Allen and Unwin, Sydney, 1986, p. 72.
[27] B. Head, "The Australian political economy: introduction" in B. Head (ed.), *State and Economy in Australia*, Oxford University Press, Melbourne, 1983, pp. 4-5.
[28] S. Harris, "Resources, development and the international system", p. 73.

immigration, for the purpose of shaping "the integration of Australia in the international economy".[29]

The capacity for international developments to influence domestic policy decisions informs the following study. There are a number of respects in which the development of Australian wireless was shaped by international factors. Most fundamental of these was with regard to the scientific and technological breakthroughs that led to the medium's invention in the first place. As a country in the early throes of industrialisation, far removed from the centres of innovation in Europe and the United States, Australia's adoption of wireless was conditioned by developments overseas from the first moment in which the medium appeared on its shores. Along with the initial creation of wireless, other dimensions of international influence included the commercial and defence implications of the medium, which in turn fed into competition between great powers to control international communications. As Headrick describes, wireless was born into a world characterised by great power rivalry over communication networks, and its early development was inseparable from this fact.[30] It was within this global context, with Australia as an isolated outpost of the British Empire, that the formative policy decisions of the Commonwealth government concerning wireless under consideration in this study were made. The empirical study demonstrates that international considerations were a constant influence on the policy decisions made by Australian actors.

One implication stemming from the influence of the international environment is that war can make a strong impact on the contents of domestic policy. "War is the greatest of all agents of change", George Orwell declared, "it speeds up all processes, wipes out minor distinctions, brings realities to the surface".[31] Though public policy literature is replete with mention of the capacity for events to influence policymaking, "wars may offer the best case imaginable" for international events that can have tremendous consequences on the shape of domestic policy.[32] David Mayhew's research has uncovered strong connections between American participation in wars and the enactment of "major policy innovations" in fields as far-removed

[29] B. Dyster and D. Meredith, *Australia in the Global Economy: Continuity and Change*, Second Edition, Cambridge University Press, Melbourne, 2012, p. 19.
[30] Chapter 7 in D. Headrick, *The Invisible Weapon*.
[31] G. Orwell, *The Lion and the Unicorn: Socialism and the English Genius*, Penguin, Ringwood, Victoria, 1982, p. 102.
[32] D. Mayhew, "Wars and American Politics" in *Perspectives on Politics*, Vol. 3, No. 3, 2005, p. 473.

as taxes, suffrage, and race relations.[33] Referring to a series of American conflicts from the War of 1812 to the Second World War, Mayhew collates a lengthy list of significant policy changes that were caused by war-related circumstances.[34]

Just as significant for the purposes of this study is the capacity for war to alter the balance of power within the domestic political system. A wide literature exists on the impact of major wars on the increasing power of the American presidency in the early twentieth century.[35] It is "an axiom of political science", declared Clinton Rossiter in 1956, that "great emergencies…bring an increase in executive power and prestige".[36] In a similar vein, Robert Higgs' *Crisis and Leviathan* documents the great influence that wars had upon the expansion of American government in the twentieth century.[37]

Adopting these insights, the study highlights the considerable impact of the Great War upon policymaking in relation to Australian wireless communications, and demonstrates that the conflict was a major structural influence on the development of policy in the early 1920s. Chapter Four outlines the direct impact of the conflict upon the development of the sector. Preceding this, Chapter Two documents the tremendous impact that the Great War had on the domestic policymaking environment, through the expansion of Prime Ministerial power, and the emergence of economic nationalism. These proved to be vital contextual factors contributing to the passage and shape of the 1922 agreement. Through the combination of its impact on the wider policymaking environment, and its specific effects on the Australian wireless sector, the thesis demonstrates that the Great War was an instrumental influence over the Commonwealth government decision to partner with AWA for the purposes of establishing Australia's international wireless service.

---

[33] D. Mayhew, "Events as Causes: The Case of American Politics" in I. Shapiro and S. Bedi (eds), *Political Contingency*, pp. 113-115.

[34] D. Mayhew, "Wars and American Politics", pp. 475-482.

[35] See the literature surveyed in W.G. Howell and T. Johnson, "War's Contributions to Presidential Power" in G.C. Edwards III and W.G. Howell (eds), *The Oxford Handbook of the American Presidency*, Oxford University Press, Oxford, 2009; W.G. Howell, "Presidential Power in War" in *Annual Review of Political Science*, Vol. 14, 2011.

[36] C. Rossiter, *The American Presidency*, Hamish Hamilton, London, 1956, p. 64.

[37] R. Higgs, *Crisis and Leviathan: Critical Episodes in the Growth of American Government*, Oxford University Press, Oxford, 1987.

Multiple Streams Analysis and the Policymaking Process

The study utilises MSA as a means to conceptualise the process of policymaking in a manner compatible with contextual analysis. An investigation of the establishment of a new communications sector, such as this study, must grapple with the concept of policymaking. Because the emergence of new forms of technology raises questions about how they will be used, "whether, for example, they will primarily be military or civilian, governmental or private, or non-profit or commercial", the constitutive decisions relating to new industries are resolved in the arena of public policy.[38] In order to explain why some choices prevail over others, it is necessary to understand how policy decisions are made.

This represents a significant theoretical challenge. In opposition to the pluralist conception that underpins Curnow's study, which links the content of policy decisions to the advocacy of interest groups, it is now generally accepted that the formation of public policy is characterised by great complexity, with interest group pressure representing only one explanatory factor.[39] Recent theoretical advances have cut through the "bewildering complexity" of surrounding phenomena to identify "a smaller set of critical relationships" which can be generalised into abstract theories of a policymaking process.[40]

MSA – first developed in John Kingdon's 1984 book *Agendas, Alternatives, and Public Policies* – presents a generalisable theory of policymaking which was based upon a detailed study of policymaking in the American federal health and transportation sectors in the late 1970s.[41] Since its initial development, the model has been widely adopted by public policy scholars to examine policymaking in other national, subnational and international contexts. This has been possible because of MSA's 'universal' elements that have relevance to any consideration of

---

[38] P. Starr, *The Creation of the Media*, p. 6.
[39] P. Sabatier, "The Need for Better Theories" in P. Sabatier (ed.), *Theories of the Policy Process*, Second Edition, Westview Press, Boulder, 2007, pp. 3-5.
[40] P. Sabatier, "The Need for Better Theories", p. 5.
[41] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, Second Edition, Longman, New York, 2003.

policymaking.[42] MSA was chosen for this study because of this flexibility and suitability for analyses of policymaking in a variety of contexts.

MSA presents a systemic conception of policymaking, modelling the way in which policy decisions emerge from complex systems.[43] Its 'universal' features are derived from organisation theory's 'garbage can' model of choice, wherein decisions are made in neither a rational nor linear manner.[44] Instead, "choice is conceptualized as a garbage can into which participants, who drift in and out of decisions, dump largely unrelated problems and solutions. No one person controls the process of choice, and fluctuating attendance, opportunities, and attention give the process highly dynamic and interactive qualities".[45] As a consequence of the system's opacity and uncertainty, policymaking occurs under conditions of ambiguity. The prevalence of ambiguity leaves considerable scope for actors to frame policy questions in different ways, because in regard to any field of policy there are many ways that an issue can be understood. The framing of policy questions is a political endeavour wherein actors exercise power to manipulate the ways in which the matter is principally understood for the purpose of influencing decisions.[46]

There are five key features of MSA: the problem stream, the policy stream, the politics stream, policy windows, and policy entrepreneurs. The three streams of problems, policies, and politics – from which the name of the approach is derived – are each depicted as flowing independently of the other two. Each has "a life of its own", and they are "largely governed by different forces, different considerations, and different styles".[47] When these streams converge, usually with the assistance of policy entrepreneurs, a policy window opens and creates the potential for policy change to be enacted.

---

[42] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach: What Is the Empirical Impact of this Universal Theory?" in *The Policy Studies Journal*, Vol. 44, No. 1, 2016.

[43] N. Zahariadis, "The Multiple Streams Framework: Structure, Limitations, Prospects" in P. Sabatier (ed.), *Theories of the Policy Process*, pp. 65-66.

[44] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", p. 39; J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 84-89.

[45] N. Zahariadis, "The Multiple Streams Framework", p. 66.

[46] P. Cairney and N. Zahariadis, "Multiple streams analysis: A flexible metaphor presents an opportunity to operationalize agenda setting processes" in N. Zahariadis (ed.), *Handbook of Public Policy Agenda-Setting*, Edward Elgar, Forthcoming, p. 4; N. Zahariadis, "The Multiple Streams Framework", pp. 66-70.

[47] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 86-88.

The Problem Stream

The problem stream refers to those questions of policy which draw the attention of actors within the system.[48] The importance of this stems from another 'universal' aspect of MSA: the fact that policymakers' attention is finite and that at any time they could potentially consider an almost innumerable number of subjects. As a result there is competition between problems for the attention of policymakers, and their attention can abruptly shift to new and different subjects.[49] Problems can be highlighted because of statistical indicators or other types of feedback that demonstrate problems with existing policy, or by highly-visible 'focusing events' that concentrate the attention of policymakers upon them and "bowl over everything standing in the way of prominence on the agenda".[50] However, a focusing event may need to be seen as indicative of a widespread problem, or presaging future troubles, to receive attention in a crowded field.[51] The problem stream also contains a prominent "perceptual, interpretive element" relating to how problems are defined by participants in the policymaking process.[52] Because of the pervasive ambiguity of the policymaking process, problems can be framed by actors in a variety of ways. The framing of problems, which involves the values, priorities, and goals of those involved, is a political exercise. This will often involve framing a problem in such a way as to promote a 'solution' that already exists. In some cases, problems may not receive the attention of decision-makers unless there is a ready-made policy 'solution' available.[53] Those involved in framing problems are not always reacting to external forces, but can play a proactive role by taking up the mantle of an issue and framing it as a problem which requires a particular policy response.

The Policy Stream

The policy stream refers to the development of policy proposals.[54] It is the domain of 'policy communities' – agglomerations of specialists in the field either within the government, such as

---

[48] In addition to chapter 5 in J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, the problem stream is summarised in N. Zahariadis, "The Multiple Streams Framework", pp. 70-72; P. Cairney, *Understanding Public Policy*, pp. 233-234; P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", p. 40; P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 5.

[49] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", pp. 39-40.

[50] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 96.

[51] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 98-100.

[52] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 110.

[53] P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 5

[54] In addition to chapter 6 in J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, the policy stream is summarised in N. Zahariadis, "The Multiple Streams Framework", pp. 72-73; P. Cairney, *Understanding*

bureaucrats, or without, such as those attached to interest groups.[55] It is within these communities that policy ideas are developed, discussed, and debated. Over time the number of proposals within a given community will be winnowed down through criteria such as the opinions of other specialists and their compatibility with prevailing values. This leads to a shortlist of policy ideas that may receive the attention of decision-makers.[56] However, the structure of policy communities is an important factor influencing the proposals that will emerge from them. Fractured policy communities – those in which specialists in a field of policy are not in close contact – are more likely to produce radical revisions to existing policies. In contrast, integrated communities are more likely to hold on to existing paradigms.[57] Unlike the problem stream, which is characterised by sudden shifts in the attention of actors, the policy stream is typically slow-moving. It also proceeds independently from the other streams. As a result of these factors, policy proposals – though they will often be touted as the 'solution' to problems that come to the attention of policymakers – are often designed to achieve separate goals. While some are sincere attempts to solve a problem, values or personal advantages, such as pecuniary or career interests, can also serve as powerful motivators for those involved.[58] At any given time in a policy community there would be proposals formulated and ready for enactment. Policy entrepreneurs, discussed below, use developments in the problem stream to advocate their preferred 'solutions' in a given field of policy. MSA highlights the notion of "solutions chasing problems", whereby policy communities will have developed policy proposals and seek problems for which their proposals can be presented as solutions.[59]

The Politics Stream

The politics stream refers to the political environment within which formal decisions over policy are made.[60] Like the others, the politics stream operates independently, and is in a

---

Public Policy, pp. 234-236; P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", p. 40; P. Cairney and N. Zahariadis, "Multiple streams analysis", pp. 6-7.

[55] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 117-121.

[56] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 127-139.

[57] N. Zahariadis, "The Multiple Streams Framework", pp. 76-77.

[58] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 122-124.

[59] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", p. 40; P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 6.

[60] In addition to chapter 7 in J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, the politics stream is summarised in N. Zahariadis, "The Multiple Streams Framework", p. 73; P. Cairney, *Understanding Public Policy*, p. 236; P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", p. 40; P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 7.

constant state of flux as its different components shift. It concerns the receptivity of actors within the political system to policy proposals, based on such factors as the 'national mood', the advocacy of pressure groups, and turnover such as through the election of a new government. The 'national mood', referring to the ephemeral array of sentiments prevalent at the time – "the notion that a rather large number of people out in the country are thinking along common lines" – can be a significant influence on the behaviour of elected officials, with the result that policies aligned with the prevailing mood are more likely to receive political support than ideas which are at odds with it.[61] The activities of pressure groups can also be a strong current in the political stream, as politicians consider the strength of opposition or support for a proposal in their approach to the policy in question.[62] Finally, turnover in the political system can create opportunities for some proposals while quashing others – "in many cases, a change of government provides both motive and opportunity".[63] New politicians coming to power may bring their own motivations to achieve a particular change in policy, while the replacement of old politicians may remove obstacles to a 'solution' that had previously been stymied.

Policy Windows

Policy windows are short-lived opportunities to enact policy change.[64] They open when the three streams converge: a problem is receiving attention, a 'solution' to it is available, and political circumstances are favourable.[65] A window can open as a result of changes in any of the streams. For instance, a new problem may manifest to which a ready-made 'solution' can be attached, development of a new policy may be a remedy for an already-existing problem, or the election of a new government can provide opportunities to secure the passage of certain policies opposed by the previous one. In Kingdon's words, "advocates lie in wait in and around government with their solutions at hand, waiting for problems to float by to which they can attach their solutions, waiting for a development in the political stream they can use to their advantage".[66] Windows are usually only open for short periods, as conditions in one of

---

[61] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 146.
[62] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, pp. 150-153.
[63] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach", p. 40.
[64] In addition to chapter 8 in J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, policy windows are summarised in N. Zahariadis, "The Multiple Streams Framework", pp. 73-74; P. Cairney, *Understanding Public Policy*, pp. 237-238; P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 7.
[65] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 88.
[66] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 165.

the streams – particularly the swift-moving problem stream – can shift and thereby end the opportunity that had existed. Furthermore, the opening of a window does not guarantee any change. The final outcome depends upon the specific array and interaction of elements in that particular policy field at that particular point in time. As a consequence, policy change "requires a degree of, if not serendipity, at least a confluence of events and actions in a short space of time".[67]

Policy Entrepreneurs

Policy entrepreneurs are actors within the system who play the critical role of joining the streams to promote a change in policy.[68] When a policy window opens, policy entrepreneurs must capitalise on the opportunity before it disappears. As advocates of given 'solutions', they act to frame their preferred proposals as remedies to problems, and to secure political support for them; "they hook solutions to problems, proposals to political momentum, and political events to policy problems...thus linking problem, policy, and politics".[69] The ability of a policy entrepreneur to accomplish their goal is increased by factors such as their access to political decision-makers, the resources they can dedicate to advocacy, and their capacity to persuasively frame the discussion in their preferred terms.[70] 'Softening up' is another important task performed by policy entrepreneurs. This refers to efforts to build support for a preferred proposal in anticipation of a future opportunity to push for its adoption – "without this preliminary work, a proposal sprung even at a propitious time is likely to fall on deaf ears".[71] Through these roles, policy entrepreneurs are vital to the policymaking process. Though they operate as individuals within complex systems under conditions of ambiguity, and therefore cannot exercise complete control over the policy outcome, in any given case study "one can nearly always pinpoint a particular person, or at most a few persons, who were central in moving a subject up on the agenda and into position for enactment".[72]

---

[67] P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 7.
[68] In addition to pp. 122-124, 179-183 in J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, policy entrepreneurs are summarised in N. Zahariadis, "The Multiple Streams Framework", p. 74.
[69] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 182.
[70] N. Zahariadis, "The Multiple Streams Framework", p. 74.
[71] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 128.
[72] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 180.

MSA depicts policymaking as a process characterised by the fluid interaction of different elements within a complex system. Its emphasis on the importance of timing to outcomes, incorporated within the notion of policy windows, differentiates it from more straightforward understandings of policymaking that seek to locate the origins of policy in the actions of individuals and groups. Though individual actions retain an importance in MSA, through the vital role played by policy entrepreneurs, they take place within a system marked by complexity, flux, and "residual randomness".[73] Because of these factors, no actor can be said to control the policymaking process. MSA also eschews tidy notions of linear progression in favour of messiness and contingency, with a strong emphasis on the importance of timing to outcomes. "Events do not proceed neatly in stages, steps or phases", Kingdon concludes, "instead [they are the product of] independent streams that flow through the system all at once, each with a life of its own…many things happen separately in each case, and become coupled at critical points".[74]

As a result MSA places a strong emphasis on the contingent nature of policymaking. Policy windows often open in response to unpredictable events, and typically only remain open for brief periods before closing again. For this reason they only provide short-lived opportunities for policy entrepreneurs to push their preferred 'solutions' onto the government's agenda.[75] In this sense, MSA is a general model of policymaking that incorporates contingency into its systematic approach through the notion of probability.[76] Opportunities to enact changes in policy are not always capitalised upon, and changes in policy are never inevitable, but the probability that a change will be implemented increases when "people pay high attention to a problem, a viable solution exists, and policymakers have the motive and opportunity to select it".[77] Nevertheless, the enactment of a change still requires the skills of policy entrepreneurs to connect the streams.[78]

---

[73] N. Zahariadis, "The Multiple Streams Framework", p. 66.

[74] J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, p. 206.

[75] P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 18.

[76] For discussion of the tension between contingency and the uncovering of generalisable patterns in political science see C. Parsons, *How to Map Arguments in Political Science*, Oxford University Press, Oxford, 2007, pp. 31-36; I. Shapiro and S. Bedi, "Introduction: Contingency's Challenge to Political Science".

[77] P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 1.

[78] N. Zahariadis, "The Multiple Streams Framework", pp. 69-74.

As a conceptual approach MSA is, to a large degree, concerned with the small-scale. It focuses on the actions of a small number of individual policy entrepreneurs, operating on short time horizons, as important explanatory factors in how policy decisions emerge from a system. In this sense there are strong agential elements to the approach. However, through its incorporation of "long term, continuous processes going on behind the scenes" of individual actions, within the independent streams, it situates its understanding of individual agency within the context of a wider system of decision-making.[79] Its conceptualisation of policymaking is one in which no individual actor has the capacity to control the process, and in which policymaking in a particular sector can bear the influence of external developments. A sector's policies are therefore seen as not only the product of its own particular characteristics, but also broader influences.[80] MSA's approach is one of structured agency, in which individual actions are irremovable from a surrounding structural context.[81]

MSA provides the analytical foundation upon which Part IV of this study is based. Its identification of generalisable regularities in the policymaking process, and its proven utility for case studies in other contexts, make it well-suited for those chapters' contents.[82] This approach is in keeping with the urging of Tilly and Goodin for the adoption of a "mixed strategy" that retains the possibility of generalisable explanations of political phenomena that are tempered and "sensitized to the effects of context".[83] It is based on the notion that the formulation of public policy is an identifiable process, within which it is possible to discern patterns and regularities, influenced by its location within a structural context. The structural context has the capacity to influence policy outcomes through its effects on the inputs that feed into the process, including upon the cast and relative power of the actors involved, and the national traditions they inhabit.

The study's use of MSA is restricted to the specific subject of the constitution of Australia's international wireless service in the post-war period, covered in Part IV. In keeping with the approach laid out in this chapter, it is preceded by an outline of the relevant international and domestic structural contexts in Part II, and an examination of Commonwealth government

---

[79] P. Cairney and N. Zahariadis, "Multiple streams analysis", p. 1.
[80] N. Zahariadis, "The Multiple Streams Framework", p. 84.
[81] P. Cairney and N. Zahariadis, "Multiple streams analysis", pp. 19-20.
[82] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach".
[83] C. Tilly and R.E. Goodin, "It Depends", p. 9.

wireless policy from the beginning of the twentieth century to the end of the Great War in Part III. In tandem, these provide vital background to the analysis of policymaking between 1919 and 1922 that is presented through the lens of MSA in Part IV.

The contents of Part IV demonstrate the usefulness of the problem, policy, and politics streams, policy windows, and policy entrepreneurs as analytical concepts that help to explain why the 1922 agreement between AWA and the Commonwealth government came about in the way that it did. This suggests that along with applications in other national, subnational, and international contexts, MSA's generalisability is strong enough to warrant its further application to other historical case studies.

The Task Ahead

This chapter has outlined the analytical approach that informs the remainder of the study. Part II of the study, which follows, uses the insights of contextual analysis to consider some of the international and domestic structural considerations that came to influence the development of Australian international wireless communications policy in the early 1920s. Part III then examines the prior history of Australian wireless policy between 1901 and 1918, demonstrating the manner in which the Great War proved a vital episode in the development of the sector preceding the paradigmatic shift embodied within the 1922 agreement.

Part II – Context

Chapter 2 – International and Domestic Context

It is not possible to understand the initial history of wireless in Australia purely by reference to domestic circumstances, nor without understanding critical developments external to the sector that came to influence the policymaking process in the early 1920s. Australian wireless did not develop in isolation, but was inextricably linked to the global expansion of the medium. It is therefore necessary to situate the evolution of wireless in Australia within the context of the medium's adoption around the world. Similarly, policymaking in the field was affected by broader changes in the domestic political environment that had no meaningful connection with wireless communication, but would come to exert influence over policymaking in the period covered in Part IV of the study. These were an expansion in Prime Ministerial power, and changes in the Australian tradition of development. The task of this chapter is to outline these major pieces of structural context that would, in their own ways, come to influence the course of wireless development in Australia.

The Nature of International Influence on Australian Wireless

There were continuous international influences on the development of wireless, and the formation of government policy towards wireless, in Australia. Australian developments were inseparable from the international environment, and the decisions of Australian policymakers were, to a great degree, influenced by Australia's position in the British Empire, and the Empire's place in the wider geopolitical setting. This influence came in different forms. Most fundamentally, Australia, a small and isolated country far from the centres of technological innovation in Europe and North America, was dependent upon the transfer of technology first invented overseas.[1] Related to this was the means by which Australians were pressured to adopt wireless: through the advocacy of large foreign organisations which had already embraced the medium for their own purposes, and which sought Australian adoption of wireless in alignment with those purposes. The earliest years of wireless saw Australian policymakers responding to policy proposals of international origin, though the years covered by this study saw a steady increase in domestic organisation and policy development.

---

[1] See J. Todd, *Colonial Technology: Science and the Transfer of Innovation to Australia*, Cambridge University Press, Melbourne, 1995.

Nevertheless, both policymaking and the development of the industry in Australia were reactive to international circumstances throughout the entire period covered by this study.

The international environment was also an important influence over Australian wireless policy because of the medium's weighty implications for geopolitics. As covered below, the initial development of wireless at the dawn of the twentieth century quickly led to tension between different applications of the medium. The most fundamental cleavage was between wireless as a commercial asset – a means of profiting through the provision of point-to-point messaging services – and as a strategic asset – a means of coordinating hitherto uncontactable naval forces and a 'tool of empire'.[2] The early history of wireless was marked by a conflict between commercial and political priorities for the medium.

In this conflict, Australian policymakers, like their overseas brethren, decisively favoured the medium's strategic applications. This was tied to Australia's position in the British Empire, and her reliance upon Britain for the vitals of trade and defence. At the beginning of the wireless age, Australia's existing "lines of communication were uniformly to Britain, whether through the cable or the shipping routes".[3] The coming of wireless presented the opportunity to strengthen Australia's communicative bonds with the Imperial centre, and to improve communicability with the Royal Navy, upon which Australia depended for the defence of its vulnerable sea lanes.[4] In the words of one contemporary journalist shortly after the coming of war in 1914: "the British fleet is our all in all. Its destruction means Australia's destruction, the ruin of our trade and institutions".[5] This fundamental concern, of highest priority for national survival in a potentially hostile region, exerted a powerful and constant influence over Australian policymaking in relation to wireless.

---

[2] See D. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*, Oxford University Press, Oxford, 1981.

[3] S. Alomes, *A Nation at Last? The changing character of Australian nationalism 1880-1988*, Angus and Robertson, North Ryde, NSW, 1988, p. 76.

[4] G. Osborne and G. Lewis, *Communication Traditions in 20th-century Australia*, p. 15.

[5] Quoted in W. Gammage, *The Broken Years: Soldiers in the Great War*, Penguin, Ringwood, Victoria, 1975, p. 5.

Because of Australia's position in the British Empire, and the need to keep abreast of British plans for wireless as a component of its global communications network, the autonomy of Australian policymakers in relation to international wireless was restricted. Australia did not have the option of 'going it alone' in the area – it was necessary to account for British plans and preferences. As a result of this structural imperative, wireless telegraphy's emergence as an element of geopolitical rivalry between great powers was a critical influence over the development of the medium in Australia.

International Communications and Australian Security

Much as Australian wireless was tied to developments elsewhere in the world, so was the general history of the medium irremovable from geopolitics. The potential that wireless offered for improving long-distance communication, with resultant effects upon trade and colonial administration, in addition to the military benefits it offered, first for naval vessels and later for armies and air forces, made it a medium of global importance. As Headrick explains, this entwined the development of wireless with international politics from its very inception, making rivalries between great powers a central influence on its development.[6] As a result, the development of wireless in particular countries was bound up with those countries' foreign relations and positions in the world – a subject of great interest for governments in an age of great power rivalries.

Wireless was not the first form of long-distance electrical communication – it was born into a world wherein rapid trans-oceanic communication was available by way of submarine telegraph cables. Submarine cables represented the first truly global communications network, which had two prominent features: the preponderance of private enterprise, and British dominance.[7] The initial development of the cable network was spearheaded by entrepreneurs relying on private investment who intended to establish cable services as for-profit ventures, with demand for services concentrated in the news and trading businesses.[8] Cable-laying was therefore largely driven by commercial priorities; along those routes which offered the

---

[6] D. Headrick, *The Invisible Weapon*, p. 116.
[7] D. Headrick, *The Invisible Weapon*, p. 38; P. McMahon, "Early Electrical Communications Technology and Structural Change in the International Political Economy", pp. 381-382.
[8] D. Headrick and P. Griset, "Submarine Telegraph Cables", p. 551.

greatest potential return on investment. The speed and regularity of cable communication brought considerable economic benefits to the regions it connected, smoothing the operation of financial markets, and promoting long-distance trade and investment.[9] In 1892, by which time all inhabited regions of the globe had been connected to the cable network, 90 percent of the world's cables were controlled by private enterprise, with nearly half owned by the Eastern and Associated Companies.[10]

The world's cables were also overwhelmingly British-owned. This was, to a great degree, a product of Britain's advantages in maritime strength, combined with its financial, technological, and industrial sophistication. It also reflected the fact that during the period of cable expansion in the mid/late nineteenth century, Britain remained at peace. In contrast, its great power rivals – France, Germany, and the United States – were preoccupied with major wars. By the time that other powers began to concern themselves with the field, the British cable network already spanned the globe "and had more than enough capacity to handle whatever traffic other nations' traders, shippers, and colonial officials could generate. Hence, Britain had the field to itself in the crucial formative years".[11]

However, the last two decades of the nineteenth century saw a gradual, yet vital, shift in governments' perception of, and policy towards, cables. The report of a British Royal Commission on the subject of Imperial defence in 1881 was a critical development in this transition. The report identified cables as vital strategic assets in the event of any future war.[12] From this point commercial considerations were relegated to secondary concerns in relation to cables, which increasingly became the focus of "those who were concerned with the unity and security of the empire, who could perceive advantages in it entirely unconnected with business and commerce".[13] The British government's realisation of cables' strategic importance was followed by other great powers. Whereas rival European powers had previously relied upon British cables for their international communication services, a series of incidents in the late

---

[9] R. Wenzlhuemer, *Connecting the Nineteenth-Century World: The Telegraph and Globalization*, Cambridge University Press, Cambridge, 2013, pp. 85-88.

[10] D. Headrick, *The Invisible Weapon*, pp. 38-39; R. Wenzlhuemer, *Connecting the Nineteenth-Century World*, p. 119.

[11] D. Headrick and P. Griset, "Submarine Telegraph Cables", p. 553.

[12] D. Headrick, *The Invisible Weapon*, p. 77.

[13] P. Kennedy, "Imperial cable communications and strategy, 1870-1914" in *The English Historical Review*, Vol. 86, No. 341, 1971, p. 730.

1890s confirmed the geopolitical significance of cables, and the associated risks of their continued dependence on Britain. The Spanish-American War of 1898 saw the United States cut a number of British-owned cables connecting Cuba with the outside world. This confirmed that, despite British neutrality in the conflict, cables would be a target in any future war between great powers. In the same year, a dispute between British and French colonial forces in East Africa – the 'Fashoda Incident' – saw Britain refuse to give permission for French officials to use its cable to communicate with Paris, while its own were able to contact London within a few hours. Most significantly, the outbreak of the Boer War in 1899 saw Britain institute restrictions on all foreign traffic on its cables connecting South Africa, despite the complaints of the French and Germans that this damaged their commercial interests in adjacent colonies.[14] As Headrick and Griset summarise, "by the turn of the century, it had become clear that all other countries' vital communications were at risk as long as Britain ruled the waves and owned the cables".[15]

As a result, the first years of the twentieth century saw a considerable expansion of the world's cable network as rival powers began laying their own cables to communicate with their overseas colonies and end their reliance upon Britain. This was driven by geopolitical imperatives; commercial profit was a subsidiary concern compared to the potential strategic benefits from escaping British control.[16] Despite newfound competition from France, Germany and the United States, by the coming of war in 1914 Britain remained the dominant nation in the field of cable communication thanks to its pioneering efforts decades earlier.[17] This competition, entwined with increased awareness of the strategic implications of trans-oceanic communication, had also led Britain to pivot away from private enterprise and towards "government priorities about colonial possessions, wars, and strategic interests" in its stewardship of the medium.[18] New cables were laid along routes that were unremunerative, but offered strategic benefits. By the eve of the Great War in 1914, submarine cables had become enmeshed with geopolitics, "no longer just a business or a public utility" but instead "one of the pillars of national security".[19]

---

[14] D. Headrick, *The Invisible Weapon*, pp. 80-89.
[15] D. Headrick and P. Griset, "Submarine Telegraph Cables", pp. 563-564.
[16] See chapter 6 in D. Headrick, *The Invisible Weapon*.
[17] P. Kennedy, "Imperial cable communications and strategy", p. 748.
[18] J. Hills, *The Struggle for Control of Global Communication*, p. 89.
[19] D. Headrick, *The Invisible Weapon*, p. 111.

When wireless was born in the 1890s, it was into a world in which governments had established strong interests in controlling communications. Because of this, the development of wireless quickly became embroiled with great power rivalries – a factor which exercised a considerable influence over the course of the medium's development. The conclusions that governments had drawn about the strategic utility of cables in the late nineteenth century carried over to wireless telegraphy, which saw government priorities obstruct the unfettered exploitation of the new medium by private enterprise.

The Italian inventor and entrepreneur Guglielmo Marconi was the central figure in the early history of wireless, and the eponymous company he founded became one of the most important organisations in the new field.[20] Having constructed a prototype wireless apparatus at his family home in Italy, the young Marconi initially offered his device to the Italian government but was turned down.[21] This was to have far-reaching consequences. In 1896 Marconi sailed to his mother's home country, Britain, for the purpose of further developing his invention.[22] As a result of this decision, the infant medium first took root in the country that was already dominant in the field of communications. Shortly after arriving in London, Marconi applied for the first patent covering wireless telegraphy, and, using connections on his mother's side of the family, arranged to meet with the Chief Engineer of the British Postmaster-General's Department, William Preece.[23]

Preece's willingness to meet the young inventor reveals an interest in wireless within the British government from the outset. Preece, who was in charge of Britain's land telegraph system, had a keen interest in the development of the new technology and had been experimenting himself, though less successfully than Marconi, with a form of wireless telegraphy.[24] After a small-scale demonstration of Marconi's device before departmental officials, Preece became a strong advocate for the new invention and arranged for

---

[20] A new biography of Marconi was published as this study was being completed. See M. Raboy, *Marconi: The Man Who Networked the World*, Oxford University Press, Oxford, 2016.
[21] J. Bray, *Innovation and the Communications Revolution: from the Victorian pioneers to broadband internet*, The Institution of Electrical Engineers, London, 2002, pp. 66-67.
[22] W. Baker, *A History of the Marconi Company*, Methuen and Co. Ltd, London, 1970, p. 28.
[23] S.G. Sturmey, *The Economic Development of Radio*, pp. 16-17.
[24] D. Headrick, *The Invisible Weapon*, p. 117.

governmental support for its further development.[25] Officers of the Royal Navy were also experimenting with wireless in this era. Beginning in 1895, Captain Henry Jackson, interested in enabling warships to communicate with each other during night time operations, had conducted a number of experiments in wireless signalling.[26]

Within months of arriving in Britain Marconi had cultivated powerful supporters within the British government. Officials from the Postmaster-General's Department and the British defence establishment, including Preece and Jackson, were present for a large-scale demonstration of Marconi's invention on the Salisbury Plain conducted in September 1896. The demonstration convinced those in attendance of wireless' viability as a new medium of communication. Later in 1896 Preece endorsed Marconi and his invention at a public lecture on the subject of wireless, resulting in widespread publicity for the new medium.[27] Jackson was also impressed by the capabilities of Marconi's device, reporting that "for military purposes…its adoption would be almost invaluable".[28]

However, events in 1897 transformed the relationship between the British Postmaster-General's Department and Marconi into an adversarial one. In April Marconi was approached by a private investor with an offer to form a company based around the commercial exploitation of his invention. After correspondence with Preece on the subject, which led to the Chief Engineer attempting, unsuccessfully, to convince the Treasury to offer Marconi £10,000 for his patent, the inventor accepted the investor's offer and formed a new company, the Wireless Telegraph and Signal Company (hereafter the Marconi Company) in July. Marconi's decision soured his hitherto good relationship with Preece, who had been an enthusiastic early supporter of the invention.[29] This was the first sign of tension between the different priorities for wireless communication.

[25] W. Jolly, *Marconi*, Constable and Company Limited, London, 1972, pp. 36-37.
[26] R. Burns, *Communications: An International History of the Formative Years*, Institution of Electrical Engineers, London, 2004, p. 285.
[27] W. Baker, *A History of the Marconi Company*, p. 29.
[28] Quoted in R. Burns, *Communications*, p. 294.
[29] J. Hills, *The Struggle for Control of Global Communication*, pp. 94-95.

The Marconi Company was formed to capitalise on the commercial opportunities presented by wireless' unique potential to communicate with ships at sea. The Royal Navy, which, unlike the Postmaster-General's Department, had not turned against the company, became its first customer. After large-scale manoeuvres in 1899, which demonstrated the usefulness of wireless to naval operations, Jackson – in charge of overseeing the use of wireless in the trial – recommended that the Royal Navy adopt the medium.[30] Soon after, during the Boer War, the Navy found use for a number of Marconi apparatuses in a real conflict for the first time. In 1900 the Admiralty ordered thirty Marconi sets for its vessels, followed by an additional fifty in the following year. Then, in 1903, the two organisations signed a long-term contract wherein the company became the Royal Navy's exclusive supplier of wireless equipment for eleven years.[31]

The company also moved into providing commercial maritime communication services, with the aspiration to achieve a monopoly in the field. Coupled with its contracts with the Royal Navy, the Marconi Company's commercial service provided a steady source of revenue that allowed it to dominate the field of wireless in its first years.[32] In 1901 the company secured a contract with the maritime insurance giant Lloyd's on the basis of wireless' new capabilities:

> Lloyd's had at this time, in all the major seaports of the world and most of the minor
> ones, a network of more than 1000 agents who…were especially charged with
> transmitting to London from their districts the latest news of ship arrivals and ship
> movements. Radio held out significant prospects for a vast improvement in the
> efficiency of this global information network, most notably perhaps in the new facility
> it afforded for communicating with ships on the high seas – a facility that submarine
> cables could never provide.[33]

The Marconi Company's contract with Lloyd's was followed by other agreements with major commercial shipping lines such as P&O and the White Star Line.[34] By December 1902 the

---

[30] W. Jolly, *Marconi*, p. 67.
[31] D. Headrick, *The Invisible Weapon*, p. 118.
[32] D. Headrick, *The Invisible Weapon*, pp. 119-121.
[33] H. Aitken, *Syntony and Spark*, p. 235.
[34] D. Headrick, *The Invisible Weapon*, p. 119.

company had fitted seventy ships and erected over two dozen shore stations for communicating with them.[35] Five years later, "all the large transatlantic liners carried radio installations, and all of these were Marconi".[36] As the first organisation to enter the field, the Marconi Company was able to secure deals with maritime organisations without the need to worry about competition. The company's quest for monopoly was also aided by a policy against intercommunication. Under this, Marconi operators were forbidden from exchanging messages (with the exception of distress calls) with any wireless systems other than their company's own. This practice, combined with the company's commanding share of the maritime market, created strong pressures for organisations to adopt the Marconi system rather than that of any of the rival companies which were beginning to emerge.[37]

The most powerful resistance to the Marconi Company's initial strides towards a global wireless monopoly came from governments, led by Germany and the United States, rather than commercial competitors.[38] Britain's great power rivals were wary of the company's increasing power over the new medium, perceiving it as a tool through which the British government could secure a stranglehold over wireless communication similar to that which it already held over submarine cables.[39] This suspicion led Britain's great power rivals to reject offers from the Marconi Company to provide equipment to their navies.[40] In addition, two international conferences on wireless, held in Berlin in 1903 and 1906, resulted in an international agreement to prohibit the Marconi Company's policy of non-intercommunication, which was narrowly ratified by the British Parliament.[41] Furthermore, in 1903 Kaiser Wilhelm II ordered the formation of a national wireless company, Telefunken, for the purpose of advancing the medium's development in Germany.[42] Telefunken would become the Marconi Company's principal rival in the field.

---

[35] W. Baker, *A History of the Marconi Company*, p. 88.

[36] H. Aitken, *Syntony and Spark*, p. 239.

[37] S.G. Sturmey, *The Economic Development of Radio*, p. 51.

[38] P. McMahon, "Early Electrical Communications Technology and Structural Change in the International Political Economy", p. 385.

[39] S.G. Sturmey, *The Economic Development of Radio*, pp. 52-53.

[40] D. Headrick, *The Invisible Weapon*, p. 118.

[41] J. Hills, *The Struggle for Control of Global Communication*, pp. 100-107; D. Headrick, *The Invisible Weapon*, pp. 119-121.

[42] D. Headrick, *The Invisible Weapon*, p. 120; R. Burns, *Communications*, p. 320.

The differences between the Marconi Company and Telefunken symbolised the conflict between commercial and governmental priorities for the medium. Whereas the Marconi Company functioned as a commercial enterprise, funded by private investors and driven by commercial priorities, Telefunken was scarcely concerned with profits. From its very inception it functioned as an instrument of the German government, which was concerned with the strategic, rather than the commercial, utility of wireless.[43] The German government undertook a number of measures to aid Telefunken's expansion, including guaranteed military orders, the subsidisation of its tenders in other countries, and, from 1910, a prohibition on the use of foreign wireless equipment aboard German ships. Up until this point two of the larger German shipping lines had carried Marconi equipment.[44]

Underwritten by the German government, Telefunken sought to roll-back the established power of the Marconi Company around the globe. The primary arena of confrontation between the two companies was in Europe. The Marconi Company had some difficulties establishing relationships with continental governments due to competition from Telefunken which, backed by German banks and diplomacy, could offer more attractive terms to potential buyers.[45] Much to the chagrin of the Marconi Company, Telefunken had secured maritime wireless agreements across a wide swathe of Europe by 1910.[46] By this time Germany had emerged as a notable competitor to Britain in the field of wireless.

The early history of maritime wireless reflected the attentiveness of governments to its potential military implications. From the 1890s, there was considerable interest from naval authorities in in its adoption, because wireless "could do things of military importance that no other technology could do. Price competition was of small importance in this market; what counted were the completely new capabilities".[47] This explains why, despite the hostility towards the Marconi Company within the British Postmaster-General's Department, the Royal Navy relied on the company to supply it with equipment. It also explains why the German government was willing to underwrite Telefunken's finances; the costs involved were outweighed by the strategic benefits of developing a national wireless organisation free from

---

[43] W. Baker, *A History of the Marconi Company*, p. 94.
[44] W. Baker, *A History of the Marconi Company*, pp. 130-132.
[45] W. Baker, *A History of the Marconi Company*, p. 131.
[46] R. Burns, *Communications*, pp. 356-357; W. Baker, *A History of the Marconi Company*, p. 131.
[47] H. Aitken, *Syntony and Spark*, p. 310.

British control. The advantages of integrating wireless into naval operations were further underscored in 1905, as the effective use of the medium made an important contribution to the Japanese naval victory in the Battle of Tsushima in the Russo-Japanese War.[48]

Unlike its major competitor, which was supported by the German government, the Marconi Company was hamstrung by British government policy that prioritised defence and strategic considerations over the firm's profitability. In 1904 Parliament passed the *Wireless Telegraphy Act* to make wireless, in the words of the Postmaster-General, "more useful for purposes of defence and general communication, and to provide against the growth of a monopoly in the hands of any one Company".[49] This was followed by the ratification, in 1907, of the aforementioned international agreement obliging intercommunication, which ended the company's effective monopoly over the field of maritime wireless. Then, in 1909 the Postmaster-General's Department decreed that under the *Wireless Telegraphy Act* the company would no longer be permitted to renew its licences for shore stations in Britain, effectively forcing the company to sell these facilities to the government. These actions of government combined with high capital costs to threaten the firm's financial viability.[50]

The Marconi Company responded to these challenges in 1910 by reforming its business strategy and appointing Godfrey Isaacs as its new Managing Director. To shore up the company's viability Isaacs launched an aggressive campaign of litigation against those parties it claimed had infringed its patents.[51] Though the company had been acquisitive regarding wireless patents since its inception, it had previously been reluctant to launch expensive legal challenges in relation to patent rights because of its poor financial position.[52] Under Isaacs' leadership the company prioritised the legal defence of its patents. This proved a windfall for the company, with its most important result being the penetration of the growing American market from 1912.[53]

---

[48] G. Hartcup, *The War of Invention: Scientific Developments, 1914-1918*, Brassey's Defence Publishers, London, 1988, pp. 14-16.
[49] Quoted in J. Hills, *The Struggle for Control of Global Communication*, p. 102.
[50] Chapter 14 in W. Baker, *A History of the Marconi Company*; J. Hills, *The Struggle for Control of Global Communication*, p. 107.
[51] H. Aitken, *Syntony and Spark*, p. 283.
[52] J. Hills, *The Struggle for Control of Global Communication*, p. 128.
[53] H. Aitken, *The Continuous Wave*, p. 194.

However, Isaacs was less successful in improving his company's position against Telefunken. The German government's support of its national firm meant that the Marconi Company was forced to abandon its foothold in German shipping and, effectively, any activity in Germany at all. Instead, the British company sought to confront Telefunken by instigating patent infringement suits in other countries where the two firms were competing for contracts.[54] After months of costly 'war' between them, centred on the control of wireless on the German mercantile marine, the rival companies turned to negotiation. These negotiations culminated in 1912 with the formation of an international cartel wherein each firm agreed to cease litigation, divide the world into spheres of influence, and form a patent pool.[55]

Another key change that came from Isaacs' leadership of the Marconi Company was a greater emphasis on the formation of commercial relationships with governments through the provision of international wireless services. This marked a recognition that, in relation to communications, governments were less interested in "unfettered commerce" than in geopolitics, and that the company's operations needed to be tailored towards this reality.[56]

The centrepiece of the Marconi Company's bid to establish profitable international services in collaboration with the British government were ambitious plans, first emerging in 1910, for an 'Imperial scheme' of wireless connecting the territories of the British Empire – one of the major focuses of this study. This was not the company's first foray into international wireless. It had already established a trans-Atlantic international service in 1907, but this was a commercial service reliant on private investment.[57] Prior to this, in 1906, the company had proposed to construct a series of long-distance stations for the purpose of connecting British possessions through wireless. However, this proposal had been stymied by resistance from the Postmaster-General's Department, concerned about the prospect of the company attaining a

---

[54] W. Jolly, *Marconi*, pp. 190-191

[55] Chapter 15 in W. Baker, *A History of the Marconi Company*; J. Hills, *The Struggle for Control of Global Communication*, pp. 111-112.

[56] P. McMahon, "Early Electrical Communications Technology and Structural Change in the International Political Economy", p. 386.

[57] Chapter 4 in S.G. Sturmey, *The Economic Development of Radio*.

monopoly over long-distance wireless within the Empire and deeming the proposal "too radical".[58]

After Isaacs had assumed the role of Managing Director of the Marconi Company in 1910, he presented the British government with a comprehensive proposal to construct an Imperial scheme of wireless. The proposal, which received greater consideration from the Imperial government than had been the case in 1906, placed a stronger emphasis on wireless' strategic dimensions. As the following chapter details, after two years of negotiations an agreement was reached wherein the Marconi Company was contracted to build a series of six stations throughout the Empire that would be operated by the Post Office. However, because of delays the company had only commenced the construction of one of these stations by the outbreak of the Great War in August 1914, and in early 1915 further work on the Imperial scheme was abandoned for the duration.[59] Because of this interruption, the subject of an Imperial wireless scheme was not revisited until the after the return of peace.

Britain remained the leading power in international communications at the time of the war's outbreak. Despite delays to the Imperial scheme, the Royal Navy and British shipping companies could communicate with seafaring vessels everywhere but the Pacific through wireless. Vitally, Britain also continued to dominate the field of cables: "for Great Britain radiotelegraphy was not a substitute for cables, but a complement, part of an integrated system of communications" – as a result "Britain had what no other nation could boast: a choice" between different means of international communication in times of crisis.[60]

In contrast, adopting wireless was a way for Britain's great power rivals – principally Germany and the United States – to challenge British hegemony over global communications.[61] In 1906, the German government embarked upon the construction of long-distance wireless stations to supplement its limited number of submarine cables. Its aspiration was to construct a global

---

[58] D. Headrick, *The Invisible Weapon*, p. 131; J. Hills, *The Struggle for Control of Global Communication*, p. 117.
[59] D. Headrick, *The Invisible Weapon*, pp. 131-132.
[60] D. Headrick, *The Invisible Weapon*, p. 133.
[61] P. McMahon, "Early Electrical Communications Technology and Structural Change in the International Political Economy", p. 386.

communications network, free from British control, pieced together from a combination of cables and wireless stations.[62] The centrepiece of this network was a powerful station at Nauen, on Berlin's outskirts, which Telefunken began constructing – with strong financial support from the German government – in 1906. Heavy investment from the government was seen as justified because of the geopolitical necessity of being able to communicate overseas without the cooperation of Britain. By 1914, thanks to technological improvements, the Nauen station's effective range was eight thousand kilometres, enabling direct signalling to the United States' eastern seaboard.[63] This year also saw an American subsidiary of Telefunken erect a long-distance station in Sayville, New York that was itself capable of direct transmission to Germany.[64] By the eve of war in 1914 Germany had completed a rudimentary communications network linking its colonies around the world, with a combination of wireless and submarine cable relays connecting the Nauen and Sayville stations with its possessions in Africa, Asia, and the South Pacific.[65] Though the United States had been slow to embrace wireless, between 1911 and 1914 it emerged as another rival to British communications supremacy. The *Radio Act*, passed by Congress in 1912, placed wireless under the control of the US Navy, which began constructing a series of long-distance stations at its bases around the world.[66] The American stations, which could communicate with vessels in both the Atlantic and Pacific, "far surpassed in coverage anything the British or any other government could claim".[67]

The German and American challenges were based on technological innovations that allowed for the propagation of continuous waves.[68] Continuous waves, which would later enable the transmission of voice and music through the airwaves, allowed for a considerably more efficient means of signalling – increasing the effective range of wireless transmission. The Marconi Company, on the other hand, was deeply invested in the original 'spark gap' design of wireless telegraphy. This design produced damped waves, which restricted signals to Morse code, and its range was linked to the electrical charge that could be held by the device's aerial.

---

[62] G. Pickworth, "Germany's imperial wireless system" in *Electronics World + Wireless World*, No. 99, May 1993, p. 427.

[63] G. Pickworth, "Germany's imperial wireless system", pp. 427-428.

[64] S. Douglas, *Inventing American Broadcasting: 1899-1922*, Johns Hopkins University Press, Baltimore, 1987, p.269.

[65] D. Headrick, *The Invisible Weapon*, pp. 129-130; G. Pickworth, "Germany's imperial wireless system", p. 427.

[66] D. Headrick, *The Invisible Weapon*, pp. 126-127.

[67] H. Aitken, *The Continuous Wave*, p. 95.

[68] D. Headrick, *The Invisible Weapon*, pp. 125-130; chapters 2-4 in H. Aitken, *The Continuous Wave*.

Larger aerials, to provide more power, were therefore required for longer distances.[69] Though the Marconi Company had utilised spark telegraphy for its trans-Atlantic service that opened in 1907, by this stage the spark gap "had little potential for further development".[70] The development of continuous wave apparatuses foreshadowed the obsolescence of spark equipment, but the Marconi Company was slow to embrace them because of its heavy investment in spark. Although the company remained the world's most important wireless organisation, by 1914 it had lost its position at the forefront of the medium's technological development.[71]

The outbreak of the Great War saw the strategic value of trans-oceanic communication networks laid bare. Operations against the communications infrastructure of their adversaries were crucial elements in the grand strategies of both sides.[72] Since the late 1890s British war plans had called for severing the cables of its enemies in the event of war.[73] A later report from the Committee of Imperial Defence in 1911 outlined that, in the case of war against Germany, the British would isolate Germany from the rest of the world by attacking its cables and wireless stations.[74] This would limit Germany's "access to allies and neutral sources of supply and finances", as well as its ability to interdict the sea lanes upon which British imports depended.[75] Consequently, one of Britain's first military actions in August 1914 was to sever Germany's cables in the English Channel. This was accomplished within hours of the British declaration of war and effectively isolated Germany from the global cable network.[76]

The British-controlled cable network proved instrumental to the Allied victory, but by the November 1918 Armistice three problems with cables were evident. The first, as had been anticipated in pre-war plans, was that cables were vulnerable to interdiction. It was only British control of the oceans that guaranteed the survival of its own cable network. "The real weapon

[69] L. Coe, *Wireless Radio: A Brief History*, McFarland and Company, Inc., London, 1996, pp. 7-8.

[70] H. Aitken, *Syntony and Spark*, pp. 281-282.

[71] D. Headrick, *The Invisible Weapon*, p. 126.

[72] J.R. Winkler, "Information Warfare in World War I" in *The Journal of Military History*, Vol. 73, No. 3, July 2009, pp. 846-847.

[73] P. Kennedy, "Imperial Cable Communications and Strategy", p. 740.

[74] J.R. Winkler, "Information Warfare in World War I", p. 848.

[75] J.R. Winkler, "Information Warfare in World War I", p. 847; P. Overlack, "The Force of Circumstance: Graf Spee's Options for the East Asian Cruiser Squadron in 1914" in *The Journal of Military History*, Vol. 60, No. 4, 1996, pp. 657-658.

[76] J.R. Winkler, "Information Warfare in World War I", p. 849.

was not the ability to cut cables", Headrick describes, "but to repair them. Germany's cables, once cut, were lost for good", whereas "Allied cables did not remain out of commission for more than a few weeks".[77] Nevertheless, as Sturmey writes, "many legends died in the 1914-18 war, among them that cables could be relied upon because of the invincibility of the British Navy".[78] A number of German raids on British cables, discussed below, had confirmed their vulnerability. The second problem with cables revealed during the conflict was that their capacity had been stretched by the pressures of war, which had seen a doubling of cable traffic without any additional cables being laid.[79] This led to considerable delays in the transmission of messages, sometimes to the point where postal confirmation of a cable message being dispatched reached the destination before the cable message itself.[80]

Finally, the considerable advances in wireless during the conflict made cables appear outmoded. Due to technological upgrades, by 1918 the German station at Nauen could transmit over a distance of 18,000 kilometres, sufficient to reach New Zealand directly.[81] The Allied belligerents also improved their trans-oceanic wireless capacity in different ways in the war years. The United States used its neutrality prior to 1917 to improve the series of long-distance stations first commenced by the US Navy in 1912, resulting in "the most modern and extensive radio-communications network in the world", and signifying the lead it had achieved in the field by this point.[82] Then, after its entry into the conflict, American wireless was thoroughly reorganised by government action, leading to the purging of Marconi influence from that country, and the eventual formation of the Radio Corporation of America.[83] The British also bolstered their number of wireless stations during the conflict. Though the original plans for the Imperial scheme were abandoned in early 1915, the Marconi Company was contracted to erect thirteen new long-distance stations around the world so as to increase the wireless coverage available to British vessels.[84] There remained complications associated with the use of wireless for long-distance communication, namely that its signals could be

---

[77] D. Headrick, *The Invisible Weapon*, pp. 149-150.
[78] S.G. Sturmey, *The Economic Development of Radio*, p. 127.
[79] J. Hills, *The Struggle for Control of Global Communication*, p. 222.
[80] S.G. Sturmey, *The Economic Development of Radio*, p. 126.
[81] G. Pickworth, "Germany's imperial wireless system", p. 428.
[82] D. Headrick, *The Invisible Weapon*, p. 143.
[83] D. Headrick, *The Invisible Weapon*, pp. 180-183.
[84] W. Baker, *A History of the Marconi Company*, p. 161.

intercepted, necessitating the adoption of codes and secrecy,[85] yet by the Armistice it appeared to represent the future of international communication.

Australia, which had not established wireless communication with the outside world by the time of the war's outbreak, remained dependent upon cables, and the capacity to protect them from enemy action, for its international communication during the conflict. However, the perils of an exclusive reliance on cables were underscored by two incidents in late 1914. In September, a German cruiser landed a raiding party on Fanning Island in the Pacific, severing the Pacific cable connecting Australia with North America. Despite a heroic repair effort, the cable's operations were not completely restored until the following month.[86] Then, in November, a similar incident saw another German cruiser attack the cable station on Cocos Island in the Indian Ocean. This raid, interrupted by the HMAS *Sydney* – which had received a wireless message alerting it to the German vessel's presence – was comparatively unsuccessful, with the damage repaired within a day.[87] By the end of 1914, with the remainder of the German surface fleet confined in port and the Royal Navy dominant over the world's oceans, "Australia's cable connections with the rest of the world remained uninterrupted by enemy action".[88] Nevertheless, the German raids had revealed the vulnerability of cables to attack. In a future war there was no guarantee that their safety could be maintained. And yet, in the absence of an alternative, it remained the fact that, in the words of one contemporary strategist, "the ultimate fate of Australia is dependent upon the security of the Empire's sea communications".[89]

The vulnerability of the only lines of rapid communication to Britain coupled with other security challenges Australia faced in the post-war years. These were related to the future of British policy in the Pacific, and what Neville Meaney has labelled Australia's 'cold war' against

---

[85] See chapter 9 in D. Headrick, *The Invisible Weapon*.
[86] S.G. Sturmey, *The Economic Development of Radio*, pp. 126-127; E. Harcourt, *Taming the Tyrant*, pp. 192-193.
[87] D. Headrick, *The Invisible Weapon*, p. 142.
[88] E. Harcourt, *Taming the Tyrant*, p. 194.
[89] Quoted in G. Osborne and G. Lewis, *Communication Traditions in 20th-century Australia*, p. 15.

Japan.[90] Though it had been on the victorious side, the war left the British Empire drained and in a perilous position:

> The British Empire, it seemed, would claim for itself a major place in the twentieth-century world as a self-sustaining and self-legitimating strategic unit. After 1919 that complacent scenario collapsed. London found itself struggling both to overcome resistance to its imperial rule and to mobilize the internal resources necessary to uphold its power. The international legitimacy and the strategic rationale of the empire were both in doubt as never before.[91]

In light of these challenges, the end of the war portended a relative decline in British naval power in the Pacific. Exhausted and financially strained by war, the Admiralty, following the Armistice, began downsizing the fleet by scrapping a number of capital ships without commissioning replacements for them. It also abandoned the 'two power standard', which, since the 1890s, had obliged the Royal Navy to maintain as many capital ships as those possessed by the next two largest fleets. This was a symbolic recognition that it was no longer possible for the Royal Navy to single-handedly control the world's oceans in the face of future challenges from the rising naval powers of Japan and, particularly, the United States. As a result, the Royal Navy would prioritise the seas closer to Britain, ceding influence in the Pacific to the United States and Japan.[92]

For Australia, the potential implications of Britain's reorientation were dire because of the ongoing 'cold war' with Japan. Since the Russo-Japanese war, Australian officials had cast nervous eyes towards Japan's growing power in the Pacific. This had been exacerbated during the Great War, when, as part of Allied operations against Germany's colonial possessions, Japanese forces had seized all German territories in the Pacific north of the equator while

---

[90] N. Meaney, *Australia and World Crisis, 1914-1923*, Volume 2 of *A History of Australian Defence and Foreign Policy 1901-23*, Sydney University Press, Sydney, 2009.

[91] A. Tooze, *The Deluge: The Great War and the Remaking of Global Order, 1916-1931*, Penguin, London, 2014, p. 375.

[92] M. Toll, *Australia in the Evolution of the British Commonwealth, 1919-1939: The Impact of the International Environment*, Ph.D. Thesis, Johns Hopkins University, 1979, pp. 73-74; A. Tooze, *The Deluge*, pp. 364-365.

Australian and New Zealand troops had done the same in the South Pacific.[93] Neither the fact

that Australia and Japan fought against a common foe, nor the existence of the Anglo-

Japanese alliance, could allay Australian apprehension about Japan's territorial ambitions in

the Pacific. In analyses that would be vindicated two decades later upon the onset of the next

world war, Australian policymakers in the post-war period viewed Japan as a potent threat

that could come to dominate the Pacific Ocean. Meanwhile, "Britain was economically and

psychologically exhausted and unable to maintain a two ocean navy, and it was unclear what

assistance Britain would be able to offer in the case of a Japanese move against Australia".[94]

In the early 1920s Australian defence planners began to prepare for a future confrontation

with Japan. In an influential report from 1920, military officials noted that Australia's security

rested on two foundations: membership of the British Empire, and the ability to withstand an

attack for long enough to allow outside assistance to arrive. As Maynard Toll describes, the

report emphasised the pivotal importance of external reinforcements to Australia's ability to

repel an attack:

> It must be assumed that the Empire would aid Australia in the event of aggression
> against her. This being so, Australia was in a particularly dangerous position since that
> aid must come from overseas, and without sufficient naval strength deployed in the
> Pacific to deter the Japanese, *it was likely that Japan could gain command of the seas
> at the outset*.[95]

This report, commissioned by Cabinet two years before the AWA agreement, reveals an

important consideration that Australian policymakers had to face in relation to the subject of

international communications. The next major conflict Australia faced was likely to see a

hostile power in control of the surrounding oceans, underneath which Australia's only lines of

international communication ran. Yet the external support Australia would require in a future

war would depend on being able to communicate with the outside world. As a result, there

---

[93] D. Lowe, "Australia in the world" in J. Beaumont (ed.), *Australia's War, 1914-18*, Allen and Unwin, St Leonards, 1995, pp. 127-129.
[94] N. Meaney, *Australia and World Crisis, 1914-1923*, p. 501.
[95] M. Toll, *Australia in the Evolution of the British Commonwealth, 1919-1939*, p. 76. Emphasis added.

was a strong security imperative for Australia to escape its dependence on submarine cables for its ability to communicate with the heart of the Empire.

Wireless' geopolitical dimensions were of great importance to Australia because of their implications for her relationship with the outside world within the context of the British Empire. As the next chapter demonstrates, the strategic implications of wireless were evident from the very beginning of Australian policymakers' interest in the subject.

Although the strategic dimensions of wireless were present from the very beginning, and had been a strong influence over the medium's development internationally, the experience of 1914-1918 underscored their vital importance. The war demonstrated that twentieth century conflict was greatly dependent on the maintenance of communications links, with Germany's isolation from the outside world being an important element in her defeat in 1918. Of more concrete importance to Australian policymakers, however, was the war's demonstration of the shortcomings of cables, upon which the country still relied for its international communications. One concern was the heavy congestion, and associated delays, in cable communication with the heart of the Empire. With Australia so distant from Britain, meaning that cable messages had to pass through several relay points between the two countries, it was slow for messages to travel between them. Furthermore, the raids of German cruisers in late 1914 had revealed the vulnerability of cables to attack, and the possibility, in the case of a future war, that Australia's communications with the Imperial centre could be severed by a hostile power. With the Royal Navy's reorientation away from the Pacific, and the potential of Australia facing a conflict with Japan, whose navy could quickly establish control over the surrounding seas, continuing to exclusively rely upon cables for trans-oceanic communication was fraught with risk.

The geopolitical context therefore placed strong pressures upon Australia in relation to international wireless development. However, it did not itself determine domestic policy decisions. To return to Gourevitch's conceptualisation of the relationship between the international system and domestic policies, although the global "environment may exert

strong pulls…some leeway in the response to that environment remains".[96] In other words, domestic decision-makers face choices, albeit from among a constrained range of possibilities, in how to respond to international circumstances. Even after considering the powerful influence of international factors, there remains a need to examine domestic political circumstances in order to explain policy outcomes. The remainder of this chapter outlines two pieces of domestic context that would prove influential over policymaking in relation to international wireless in the early 1920s.

Prime Ministerial Power

One of the major dynamics revealed in Part IV of this study is the central role of Prime Minister Hughes in the policymaking process culminating in the 1922 agreement. This was, however, only one dimension of Hughes' tenure in office.[97] Between his ascension in 1915 and his downfall in 1923 – a longevity not exceeded until the Menzies era – Hughes exercised a level of Prime Ministerial power unequalled in Australian history. In the assessment of R.A.W. Rhodes, John Wanna, and Patrick Weller, no other Australian Prime Minister has been "more powerful, more idiosyncratic, more individualistic" than Hughes.[98] These authors also attribute the Hughes years as the beginning of the "prime ministerial dominance" that has since come to characterise the Australian Westminster system.[99]

A number of factors prevented the emergence of a strong Prime Minister prior to 1910. One was the instability associated with the three party system of Free Trade, Protectionist, and Labor, during which time Alfred Deakin was the only figure to hold the office for the full length of a Parliamentary term. The parties also saw a number of leadership changes during this period.[100] Furthermore, during this period the functions of the Commonwealth government were comparatively few. The architects of Federation had agreed upon a specific list of powers

---

[96] P. Gourevitch, "The second image reversed", p. 900.

[97] A new study of early Australian Prime Ministers in office, including Hughes, was published as this study was being completed. See P. Strangio, P. t'Hart and J. Walter, *Settling the Office: The Australian Prime Ministership from Federation to Reconstruction*, Melbourne University Press, Melbourne, 2016.

[98] R.A.W. Rhodes, J. Wanna and P. Weller, *Comparing Westminster*, Oxford University Press, Oxford, 2009, p. 102.

[99] R.A.W. Rhodes, J. Wanna and P. Weller, *Comparing Westminster*, p. 82.

[100] P. Loveday, "The Federal Parties" in P. Loveday, A.W. Martin and R.S. Parker (eds), *The Emergence of the Australian Party System*, Hale and Iremonger, Sydney, 1977, p. 383.

for the Commonwealth government – aiming to limit its activity to a few prescribed areas – while leaving state powers as general.[101] As an indication of this, the Commonwealth Public Service was a relatively small organisation, with 90 percent of its officials employed by the Postmaster-General's Department, owing to the fact that many government functions remained the domain of the states.[102]

Andrew Fisher's second term as Prime Minister, beginning in 1910, marked the first notable deviation from this pattern. With the aid of Australia's first Parliamentary majority, he set about expanding Commonwealth responsibilities in a range of areas, such as social welfare, expanding postal services and regulating coastal shipping.[103] Fisher also presided over the creation of the Prime Minister's Department in 1911. The first new Commonwealth department since Federation, it was created to preside over "matters upon which the Prime Minister's opinion is sought by other Departments, or in connection with which expression is required to be given to the general views of the Government as determined by Cabinet".[104] Initially its functions remained modest, however the creation of a new department to serve the Prime Minister alone foreshadowed greater changes in the years to come.[105]

Though the Fisher Prime Ministership saw the appropriation of new responsibilities and the creation of a new institutional support, there remained multiple checks upon his power in the office. One of these was the relationship between Cabinet and the Labor caucus. The latter body had asserted its control over the selection of ministers in 1905, and ministers were regular attendees at the party's weekly caucus meetings.[106] From that point the responsibility of Cabinet to the party caucus became "a defining principle for Labor" in government.[107] In addition, Fisher's personal qualities were not conducive to aggrandising power. His style of

---

[101] M. Coper, *Encounters with the Australian Constitution*, CCH Australia Ltd, North Ryde, NSW, 1987, p. 83.

[102] B. Minns, "A History in Three Acts: Evolution of the *Public Service Act 1999*", Australian Public Service Commission, Occasional Paper Three, 2004, p. 14.

[103] See chapter 16 in P. Bastian, *Andrew Fisher: An underestimated man*, University of New South Wales Press, Sydney, 2009.

[104] Quoted in P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse: A Centenary History of the Department of the Prime Minister and Cabinet 1911-2010*, Allen and Unwin, Sydney, 2011, pp. 4-5.

[105] P. Weller, *Cabinet Government in Australia, 1901-2006: Practice, Principles, Performance*, University of New South Wales Press, Sydney, 2007, p. 30.

[106] P. Weller, *Cabinet Government in Australia*, pp. 28-29.

[107] R.A.W. Rhodes, J. Wanna and P. Weller, *Comparing Westminster*, p. 105.

leadership was oriented towards consultation and delegation. As Peter Bastian describes, in his relationship with the rest of the Cabinet Fisher "gave his ministers a free hand while he set priorities and maintained a general oversight of the administration".[108] His aversion to direct intervention in policymaking is also highlighted by John Murdoch in a description of Fisher's relationship with the bureaucracy: he "never claimed to have the detailed knowledge of a specialist…He trusted completely his permanent officials and other advisers to show him how to carry [his] ideas into effect, and he was good at delegating responsibility on to them".[109] The following chapter demonstrates the pertinence of Murdoch's observation with regard to Fisher's approach towards the development of wireless. It was during his Prime Ministership that the Commonwealth bureaucracy, with political support, attained its highest level of control over the medium.

Little is known about this dimension of Cook's brief period in power in 1913-1914; Murdoch's account portrays this period as characterised by the government devoting its energies towards undoing a number of the Fisher government's reforms.[110] The coming of war in 1914, however, augured a vast and unprecedented increase in Prime Ministerial power. Hughes' rise to the office in 1915 led to the augmentation of that position relative to the rest of the political system. As Sol Encel observes, "strong central government is an historic consequence of the need for defence".[111] The Great War prompted a large expansion in the Commonwealth's sphere of activities, as it grappled with mobilising the Australian economy for war, and a resultant increase in executive power. This was further accelerated as Hughes progressively broke free from the usual constraints upon Prime Ministerial power.

Australia was in an election campaign when the Great War broke out in August 1914. The Cook caretaker government, once it had received notification from British authorities that war was unavoidable, took the first steps towards preparing the Commonwealth for the conflict. These included mobilising the armed forces and creating an office for the purpose of instituting a

---

[108] P. Bastian, *Andrew Fisher*, p. 175.
[109] J. Murdoch, *A Million to One Against: A Portrait of Andrew Fisher*, Minerva Press, London, 1998, p. 69.
[110] See chapter 7 in J. Murdoch, *Sir Joe: A Political Biography of Sir Joseph Cook*, Minerva Press, London, 1996.
[111] S. Encel, *Cabinet Government in Australia*, Second Edition, Melbourne University Press, Melbourne, 1974, p. 7.

censorship regime on means of communication such as cables, wireless, telephones, newspapers, and post. Military authorities also began to monitor those of whom there were reasons to be suspicious, such as German subjects living in Australia.[112] The most notable increases in executive power, however, came shortly after the re-election of Fisher in September 1914. This was the passage of the *War Precautions Act*. This Act formed the legal cornerstone of the Commonwealth's expanded wartime powers, with the effect of marginalising Parliament for the duration of the conflict because the powers it conferred were exercisable by regulation. The *War Precautions Act*, supplemented by the *Trading With the Enemy Act* and *Crimes Act*, provided the legal basis for the Commonwealth prosecution of the war and also increased the importance of Hughes, serving as Attorney-General at the time.[113]

Following Fisher's retirement in October 1915, Hughes, who had already established himself at the centre of decision-making, attained the Prime Ministership without relinquishing the Attorney-General portfolio. By the end of the war, Hughes held the offices of Prime Minister, Attorney-General and External Affairs Minister; the dominant figure within the executive.[114] Throughout the conflict he wielded regulations under the *War Precautions Act* readily, facilitating his personal intervention in a wide range of areas. Joan Beaumont's assessment of this pattern of behaviour is stark, describing the *War Precautions Act* as "used in an essentially dictatorial manner by Hughes" from 1916 onwards.[115] Hughes' attitude towards governing during this time is best illustrated in a wry joke he is said to have made that "the best way to govern Australia was to have [the Solicitor-General] Sir Robert Garran at his elbow, with a fountain pen and a blank sheet of paper, and the *War Precautions Act*".[116]

Hughes' preferred approach to administration during the war was to delegate broad powers to others and charge them with executing particular tasks with a minimum of oversight while his attention was focused elsewhere: "this was so in the case of R.R. Garran, the Solicitor-General;

---

[112] See chapters 3, 4 and 6 in E. Scott, *Australia During the War*, Volume XI of the *Official History of Australia in the War of 1914-1918*, Angus and Robertson, Sydney, 1937.

[113] G. Sawer, *Australian Federal Politics and Law 1901-1929*, Melbourne University Press, Melbourne, 1956, p. 135; J. Beaumont, "The politics of a divided society" in J. Beaumont (ed.), *Australia's War*, p. 38; J. Beaumont, *Broken Nation: Australians in the Great War*, Allen and Unwin, Sydney, 2013, pp. 44-46.

[114] C.A. Hughes and B.D. Graham, *A Handbook of Australian Government and Politics: 1890-1964*, Australian National University Press, Canberra, 1968, p. 12.

[115] J. Beaumont, "The politics of a divided society", pp. 38-39.

[116] Quoted in P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse*, p. 203.

J.M. Higgins, the man he chose to organise the metal industry and later the wool industry; F.W. Hagelthorn, in whose hands he placed control of the wheat industry; and W.S. Robinson, who in effect was plenipotentiary between the government and Australian industry".[117] Such arrangements were typically complemented by the creation of new organisations through which the Prime Ministerial appointees worked on their tasks. This may seem at odds with the view of Hughes as a grand centraliser, but it is not. None of these men personally appointed by Hughes to manage certain tasks were politicians. George Pearce, who had served as Defence Minister since September 1914, was the only other politician whose competence Hughes trusted sufficiently to delegate power to in such a manner. Hughes' style was characterised by reliance upon advice from figures outside the official organs of government, and from only a trusted few within.[118]

By removing responsibilities from ministers in favour of appointees that were, in effect, personally accountable to him, Hughes circumvented the traditional operation of Cabinet. As a result Cabinet ceased to be a body within which important decisions were made. Interpreting this, Malcolm Booker writes that:

> It has been said that Hughes did not delegate authority to his other cabinet colleagues because he was suspicious of them; but this is not the true explanation…The truth was he had a poor opinion of the ability of most of the members of his ministry…He assumed almost all authority himself because he believed that he was the only one capable of exercising it.[119]

There is merit in Booker's explanation of Hughes' marginalisation of Cabinet as driven by his personal idiosyncrasies, rather than being driven solely by wartime exigency. Sol Encel also describes Hughes' ascendancy over his Cabinet as a result of his "qualities of personality", such as his "considerable intellect…mental agility and a political flair unrivalled among his contemporaries".[120] However, the point is best illustrated through counter-example. Weller's

---

[117] M. Booker, *The Great Professional: A Study of W. M. Hughes*, McGraw-Hill Book Company, Sydney, 1980, p. 185.
[118] P.G. Edwards, *Prime Ministers and Diplomats: The Making of Australian Foreign Policy 1901-1949*, Oxford University Press, Melbourne, 1983, pp. 32-33.
[119] M. Booker, *The Great Professional*, p. 186.
[120] S. Encel, *Cabinet Government in Australia*, pp. 167-168.

history of Australian Cabinet government illustrates that the degree to which Cabinet was involved in wartime decision-making was largely a function of who was serving as Prime Minister at the time. For instance, he describes Fisher's steerage of Cabinet in 1914-1915 as being frantic, with frequent meetings and the consideration of many war-related questions by the body as a whole. Despite an increase in activity, Fisher adhered to conventional Cabinet processes during his tenure as wartime Prime Minister. In contrast, once Hughes replaced Fisher as Prime Minister, there were very few Cabinet meetings before the Labor split of 1916.[121] Nor was this the simple result of an escalation of the war effort from late 1915 onwards; Pearce's tenure as Acting Prime Minister during Hughes' first overseas trip in 1916 saw a partial restoration of orderly Cabinet processes, with a resumption of regular meetings and a greater degree of input from other ministers. Similarly, Hughes' second trip abroad in 1918-1919 – during which, as Chapter Five documents, wireless policy was prominent on the government's agenda – saw the reinstatement of traditional Cabinet convention under the Acting Prime Ministership of William Watt. Even more than Pearce, Watt's tenure leading Cabinet represented a return to pre-Hughes norms. Using techniques learned as Premier of Victoria, Watt's approach to Cabinet was consultative and orderly. In addition to a greater openness towards the input of other ministers, he also assigned regular times in which to meet with departmental secretaries. In this vein, formal agendas were created for Cabinet meetings and notes were kept of decisions. In contrast, the records of Cabinet meetings under Hughes are notoriously threadbare – an indication of the reduced stature of the body during his Prime Ministership.[122]

Similar themes are evident in those accounts that deal with Hughes' relationship with the bureaucracy while Prime Minister. Hughes was the first to wield the Prime Minister's Department as an instrument "to reflect the enthusiasms of its political master".[123] Whereas its initial operations under Fisher were modest and largely ceremonial, this began to change after the outbreak of war and particularly after Hughes became Prime Minister. The department acquired a new and incongruent range of responsibilities, such as handling foreign affairs after the 1916 closure of the External Affairs Department, managing the sale of Australia's wool clip to the British government, and steerage of newly-created government bodies such as the Commonwealth Advisory Council of Science and Industry and the

---

[121] P. Weller, *Cabinet Government in Australia*, pp. 33-37.
[122] P. Weller, *Cabinet Government in Australia*, pp. 38-40.
[123] P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse*, p. 8.

Commonwealth Line of Steamers.[124] However, while Hughes placed himself, and by extension those departments under him, at the centre of decision-making, various accounts suggest that this tended towards dysfunction due to his suspicions. As Governor-General Ronald Munro Ferguson wrote at the time, "my little man does not trust the Secretary at the head of his department, which I can well understand, but the consequences are that he…carries through a great many things 'on his own' of which no record is made – consequently it happens at times that no one knows how business stands".[125] Elsewhere, he wrote that during Hughes' time in power "the Prime Minister's Department became greatly enlarged and it has become something of a maelstrom into which business from all departments is sucked and continues to swirl round and round".[126]

One consequence of Hughes' style of leadership during the war years was that many actions of the Commonwealth government were linked to the Prime Minister's personal attention. Given the rolling series of crises that the war unleashed, his attention was often stretched between many competing demands. The result was that policymaking was often ad hoc and influenced by Hughes' whims. Donald Horne describes "his liking for jumping from one obsession to the next…if he could find someone to take over before he lost interest".[127] This portrayal is uncharitable, but nevertheless illustrates Hughes' susceptibility to short-lived bouts of personal intervention in various policy areas. Perhaps the greatest example of Hughes' personal influence over policy came with the 'Warwick incident'. This saw the Prime Minister pelted with an egg while addressing a crowd in the Queensland town of Warwick in late 1917. In reaction to this, and what Hughes saw as the timid response of local police, who insisted on prosecuting the assailant under state, rather than Commonwealth, law, he took steps to establish Australia's first Commonwealth Police Force.[128] L.F. Fitzhardinge assesses Hughes' characteristic administrative methods in his description of the creation of the Commonwealth Advisory Council of Science and Industry, another organisational body created in response to direct Prime Ministerial intervention: "an idea coming from outside happened to chime with his preoccupation of the moment. He seized it, put his stamp on it, and pushed it through to the point of realisation. Then, having established the machinery, he expected it to run itself

---

[124] P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse*, p. 12.
[125] P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse*, p. 13.
[126] P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse*, p. 13.
[127] D. Horne, *Billy Hughes: Prime Minister of Australia 1915-1923*, Black Inc., Melbourne, 2000, p. 117.
[128] J. Beaumont, *Broken Nation*, pp. 384-385.

while he turned his full energies elsewhere".[129] As Part IV of this study demonstrates, Hughes'

intervention in the formation of wireless policy conformed to this pattern: a short-lived bout of

Prime Ministerial intervention was critical to enacting the policy that came to constitute the

international service.

Following the Labor split of 1916, which represented a failed attempt by the party caucus to

rein in Hughes' autonomy from the party machine, Hughes' inauguration as Prime Minister at

the head of the newly-formed Nationalist Party saw a strengthening of these patterns.[130] His

suspicions about other politicians were magnified as the head of a party whose membership

was dominated by long-time political rivals. As L.F. Fitzhardinge describes, "he did not trust his

new associates, and knew that they did not trust him. Except in their attitude to the war, he

had nothing in common with them, and in most cases he did not think highly of their

ability".[131] The new political circumstances thus further increased Hughes' impulses towards

autocratic leadership. In the assessment of some contemporary observers, writing after

Hughes' attainment of the Nationalist leadership, "he will be a successful head of his Ministry

if he will check a tendency to monopolise all administrative control in his own hands which,

however natural in a man of outstanding ability, is fatal to the efficiency of the department

and the harmony of the Cabinet".[132] These words appear to have been written in hope more

than expectation; Hughes continued to run the executive in his customary manner throughout

1917 and 1918, until departing for Britain to join the deliberations of the Imperial War

Cabinet.[133]

With the exceptions of the months in which Pearce and Watt served as Acting Prime Minister

in Hughes' absence, the war years were characterised by a breakdown in formal processes and

their replacement by comparatively arbitrary and autocratic rule. By 1918 Hughes was solidly

entrenched as the focal point of government decision-making. As another biographer

describes, "l'etat c'est moi. To the average Australian citizen of 1918, the State and the Prime

---

[129] L.F. Fitzhardinge, *The Little Digger 1914-1952*, Volume 2 of *William Morris Hughes: A Political Biography,* Angus and Robertson, Sydney, 1979, p. 67.
[130] R.A.W. Rhodes, J. Wanna and P. Weller, *Comparing Westminster*, p. 105.
[131] L.F. Fitzhardinge, *The Little Digger*, p. 267.
[132] Quoted in L.F. Fitzhardinge, *The Little Digger*, p. 269.
[133] P. Weller, *Cabinet Government in Australia*, p. 39.

Minister were one and the same thing".[134] Though hyperbolic, this observation demonstrates the prominence that the Prime Minister had assumed during the conflict.

Following the end of the war, administrative changes for the remainder of Hughes' tenure as Prime Minister were only slight. Though the crisis had passed, he remained surrounded by wary colleagues and men he saw as less talented than himself. Furthermore, the end of the war, by dissolving the major bond that had brought the Nationalists together, only served to increase the mistrust within the party. In addition, the aftermath of the war presented many challenges that were easier addressed with the retention of wartime powers, as described in Garran's memoir:

> [The initial] winding-up [of the war effort] had been a long and complicated process. And the unwinding too was inevitably slow...There was a wide range of post-war conditions – called by Hughes the 'aftermath' of the war – which had to be dealt with in restoring a peace-time economy, but which went beyond the negative concept of 'unwinding'...making good the wastage of war, disposing of vast quantities of war materials, marketing accumulations of produce, unblocking the channels of commerce, and many ramifications connected with these. I suggested to Hughes that the War Precautions Act had served us so well that we might follow it up with a Peace Precautions Act. He appreciated the jest, but clearly things were not as simple as that.[135]

There were numerous examples of the Prime Minister's deployment of wartime powers following the Armistice. The records of the Prime Minister's Department suggest that its staff stayed occupied managing various 'pet projects' undertaken at Hughes' discretion in the immediate post-war years.[136] Most flagrant was an incident said to have shocked fellow Nationalists as much as it did members of the Opposition, where, in late 1919, Hughes used his

---

[134] F.C. Browne, *They Called Him Billy: A Biography of the Rt Hon. W.M. Hughes*, Peter Huston, Sydney, 1940, p. 137.
[135] R.R. Garran, *Prosper the Commonwealth*, Angus and Robertson, Sydney, 1958, pp. 277-278.
[136] P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse*, p. 16.

powers under the *War Precautions Act* to break a strike of maritime engineers by issuing a regulation to freeze the funds of the union involved.[137]

Other aspects of Hughes' characteristic style of executive management persisted in the post-war years. While Cabinet began to meet more frequently, it remained a body dominated by the Prime Minister in relation to the matters given consideration and the decisions reached. The functioning of the Hughes Cabinet during this period was later described in a colourful manner by Stanley Bruce, who became Treasurer in late 1921:

> When I joined the Government, I discovered that Cabinet meetings were strange and mysterious affairs, where really nothing was seriously discussed. I believed this was felt by all ministers other than the prime minister, but no one moved…[Hughes'] usual practice [was] arriving anything up to half an hour late and then producing some new, and generally wild, scheme. Cabinet would then proceed to discuss his new scheme before going anywhere near the agenda and, generally speaking, the whole of the meeting was devoted to the attempts to dissuade the prime minister from his latest brainwave. Or he would approach the agenda like a hen picking corn. He would dart at the subjects that interested him, regardless of their position on the agenda, and the other items would be neglected or held over…I came to the conclusion that with an eccentric genius like Billy Hughes it was impossible to have any well-regulated procedure for the Cabinet.[138]

As this description suggests, Cabinet continued to exert little authority in comparison to the Prime Minister for the remainder of Hughes' term. Despite a number of changes that reduced his power – the repeal of the *War Precautions Act* in 1920; his relinquishment of the portfolios of Attorney-General and External Affairs Minister in a Cabinet reshuffle in 1921 – Hughes continued to govern in his distinctive heavy-handed manner until his party's loss of its Parliamentary majority at the 1922 election, and his subsequent replacement as Prime Minister by Bruce.

---

[137] L.F. Fitzhardinge, *The Little Digger*, p. 434.
[138] Quoted in P. Weller, *Cabinet Government in Australia*, p. 49.

Whereas his immediate predecessor and successor maintained traditional Westminster governments – responsible to Parliament and party, and working in consultation with Cabinet and the bureaucracy – these restraints were greatly eroded during Hughes' tenure as Prime Minister. The consequence was Hughes' primacy over political decision-making. As P.G. Edwards summarises, "throughout this time, the political history of Australia…was virtually congruent with Hughes's biography. His personality, judgement and character lay at the heart of all the major events of this crisis-filled period".[139] However, because of the heavy demands on his attention stemming from his centrality in decision-making, Hughes also relied on partnerships with trusted people to execute his wishes, though these were often figures outside the Parliament or bureaucracy. As a result "policy-making under Hughes generally seemed totally autocratic and could certainly not be described as a well-coordinated team effort, but it often resembled a series of partnerships in which Hughes's energy, determination and oratorical skills were complemented by the less spectacular but more consistent qualities" of others.[140] Part IV of the study demonstrates the relevance of all of these factors – Hughes' dominance and marginalisation of Cabinet, his disregarding of departmental advice, and his proclivity for forming partnerships with figures outside the government to work towards particular goals – to the development of Australian wireless communications. In his intervention in the matter he dismissed the concerns of Cabinet colleagues opposed to AWA's participation in the field. Rather than acceding to the advice of departmental officials, he relied on the recommendations of Ernest Fisk. Without the dominant presence of Hughes as Prime Minister, who acted against the explicit preferences of most of the political system, it is inconceivable that AWA could have attained such a position of prominence in Australia's international wireless service. The enactment of the 1922 agreement was only possible within this context of a dominant Prime Minister who was sympathetic to the idea, and the process by which it was enacted conformed to the hallmarks of his period in office.

Development and Economic Nationalism

The decision to upend established Commonwealth government policy towards wireless in the 1922 agreement was also influenced by broader changes in the relationship between government and other sectors of the economy taking place at the time. These changes came

---

[139] P.G. Edwards, *Prime Ministers and Diplomats*, p. 29.
[140] P.G. Edwards, *Prime Ministers and Diplomats*, pp. 29-30.

as a response to the massive disruption of established patterns of economic activity resulting from the Great War, and led to an embrace of economic nationalism – a drive towards national self-sufficiency – within Australia in the post-war years. Wireless communication was merely one industry wherein the respective roles of government and private enterprise were recast during this period; the 'national mood' was one of restructuring economic arrangements in the wake of a disruptive event.

'Development', an omnipresent concern of governments from the colonial era into the twentieth century, had two principal characteristics in Australia.[141] One was pragmatism. Rather than strong philosophical commitment, the priorities of governance in Australia were shaped by practicality. The Australian tradition emphasised finding practical uses for ideas, and those ideas that took hold were those which melded with practice.[142] The other was what Geoffrey Stokes has identified as "state developmentalism": the crucial role played by government in facilitating the country's development.[143] This reliance on government reflected a pragmatic response to the challenges involved in establishing viable communities in a large and sparsely-populated land.[144] Dubbed 'colonial socialism' by Noel Butlin, state developmentalism featured a large-scale embrace of government enterprise, although this was largely confined to particular areas such as "public business undertakings primarily in transport and communications".[145] Another characteristic was a separation of activities between the public and private sectors, with the former handling 'macro' concerns such as capital formation, population management (through immigration) and establishing public enterprise in areas conducive to the formation of monopolies. In contrast to widespread government involvement in these particular areas, there was comparatively little intervention at the 'micro' level through such measures as the regulation of particular industries.[146] Such arrangements

---

[141] B. Head, "Economic development in state and federal politics" in in B. Head (ed.), *The Politics of Development in Australia*, Allen and Unwin, Sydney, 1986, p. 3.

[142] J. Wanna and P. Weller, "Traditions of Australian Governance" in *Public Administration*, Vol. 81, No. 1, 2003, pp. 63-65; G. Melleuish, "From the 'social laboratory' to the 'Australian Settlement'" in P. Boreham, G. Stokes and R. Hall (eds), *The Politics of Australian Society: Political Issues for the New Century*, Second Edition, Pearson, Frenchs Forest, NSW, 2004, p. 79.

[143] G. Stokes, "The 'Australian Settlement' and Australian Political Thought" in *Australian Journal of Political Science*, Vol. 39, No. 1, 2004, p. 14-15.

[144] J. Wanna and P. Weller, "Traditions of Australian Governance", pp. 66-68.

[145] N.G. Butlin, A. Barnard and J.J. Pincus, *Government and Capitalism: Public and Private Choice in Twentieth Century Australia*, George Allen and Unwin, Sydney, 1982, p. 321; N.G. Butlin, "Trends in public/private relations, 1901-75" in B. Head (ed.), *State and Economy in Australia*, p. 82.

[146] N.G. Butlin, A. Barnard and J.J. Pincus, *Government and Capitalism*, pp. 327-328.

sought to facilitate private sector growth through the provision of infrastructure, and to establish enterprise in areas that were too risky to attract private investment.[147]

In the early twentieth century state developmentalism had a particular emphasis on the development of primary industries such as agriculture and mining. These industries, dependent on foreign markets, were at the centre of Australia's prosperity, and governments focused their support on promoting further growth therein.[148] Though early moves towards industrialisation through the encouragement of secondary industry were underway – such as in the Parliament's passage of the *Australian Industries Preservation Act* in 1906, and the opening of the BHP steel works in Newcastle in 1912 with government backing – Australia had not industrialised by the outbreak of the Great War. In 1914 only a small percentage of its gross domestic product came from manufactured goods, and those secondary industries which had emerged focused on producing products from the raw material supplied by domestic primary industries, such as woollen textiles.[149]

The coming of the Great War threatened to wreck the Australian economy geared towards the export of primary goods. By 1914 the world economy had evolved to a point of complex interdependency with a strong emphasis on openness to trade, and Australia's primary industries had benefitted from access to overseas markets. However, the conflict led to the disintegration of these established global patterns and the collapse of international trade.[150]

---

[147] B. Head, "Economic development in state and federal politics", p. 3; G. Stokes, "The 'Australian Settlement' and Australian Political Thought", p. 15.

[148] A.T. Ross, *Armed and Ready: The Industrial Development and Defence of Australia, 1900-1945*, Turton and Armstrong, Wahroonga, NSW, 1995, p. 1; A.L. Lougheed, *Australia and the World Economy*, McPhee Gribble, Fitzroy, Victoria, 1988, p. 15.

[149] M. Haig-Muir, "The economy at war" in J. Beaumont (ed.), *Australia's War*, pp. 93-94; R.W. Connell and T.H. Irving, *Class Structure in Australian History: Documents, Narrative and Argument*, Longman Cheshire, Melbourne, 1980, pp. 216-218; D. Pope, "Australia's Development Strategy in the Early Twentieth Century: Semantics and Politics" in *Australian Journal of Politics and History*, Vol. 31, No. 2, 1985, p. 224; N.G. Butlin, A. Barnard and J.J. Pincus, *Government and Capitalism*, pp. 60-63; A.T. Ross, *Armed and Ready*, p. 1.

[150] See M. Thomas (ed.), *The Disintegration of the World Economy Between the World Wars*, Volumes 1 and 2, Edward Elgar, Cheltenham, 1996.

This had acute implications for Australia, with its comparative openness to foreign investment and dependence upon exports.[151] Following the declaration of war, the British government began to assert control over trade throughout the Empire. On 5th August 1914 London ordered the suspension of direct trade with enemy nations and, in certain industries, with neutral countries as well. In accordance with this direction, trade restrictions were instituted by the Australian government. The first area in which these restrictions were introduced was the beef industry, the produce of which had been deemed "a vital ration for the British Army".[152] Though exporters could have received a higher price for their beef in the United States at the time, the Commonwealth government enacted rules prohibiting the export of meat outside of the Empire without approval from the Trade and Customs Minister. As the conflict dragged on, restrictions of this kind became more prevalent, applying to a wider range of industries and to imports as well as exports. Thus, Australia's trade flows came to be restricted by the priorities of the British government in service of the war effort.[153]

In addition to formal restrictions, Australia's wartime trade capacity was also constrained by a severe shortage of shipping. In comparison to the pre-war years, Australia's freight capacity was halved. This had a great impact upon Australian exports through preventing the timely transportation of goods to their destinations, and was of particular concern for the marketers of perishable goods such as wheat – one of the pillars of the economy at the time.[154] As the shipping crisis worsened in 1916, the British government established a committee to centrally organise the allocation of merchant vessels throughout the Empire. One of the main objectives of this reorganisation was to withdraw as many ships as possible from the long antipodean route to prioritise the shorter route to the Americas. This was despite the pleading of Hughes, who was trying to secure as many ships as possible for the Australian line so as to alleviate the problems caused by domestic shortages.[155] In order to augment Australia's shipping capacity, the Prime Minister acted, against British protestations and without any consultation with his Cabinet colleagues, by purchasing fifteen old steamers from private brokers while in London on his first overseas trip.[156] These ships, along with a number of German ships captured in

---

[151] M. Haig-Muir, "The economy at war", pp. 93-95; A.L. Lougheed, *Australia and the World Economy*, p. 19.
[152] E. Scott, *Australia During the War*, pp. 518.
[153] E. Scott, *Australia During the War*, pp. 519-22.
[154] M. Haig-Muir, "The economy at war", p. 97.
[155] E. Scott, *Australia During the War*, p. 534.
[156] L.F. Fitzhardinge, *The Little Digger*, pp. 137-144.

Australian ports at the outbreak of war, formed the backbone of a new organisation created at Hughes' behest: the Commonwealth Line of Steamers. Some authors have interpreted this action as motivated by ideology and reflecting the Prime Minister's belief in "state socialism".[157] Another interpretation is that it was an expedient decision with a view towards safeguarding Australian interests within the larger framework of the Empire; an example of Hughes' penchant for "constructive improvisation".[158] Further weight is added to the latter interpretation by Hughes' later leverage of the Commonwealth Line to extract concessions from the British government in negotiations over the disposal of the Australian wheat crop.[159]

This example illustrates the direct Prime Ministerial intervention in key industries that became ubiquitous as the war escalated. Enabled by the powers of the *War Precautions Act*, Hughes intervened to shore up Australia's wheat and wool industries by creating new administrative bodies responsible for the centralised coordination of finances and marketing.[160] As a result, these primary industries, previously left to their own devices and threatened with ruin by the disruption of pre-war trade and shipping patterns, were saved by political intervention leading to organisational restructuring in response to wartime circumstances.[161]

Developments surrounding the Australian base metals industry during the war provide another example of direct political intervention in a vital industry, and also illustrate the purging of enemy influence from strategic industries. Prior to 1914, the Australian base metals industry, centred upon Broken Hill, was dominated by a consortium of German companies. The importance of these minerals, particularly lead and zinc, to the production of munitions made

---

[157] M. Haig-Muir, "The economy at war", p. 98; D. Horne, *Billy Hughes*, p. 99; J. Beaumont, *Broken Nation*, p. 171.

[158] G. Bolton, "William Morris Hughes" in M. Grattan (ed.), *Australian Prime Ministers*, New Holland Publishers, Sydney, 2006, p. 112.

[159] Hughes pledged not to acquire additional ships for the Commonwealth Line in exchange for the British purchase of Australia's entire 1916 wheat crop. See E. Scott, *Australia During the War*, pp. 534-538.

[160] J.K. Wilson, "Government and the evolution of public policy" in S. Ville and G. Withers (eds), *The Cambridge Economic History of Australia*, Cambridge University Press, Port Melbourne, 2015, p. 339; K. Tsokhas, "W. M. Hughes, the Imperial Wool Purchase and the Pastoral Lobby, 1914-20" in *The Journal of Imperial and Commonwealth History*, Vol. 17, No. 2, January 1989; K. Tsokhas, *Markets, Money and Empire: The Political Economy of the Australian Wool Industry*, Melbourne University Press, Carlton, 1990; K. Tsokhas, "Wheat in Wartime: The Anglo-Australian Experience" in *Agricultural History*, Vol. 66, No. 1, 1992.

[161] K. Tsokhas, "The Forgotten Economy and Australia's Involvement in the Great War" in *Diplomacy and Statecraft*, Vol. 4, No. 2, 1993.

them vital resources upon the outbreak of war. As with other industries, the base metals trade was upset with the coming of the conflict. The first weeks of war saw the various commercial operations centred on Broken Hill reorganise their affairs in response to the new circumstances, but these changes did not reduce the substantial German stake in Broken Hill's base metal deposits.[162]

This changed in November 1914, as the matter caught the attention of Hughes in his position as Attorney-General. Using newfound authority under the *Trading with the Enemy Act*, he ordered police raids upon the offices of German-connected base metal firms. Garran's account of this episode describes Hughes' motivation as twofold. The most immediate goal was to cease exports of material to countries other than Britain. In addition to this, "Hughes was determined that [German control] should not be re-established after the war" and undertook steps to prevent this.[163] In conjunction with domestic interests, Hughes worked to reorganise the industry so as to bring it under Anglo-Australian control and redirect its operations towards supporting the war effort. In May 1915 the *Enemy Contracts Annulment Act* passed through Parliament, requiring the termination of contracts identified by the Attorney-General as involving any enemy subject.[164] This legislation was used to sever the ties between Australian-based firms and any German interests. As a result, German interests in the domestic base metals industry were displaced by Anglo-Australian interests.[165]

As Chapter Four of this study documents, the emerging Australian wireless sector – another industry of strategic significance – experienced similar changes during the war years, as the German stake in AWA was purged at the instigation of Commonwealth authorities and brought under the control of Australians. This change, prompted by the exigencies of war, would prove decisive for the direction of policy in the post-war years as the company came to be seen as a

---

[162] F. Carrigan, "The Imperial Struggle for Control of the Broken Hill Base-Metal Industry, 1914-1915" in E.L. Wheelwright and K. Buckley (eds), *Essays in the Political Economy of Australian Capitalism: Volume Five*, Australia and New Zealand Book Company, Frenchs Forest, NSW, 1983, pp. 164-171.
[163] R.R. Garran, *Prosper the Commonwealth*, p. 224; a similar account of this episode is provided in M. Booker, *The Great Professional*, p. 183.
[164] E. Scott, *Australia During the War*, pp. 556-58.
[165] F. Carrigan, "The Imperial Struggle for Control of the Broken Hill Base-Metal Industry, 1914-1915", pp. 173-184.

national asset, rather than a foreign enterprise. In each case, the crisis of war provided the impetus to establish national control over strategic industries.

The disruption of trade and shipping during the war years also contributed to an expansion of domestic manufacturing into new fields of production.[166] There were two dimensions to this. The first was a marked decline in the importation of foreign goods, owing to the shipping shortage and the disruption of pre-war trade patterns. This provided "natural protective barriers behind which Australian manufacturing sheltered and grew".[167] The second was an increase in government contracts related to the provision of goods for the war effort. These causes combined to encourage the domestic production of many goods that had previously been imported.[168]

The war years were transformative for the Australian economy. By the time of the 1918 Armistice, the administrative arrangements for key sectors bore little resemblance to those of 1914. In addition to the new manufacturing concerns that had emerged in response to wartime circumstances, industries that had been important components of the pre-war economy, such as wool, wheat, and mining, had been thoroughly rearranged so as to contribute to the Allied war effort.

The war years had also permanently altered the contours of the global economy. After more than four years of conflict "channels of trade, disrupted and disoriented by battle and blockade, [had] atrophied" and advanced countries were embracing protectionism.[169] The immense disruption and destruction of the war had made a return to pre-1914 conditions inconceivable. As a result, Australia could no longer rely on a strong primary sector with access to international markets for her prosperity. It was necessary for the Australian government to

---

[166] C. Forster, "Australian Manufacturing and the War of 1914-18" in *Economic Record*, Vol. 29, November 1953; N.G. Butlin, A. Barnard and J.J. Pincus, *Government and Capitalism*, p. 76; J.K. Wilson, "Government and the evolution of public policy", p. 339.

[167] M. Haig-Muir, "The economy at war", p. 106.

[168] Examples of such abound in C. Forster, "Australian Manufacturing and the War of 1914-18"; M. Haig-Muir, "The Economy at War"; K. Tsokhas, "War, Industrialization, and State Intervention in the Semiperiphery: The Australian Case" in *Review*, Vol. 19, No. 2, 1996.

[169] M. Thomas, "Introduction" in M. Thomas (ed.), *The Disintegration of the World Economy Between the World Wars*, p. xii.

chart a course of development suitable for navigating the post-war years.[170] Like other

countries, the Australian response to post-war conditions was protectionist. Protection for the

new secondary industries that had grown during the war was institutionalised through the

creation of the Tariff Board and the adoption of the Greene tariff in 1920/21.[171] This tariff

represented a significant increase upon pre-war levels, applying to 71 percent of imports and

doubling the average duty payable.[172]

The post-war pivot in Australia's approach to development was prompted by Hughes' desire to

create "a more balanced and self-sufficient economy" for Australia with the resumption of

peace.[173] As Geoffrey Bolton summarises, this was a pragmatic response to post-war

circumstances:

> The war completed a major change in his economic thinking. Once a Free Trader, he
> was now convinced that the security of the British Empire, and of Australia in
> particular, lay in the development and control of its own industries and in the orderly
> marketing, under government influence, of its major export commodities…Working
> neither on overseas precedents nor on a predetermined plan, Hughes sought
> remedies that might prove efficient enough to carry on into peacetime. In a world
> where competition could be expected in peace or war, Hughes was steering Australia
> neither to a free market economy nor to socialism, but to pragmatic methods
> designed for Australian conditions.[174]

These pragmatic methods included the creation of new forms of hybrid enterprises, such as a

1920 partnership between the Commonwealth and the Anglo-Persian Oil Company to erect

refineries in Australia. The Commonwealth took a bare majority stake in the company formed

under this arrangement, with its operations overseen by a seven member Board of Directors,

---

[170] J.K. Wilson, "Government and the evolution of public policy", p. 340.
[171] C. Forster, "Australian Manufacturing and the War of 1914-18", pp. 226-228. See also R.C. Mills, "The Tariff Board of Australia" in *Economic Record*, Vol. 3, May 1927.
[172] B. Dyster and D. Meredith, *Australia in the International Economy*, Cambridge UP, Cambridge, 1990, p. 97; J.K. Wilson, "Government and the evolution of public policy", p. 340.
[173] L.F. Fitzhardinge, *The Little Digger*, p. 437.
[174] G. Bolton, "William Morris Hughes", p. 110.

of which three represented the Commonwealth and the remaining four the oil company.[175] This initiative is described by Fitzhardinge as "distinctive of Hughes, both in its imaginative vision of future developments and in its bold marriage of government and private enterprise".[176] It would also be an important influence over decisions made in relation to wireless, as will be covered in Part IV of this study.

As well as a means to break Australia's dependence on foreign suppliers for advanced goods, the adoption of protection for secondary industries was also undertaken for strategic reasons. Following the war, the idea of industrial development became linked to national defence. Throughout the 1920s, Australian policymakers adopted measures to support the growth of industries of strategic significance in anticipation of another conflict.[177] These included the refining, textiles and chemical industries, as well as emerging high-technology fields such as motor vehicles, armaments, aircraft, electronics, and communications.[178] With varying degrees of success in relation to foreign competition, new domestic industries had been established in all of these areas by the mid-1920s.[179] The explicit connection between industrial development and defence was later summarised by Stanley Bruce:

> Our first problem was that we had this continent; how were we going to make sure we held it? We were very sure that our only defence must be linked with Britain as part of the Empire, with the protection of the British Navy…Then, we had to develop what we'd got. That meant that everything must be done to ensure the prosperity of the export industries…We were also very insistent on the secondary industries being developed.[180]

In this respect, Bruce's attitude also reflected that of his predecessor.[181]

---

[175] R.W. Ferrier, *The History of the British Petroleum Company. Volume 1: The Developing Years 1901-1932*, Cambridge University Press, Cambridge, 1982, pp. 202-210, 522.
[176] L.F. Fitzhardinge, *The Little Digger 1914-1952*, p. 438.
[177] A.T. Ross, *Armed and Ready*, p. 2.
[178] A.T. Ross, *Armed and Ready*, p. 13.
[179] A.T. Ross, *Armed and Ready*, pp. 14-36.
[180] Quoted in D. Pope, "Australia's Development Strategy in the Early Twentieth Century", p. 226. See also W.H. Richmond, "S.M. Bruce and Australian Economic Policy 1923-9" in *Australian Economic History Review*, Vol. 23, No. 2, 1983, p. 240.
[181] A.T. Ross, *Armed and Ready*, p. 2.

The changes in the direction of Australian development in the post-war years were imbued with a new spirit of economic nationalism. This was keenly felt by contemporaries. According to one description from 1929, the prevailing sentiments in favour of protectionism were not exclusively economic:

(i.)   It is felt that a country is inferior in status if it does not have the industries of advanced countries, and that for Australia to be mainly dependent on primary industries would be to place its people in the position of "hewers of wood and drawers of water" for the people of more favoured countries.

(ii.)   A diversity of industry and employment is a social advantage, making for greater versatility and the development of various aptitudes in the population, and generally promoting a fuller and richer national life.

(iii.)   A country should be as independent and as self-contained as possible in order that it may be less vulnerable to the effects of any war which might disturb markets abroad.

(iv.)   Certain industries are especially desirable directly for armaments, or in case essential supplies are cut off.[182]

Or, as another observer, writing in 1933, described the pith of things: "one of the features of the post-war period has been the growth of the idea of National self-sufficiency".[183]

The post-war changes in Australia's pattern of development intersected with the paradigmatic change in the field of wireless communications under consideration in this study in a number of ways. Principally, the change ushered in by the 1922 agreement was consistent with the promotion of national industries – especially those of strategic significance – characteristic of Hughes' steerage of the Australian economy at the time, and which was subsequently continued by Bruce. Furthermore, it came at a time in which the Great War had greatly disrupted the Australian economy, such as through the shipping crisis and consequent inability

---

[182] J.B. Brigden, D.B. Copland, E.C. Dyason, L.F. Giblin and C.H. Wickens, *The Australian Tariff: An Economic Enquiry*, Second Edition, Melbourne University Press, Melbourne, 1929, pp. 18-19.
[183] D.A.S. Campbell, "Australia and Economic Nationalism" in *The Australian Quarterly*, Vol. 5, No. 20, 1933, p. 54.

of Australian industry to function as it had earlier. This wide-scale disruption, taking place across many aspects of the economy, provided the impetus – and opportunity – for reshaping sectors of the economy in alignment with new priorities. The change in Australian wireless that was embodied within the 1922 agreement did not occur in isolation, but as one element in a broader reshaping of the role of government in the Australian economy. It coincided with a 'national mood' for altering the arrangements which had characterised Australian development up to that point, for the purpose of navigating the uncertainties of the post-war years.

Placing Wireless Policy in Context

This chapter has presented three dimensions of the structural context within which Australian wireless policy was determined in the period of time covered in this study. Each would, in its own way, influence the development of policy in the early 1920s. The emergence of wireless internationally, and the new medium's place in the geopolitical environment, would provide a strong impetus for Australia to adopt wireless for the purpose of trans-oceanic communication. Domestically, the power of Hughes as Prime Minister would prove important because he would prove the only supporter of AWA's aspirations for international wireless within the Commonwealth government. Finally, the rise of economic nationalism would contribute to the 'national mood' surrounding the decision to reshape Australian wireless policy in the post-war years.

Part III – Origins

Chapter 3 – The First Years of Australian Wireless, 1901-1914

Part III of the thesis, consisting of this and the following chapter, begins the archival study with a focus on the origins of Australian wireless telegraphy. This chapter examines the first appearance of wireless in Australia, covering the years between Federation in 1901 and the beginning of the Great War in 1914. This period saw the first appearance of the medium on Australian shores, and its gradual uptake by government and commercial interests. The potential applications of wireless, and the desire for its adoption in different quarters, raised a number of constitutive questions surrounding how it would be used. The answers given to such questions – what was the primary purpose of wireless; how should it be adopted; who would control it – birthed a number of distinctive features of Australian wireless policy in the years preceding the Great War. One is that policy decisions were largely reactive to international pressures, with little initiative displayed by domestic actors. In this respect Australian policy developments were largely made in response to British proposals, whether from the Imperial government or the Marconi Company. Another was that the sector was initially constituted, like other forms of Australian communications, as a government monopoly. This saw the establishment of strong bureaucratic control over wireless, antagonism between Commonwealth officials and private firms vying to enter the Australian market, and the adoption of wireless schemes tailored towards government priorities. This period also saw the emergence of certain developments, the long-term implications of which would not become fully apparent until years into the future. Principal of these was the formation of AWA as an Australian firm with access to the world's major wireless patents, and its attainment of a small commercial foothold in the field of maritime wireless.

Though it identifies those of significance, Part III of the thesis does not offer a detailed analysis of individual policy decisions through the lens of MSA. MSA's utilisation in the study is confined to that which it is best suited for: analysis of a major individual policy decision – the 1922 agreement – in Part IV. This and the following chapter are concerned with providing vital background to the policymaking process covered in detail in Part IV. Part III of the study does not talk in the language of streams, windows, or entrepreneurs. Instead, its task is to describe the establishment of particular features of the early Australian wireless industry, with an eye

towards illustrating how different the industry's early history was from the changes that were brought in in the 1922 agreement. In order to understand the magnitude of the changes of 1922, and the resistance surrounding them, it is necessary to understand what came beforehand.

Foundations

From its advent in the closing years of the nineteenth century, there was an interest in wireless telegraphy in Australia. The first recorded evidence of this dates from 1888, when in a laboratory at the University of Sydney Professor Richard Threlfall was able to replicate Hertz's 1886 experiments with electromagnetic waves.[1] By the turn of the century a number of people, principally colonial government telegraph officials, had crafted and begun to operate crude wireless sets.[2] However, notwithstanding these individual enthusiasts, the development of wireless in Australia was spearheaded by organisations – governmental and commercial – from the very beginning.

The Constitution of the Commonwealth of Australia, in effect from 1st January 1901, vested control over "postal, telegraphic, telephonic, and other like services" in the new Commonwealth government.[3] It was not until 1905, though, that the Commonwealth took any action in the field of wireless. At the dawn of the twentieth century it was state governments that were most concerned with the new medium. As Curnow's study details, the Tasmanian state government first began advocating for the adoption of wireless in 1901 as a means of improving its communication with the mainland.[4] By 1903, both the Victorian and Tasmanian governments had contacted the Commonwealth regarding the establishment of a wireless service across Bass Strait, but the Commonwealth took no action in response.[5]

---

[1] P. Geeves, "Australia's radio pioneers – 1" in *Electronics Australia*, May 1974, p. 26.

[2] P. Geeves, "Marconi and Australia" in *AWA Technical Review*, Vol. 15, No. 4, 1974, p. 131.

[3] *Commonwealth of Australia Constitution Act 1900*, s.51 (v). It is likely that the addition of "other like services" was done in anticipation of the invention of wireless telegraphy: see J.A. La Nauze, "'Other Like Services': Physics and the Australian Constitution" in *Records of the Australian Academy of Science*, Vol. 1, No. 3, 1968.

[4] R. Curnow, "The Origins of Australian Broadcasting", p. 50.

[5] P. Geeves, "Marconi and Australia", p. 132.

As would become characteristic in the pre-war years, it was an overture from the British government, not the states, that first prompted the Commonwealth to consider policies covering wireless. In November 1904 the Governor-General received a memorandum from the officer in command of the Royal Navy's Australian Station, noting that the ongoing Russo-Japanese War demonstrated the military importance of the new technology. In response, the Admiralty had ordered a number of wireless sets to outfit the warships under his command and he urged the Commonwealth to erect coastal stations for the purpose of communicating with these vessels.[6] The idea received the enthusiastic endorsement of the Defence Minister,[7] and also raised a number of constitutive questions for the first time, including whether wireless would primarily be a commercial or a military medium, which Commonwealth department should administer it, which system should be adopted, and what – if any – degree of private involvement was desirable. Regarding the latter two questions, the Commonwealth had so far avoided engaging with any commercial interests. It had already received requests from the Marconi Company in 1902 to construct a wireless service between Australia and New Zealand, and earlier in 1904 to establish stations on islands in the Torres Strait. Nor was the Marconi Company the only commercial organisation aspiring to do business in Australia. It, Telefunken, and a number of smaller ventures had also submitted proposals to establish a service traversing Bass Strait.[8] From the very beginning, the pressures applied to the Commonwealth government to determine its future approach towards wireless were originating overseas. However, those organisations applying the pressure were working towards different ends. While the Marconi Company, along with other firms, sought to establish a commercial service, the Royal Navy's representative was emphasising wireless as a means to safeguard Australia's vital sea lanes.[9]

The first concrete decision made in response to these international pressures was the Deakin government's passage of the *Wireless Telegraphy Act* in October 1905. This Act, which served as the legislative means through which the Commonwealth exerted control over wireless communications for decades to come, appeared to settle the question of whether any private

---

[6] Memorandum to the Governor-General from the Commander in Chief of the Australian Station, 15th November 1904. National Archives of Australia: Postmaster-General's Department, Central Administration; MP341/1, General correspondence 'G' files, annual single number series, 1872-1940; 1906/362, Confidential Dispatches from Admiralty and Defence, 1904-1906.
[7] Note from the Minister of State for Defence, 29th November 1904. NAA: MP341/1, 1906/362.
[8] R. Curnow, "The Origins of Australian Broadcasting", pp. 51-52.
[9] Memorandum to the Governor-General from the Commander in Chief of the Australian Station, 15th November 1904. NAA: MP341/1, 1906/362.

participation in the field would be accepted. "Its main object", in the words of one supporting Senator, was "to make a Government monopoly of wireless telegraphy in the Commonwealth".[10] The Act established the Postmaster-General's Department as responsible for wireless, much as it already exercised monopoly control over the telegraph network. The department was vested with the authority to control the use of wireless in Australia through a system establishing "licences to establish, erect, maintain, or use stations and appliances for the purpose of transmitting or receiving messages by means of wireless" and barring any other (non-military) usage.[11] Designed to prevent any use of the medium that did not have governmental approval, the *Wireless Telegraphy Act* was the first step towards resolving some of the constitutive questions raised by the introduction of wireless in Australia.

Early International Wireless

The principal subject of this study – wireless as a means to connect Australia with the outside world – first arose soon after Parliament's passage of the *Wireless Telegraphy Act*. It remained a prominent, though unresolved, matter for eight years, before the outbreak of war forced policymakers to shift their attention elsewhere. From 1906 onwards, Commonwealth officials considered different schemes for international wireless services. From 1910, in response to British initiatives, the chief focus in this area became a grand plan to connect the British Empire through a chain of wireless stations – the Marconi Company's Imperial scheme.

Owing to its isolated position in the South Pacific, the Australian government took an early interest in the prospect of trans-oceanic wireless for the purpose of connecting British territories in the region. However, the subject was first placed on the agenda by British prompting. The aforementioned letter from the Royal Navy's antipodean commander to the Governor-General in 1904 referred to a recommendation he had given to the New Zealand government for the establishment of a long-distance station on that country's western coast.[12] By January 1906 officials in the Postmaster-General's and Defence departments had taken up the idea and expressed their shared desire for Australia to establish its own long-distance

---

[10] *Commonwealth Parliamentary Debates*, Senate, 2nd August 1905, p. 464.
[11] *Wireless Telegraphy Act 1905*.
[12] Memorandum to the Governor-General from the Commander in Chief of the Australian Station, 15th November 1904. NAA: MP341/1, 1906/362.

wireless station near Sydney to enable direct communication with New Zealand.[13] Nearly four years later, in 1909, Prime Minister Deakin was in correspondence with his New Zealand counterpart on the subject, with both agreeing to erect high-power wireless stations "so that reliable communication may at all times be possible between the two Dominions".[14] An exchange in Parliament revealed that the primary motivation for this proposed scheme was strategic, "to insure the maintenance of communication in time of war, should the cables be cut".[15]

The correspondence between Deakin and the Prime Minister of New Zealand was connected to larger aspirations for a scheme of high-power wireless stations connecting the various British possessions in the South Pacific, of which the proposed Australia-New Zealand link would form one component. In December 1909 the Australian government hosted a conference on the subject in Melbourne, inviting representatives of the New Zealand government, the British High Commission for the West Pacific, the Admiralty, and cable interests. At the time most of the British territories in the region – including Papua, Tonga and the Solomon Islands – were not connected by submarine cables and thus depended on seaborne communications with the outside world. The conference's report emphasised the "paramount importance" of developing a regional wireless scheme for strategic reasons related to the defence of the Empire.[16] Wireless would enable communication with naval vessels in the region, and also bring ancillary economic benefits by facilitating the processes of trade and investment. The conference's attendees were in unanimous agreement that the scheme should be a government monopoly, noting that "to permit private control of this important national undertaking would be inexpedient".[17]

Ultimately, nothing resulted from this proposal for a South Pacific wireless scheme. According to a July 1918 opinion piece in *The Age*, the 1909 conference represented just one of a number

---

[13] See memorandum to the Secretary of the Postmaster-General's Department from the Chief Electrical Engineer, 25th January 1906. NAA: MP341/1, 1906/362.
[14] Letter to the Prime Minister of New Zealand from Deakin, 9th December 1909. NAA: MP341/1, 1909/8900, Pacific Islands wireless Telegraphy scheme, 1909.
[15] *Commonwealth Parliamentary Debates*, House of Representatives, 14th September 1909, p. 3357.
[16] 'Report of Radio-Telegraphic Conference held at Parliament House, Melbourne, 15th to 21st December, 1909', p. 6. NAA: MP341/1, 1910/1415, Wireless Telegraphy Pacific Installation conference, 1909-1910.
[17] 'Report of Radio-Telegraphic Conference held at Parliament House, Melbourne, 15th to 21st December, 1909', p. 9. NAA: MP341/1, 1910/1415.

of "fruitless suggestions" characteristic of Australian wireless policy up to that point. In the author's description, the proposal "apparently died a natural death" and was "probably long ago forgotten in Government circles".[18] The task of leading the development of wireless in the South Pacific was taken up by Germany, which had erected a number of stations in the region by 1914.[19] Upon the outbreak of the Great War the German stations quickly became the target of Australian military action, discussed in the next chapter.

Nevertheless, the proceedings of the Melbourne conference reveal a number of key characteristics of the prevailing attitudes towards wireless within the Commonwealth government in the pre-war years.[20] One was the early acceptance of the idea – before any wireless stations were in regular operation in Australia – that wireless would ultimately be a means of long-distance trans-oceanic communication in a similar manner to cables. Another was the conception of wireless as, principally, a strategic asset. Related to this view of the medium's purpose, was the strength of the principle of government monopoly. Though the conference had heard proposals for private enterprise to develop a regional scheme, these had been unanimously rejected by attendees.[21]

In 1910, the year after the Melbourne conference, international wireless became an issue of greater prominence when plans for the Imperial scheme of wireless were first presented to the British government by the Marconi Company. In March 1910, Godfrey Isaacs, the company's Managing Director, sent a letter to the British Colonial Office outlining a proposal to connect the territories of the Empire through wireless. The proposal was for the Marconi Company to erect and operate a chain of high-power stations stretching out from Britain in several directions, with terminuses in the West Indies, South Africa and Australia. Isaacs' letter emphasised the strategic benefits that his scheme would provide to the Empire. These

---

[18] Untitled cutting from *The Age*, 23rd July 1918. NAA: MP341/1, 1917/832, Advising that 203 copies of the Radio Telegraph conference held at Melbourne in Dec. 1909 and 19 copies of the Radio telegraph conference London 1908 are on hand in the PMG Dept's and asking whether they are of use to Navy Dept., 1908-1918.

[19] D. Headrick, *The Invisible Weapon*, p. 130; H. J. Hiery, *The Neglected War: The German South Pacific and the Influence of World War I*, University of Hawai'i Press, Honolulu, 1995. p. 12.

[20] These attitudes are also evident in internal correspondence in anticipation of the conference: see minute to the Postmaster-General from the Chief Electrical Engineer, 9th December 1909. NAA: MP341/1, 1910/1415.

[21] 'Report of Radio-Telegraphic Conference held at Parliament House, Melbourne, 15th to 21st December, 1909', p. 9. NAA: MP341/1, 1910/1415.

included the ability for the Admiralty to maintain continuous contact with ships of the Royal Navy regardless of their location, a reduction in the cost of international communications, and, as a result, stronger ties between the Empire's far-flung lands. While the stations would be owned by the company, Isaacs pledged control over them to the government in times of war. Furthermore, he stressed that his company sought no subsidy and was "prepared to erect, maintain, and operate the stations entirely at its own expense".[22]

Isaacs also emphasised an important strategic dimension of his proposal: its implications for the future control of global communications. He began by noting that "other countries fully realise the advantages that would accrue…were a comprehensive network of wireless telegraph stations erected on their own territories", and claimed that implementing his proposal would reduce "the danger of the German Company [Telefunken] being able to arrange for a similar system".[23] It is not just that Telefunken represented a commercial rival to the British company, though it did. The prospect of Germany constructing a worldwide network of wireless stations was a threat to the dominance Britain had held over global communications since the mid-nineteenth century by virtue of its control over the major submarine cable routes, as discussed in the previous chapter.

The British government was initially slow to respond to the Marconi Company's proposal, but after continued overtures eventually agreed to raise the subject at the 1911 Imperial Conference: a meeting of senior ministers from Britain and the self-governing Dominions held in London. The conference unanimously passed a resolution endorsing the creation of an Imperial scheme of wireless, but on the condition that it would be government-owned and - operated.[24] This nevertheless necessitated cooperation with the Marconi Company because of its technical expertise and control over the patents involved in long-distance signalling. The resolution of the Imperial Conference led to a shift in the company's strategy compared to its initial proposal. Since it could not expect to own and operate the stations comprising the scheme, as Isaacs had wanted, the company instead sought to profit by erecting the stations on behalf of the various governments involved in the scheme. After a drawn-out period of

---

[22] 'Imperial Wireless Installation – Copies of Correspondence', p. 3. NAA: MP341/1, 1912/10512, Correspondence Relating to contract for Imperial Wireless station, 1912.
[23] 'Imperial Wireless Installation – Copies of Correspondence', pp. 2-3. NAA: MP341/1, 1912/10512.
[24] 'Imperial Wireless Installation – Copies of Correspondence', p. 7. NAA: MP341/1, 1912/10512.

negotiations, an agreement to proceed with a privately-built, government-operated Imperial scheme was made between the British government, the Marconi Company and all but one of the Dominions. Subsequently, terms were agreed whereby the company was contracted to erect the scheme's high-power stations and allow for the use of its patented equipment, in exchange for the payment of a lump sum and a percentage of the receipts for each station.[25]

Australia was the lone hold-out against this agreement. While it supported the Imperial scheme in principle, there was substantial uneasiness within the Commonwealth about the prospect of involving the Marconi Company in its construction, owing to domestic circumstances discussed below. After the resolution of the Imperial Conference, the Australian High Commissioner in London, former Prime Minister George Reid, participated in the negotiations over the form of the scheme which began in December 1911. During the negotiations, Reid emphasised his government's reservations about dealing with the Marconi Company.[26] Throughout the first half of 1912 the British placed some mild diplomatic pressure upon Commonwealth officials to accept a deal with the Marconi Company, to no avail.[27] By July 1912, when the contract between the British government and the Marconi Company was signed, a note attached to the agreement stated that "the Australian Government finally decided not to take part in this Agreement, but to proceed independently with the erection of a station in connexion with the Imperial Wireless chain".[28] Thus, the Commonwealth would still participate in the scheme, but on its own terms. These terms did not include scope for the participation of private enterprise.

Yet, because of the intrusion of external events and delays, no station for the purpose of participating in the Imperial scheme was ever erected in Australia in the pre-war period. The contract to construct the stations of the Imperial scheme was signed in July 1912, but there were considerable delays before construction commenced. Before the contract could be

[25] 'Copy of Agreement between Marconi's Wireless Telegraph Company, Limited, Commendatore Guglielmo Marconi, and the Postmaster General, with regard to the Establishment of a Chain of Imperial Wireless Stations', 19th July 1912. NAA: MP341/1, 1912/10512.
[26] See the minutes from meetings of the Committee on Imperial Wireless Telegraphy, 15th December 1911; 17th January 1912. NAA: MP341/1, 1912/4563, Wireless Empire Scheme, 1911-1912.
[27] See correspondence from the British government to Reid and the Governor-General in NAA: MP341/1, 1912/4563.
[28] Treasury Minute attached to 'Copy of Agreement between Marconi's Wireless Telegraph Company, Limited, Commendatore Guglielmo Marconi, and the Postmaster General, with regard to the Establishment of a Chain of Imperial Wireless Stations', 19th July 1912. NAA: MP341/1, 1912/10512.

placed before the British Parliament for formal approval, a scandal emerged involving allegations of insider trading in Marconi Company shares by senior ministers.[29] The 'Marconi scandal' caused a year-long delay in formal approval for the Imperial scheme, which was not approved by Parliament until July 1913. The delay proved critical to the development of wireless throughout the British Empire. By the time of the Great War's outbreak a year later – which forced the scheme's cancellation – only one of the six stations slated to comprise the scheme was under construction. When the subject of the Imperial wireless scheme was resurrected by the Marconi Company after the Armistice in late 1918, it was in a world that had been utterly transformed by the conflict. This is covered in Chapter Five of the study.

The pre-war history of Australian participation in discussions over international wireless schemes reveals three important themes. One was the realisation of wireless' potential as a means of trans-oceanic communication from a very early point in the medium's history, which would remain a major consideration throughout the period covered by this study. Though it would take until 1922 for the enactment of a definite scheme, and another five years until the service was inaugurated, the subject had been on the agenda for many years prior to concrete action being taken. Another important theme was reactivity to external circumstances. For reasons related to Australia's strategic dependence on Britain and the Royal Navy, and the lack of a domestic wireless industry, the issue was placed on the agenda of Australian policymakers by way of international initiatives. As a consequence, decisions in Australia were made in response to initiatives originating elsewhere in the Empire. This validates Gourevitch's insights about the international sources of domestic politics. It was not solely the fact that policy proposals originated overseas, but also that Australia's response had to be made with reference to the possible ramifications for Australia's security in the global order. This fundamental consideration compelled the Australian government to acquiesce with British ambitions, first to consider developing the medium in the immediate region, and then to participate in larger plans for an Imperial scheme of wireless. Though Australian decision-makers possessed the autonomy to craft their response to the scheme, the geopolitical environment made it inconceivable that participation in the scheme could be rejected outright. In the early negotiations over the Imperial scheme Australian policymakers had demonstrated a willingness to participate in a wireless network linking the territories of the

---

[29] See F. Donaldson, *The Marconi Scandal*, Rupert Hart-Davis, London, 1962; chapter 17 in W.J. Baker, *A History of the Marconi Company*.

British Empire. Importantly, though, they wanted to enter this arrangement on their own terms rather than meekly accepting the dictates of the Imperial government. This would remain a persistent feature of Australia's approach to this field of policy in the years to come.

The third prominent theme was the consensus surrounding the principle of government monopoly over wireless. On all three occasions in which the subject was brought to the attention of Commonwealth government officials in the pre-war years, the necessity of government control of international wireless was an ever-present theme. This commitment was so firm that even the limited participation of the Marconi Company in the Imperial scheme – restricted to contracts to build the stations – was deemed too much to be acceptable to Australian interests. During this period, the paradigm of government enterprise in the field of wireless was well-established.

Developments in this area also reveal the importance of timing and external events to policy outcomes. If the construction of the Imperial scheme had followed the course planned in the 1912 agreement between the British government and the Marconi Company – without the disruption of the Marconi scandal, and then the Great War – Australia's international wireless service would have been constituted as part of a relay system planned in Britain, without any scope for private participation. Yet a decade later, when a formal decision was made on the subject, the policy which was adopted was of Australian origin, rejected a relay service in favour of one that embraced direct communication between Australia and Britain, and featured a central role for private enterprise.

The Establishment of Bureaucratic Control

Australia's opposition to collaborating with the Marconi Company in relation to the Imperial scheme was a result of the domestic situation relating to wireless that had arisen by the time of negotiations. This was characterised by two interwoven issues: poor relations between the company and Commonwealth decision-makers, and the establishment of bureaucratic control over the sector.

Mistrust of the Marconi Company within the Commonwealth government was an ever-present theme of this period. From as early as 1902, the company sought to establish commercial operations in Australia, and by 1905 its pleas for permission to do so had intensified.[30] There was little appetite for this within the government. Although the company was granted permission to erect wireless stations for the purpose of conducting a demonstrative transmission between Victoria and Tasmania in July 1906, it was only permitted to do so under strict conditions. The licence granted to the company under the *Wireless Telegraphy Act* was only a temporary one, lasting for a three-month period, and provided "solely for the purpose of conducting demonstrations in wireless telegraphy and for no other purpose whatever".[31] Despite the fanfare generated by the demonstration, the company was unable to parlay its successful test into permission to establish permanent stations.[32] A number of weeks after the demonstration the Australian representative of the company wrote a letter to the Postmaster-General's Department, complaining of an inspection of the Tasmanian station by the state-based deputy, on the grounds that "it is understood that the Licence does not provide for the right of official inspection".[33] The purpose of the inspection, according to a memorandum from the Tasmanian Deputy Postmaster-General, was to compile a technical report, which "might be of interest to the Postmaster-General or staff at this or some future date".[34]

The potential for legal disputes concerning patent rights was one of the major sources of mistrust between the Marconi Company and the Postmaster-General's Department. The company's letter to the department complaining about the inspection of the Tasmanian station included a separate document emphasising the strength of the Marconi Company's legal position over the major wireless patents, and claiming that "it would not be in accordance with established views of equity and fair play for any Government to deprive an Individual or a Company of those rights by using machinery which is an infringement

---

[30] See the letter to the Postmaster-General from the Marconi Company's Managing Director, 30th June 1905. NAA: MP341/1, 1906/2849, Wireless Telegraphy licence to Marconi Coy. to conduct experiments in Australia, 1906.

[31] A copy of the licence is in NAA: MP341/1, 1906/4510, Wireless Telegraphy Demonstration at Queenscliff – Report on (June-May 1906), 1906.

[32] See J. Given, "Wireless Politics".

[33] Letter to the Acting Secretary of the Postmaster-General's Department from Marconi's Wireless Telegraph Company, 22nd August 1906. NAA: MP341/1, 1906/2849.

[34] Memorandum to the Secretary of the Postmaster-General's Department from the Tasmanian Deputy Postmaster-General, 13th August 1906. NAA: MP341/1, 1906/2849.

thereof".[35] The implication of this document was clear: the company was willing to launch a legal challenge if the Commonwealth adopted any system of wireless besides Marconi's.

While the Marconi Company had been unsuccessfully seeking permission to establish commercial wireless stations in Australia for years, it was bureaucratic initiative – divorced from the company's overtures – that led to the first developments in this area. At the end of 1906 the first policy blueprint for a scheme of wireless stations around the Australian coastline was put together by John Hesketh, the Chief Electrical Engineer of the Postmaster-General's Department. Anticipating that the spread of shipborne wireless overseas would soon see wireless-equipped vessels operating in Australian waters, Hesketh called for a conference to discuss the potential scheme between representatives of the Royal Navy, the Defence Department, and commercial shipping lines. This was predicated on the notion that whatever scheme would be put in place would be controlled by the Commonwealth, in the same manner as the Postmaster-General's Department administered the overland telegraph.[36] While Hesketh's report referred to a desire amongst Navy officers that Australia adopt the Marconi system, which supplied all of the Royal Navy's equipment, he objected that "there is no need to consider that one Company only can furnish equipment to meet all the requirements" of the proposed scheme, and that "there are several Companies with whom the contract to equip Stations might safely be placed".[37]

This document further demonstrates some of the key characteristics of this period. One was the degree to which the Commonwealth was compelled to develop a policy response to the external environment. This was not only through the anticipation of mercantile vessels fitted with wireless operating in Australian waters, but also the need for Australian stations to be able to communicate with ships of the Royal Navy. It also reveals that the notion of government monopoly over the field was unquestioned – there was no scope for private involvement beyond the possibility of being contracted to erect stations. The adoption of

---

[35] Untitled letter, 6th August 1906. NAA: MP341/1, 1906/2849.
[36] 'Wireless Telegraphy – Report on general question of erection of stations by the Commonwealth", 27th December 1906. NAA: MP341/1, 1907/1472, Conference on Wireless Telegraphy, 1906-1907.
[37] 'Wireless Telegraphy – Report on general question of erection of stations by the Commonwealth", 27th December 1906. NAA: MP341/1, 1907/1472.

wireless was to proceed along the same organisational lines as the established telegraph network.

The conference was held in June 1907 between Hesketh, two representatives of the Australian military and a British naval officer representing the Admiralty.[38] Its proceedings emphasised the defence applications of a coastal wireless network, but also noted its potential for saving lives at sea by allowing stricken vessels to transmit distress signals. The participants also compiled a list of suitable station locations, though they offered no definite opinion on the subject of what wireless system should be employed by the Commonwealth. Instead, the conference's report called for a competitive tender process open to any commercial organisations capable of erecting stations fitting the Commonwealth's requirements.[39]

The outline for a coastal scheme of wireless put together by departmental officials at the conference provided the blueprint for Commonwealth action in the field, although, as Curnow describes, the development of wireless in this period was hampered by "procrastination".[40] In 1909, however, the Deakin government was spurred into action by the loss of the passenger ship *Waratah* off the Western Australian coast, and by "reports of German intentions to establish wireless stations in its Pacific territories".[41] In September 1909 the government resolved "that wireless telegraphic stations should be immediately established...round the coasts of Australia, and that our merchant marine should be equipped with wireless installations".[42] To facilitate this, £10,000 was allocated for tenders to erect two wireless stations, one near Sydney and one near Perth.[43] A number of offers to construct the two stations were presented, including one from the Marconi Company, and in August 1910 the Postmaster-General's Department accepted the cheapest of them from a newly-created firm called the Australasian Wireless Company.

---

[38] See NAA: MP341/1, 1907/2871, Wireless Telegraphy Conference – Representatives of Defence and Navy, 1907.

[39] 'Wireless Telegraphy: Report of Conference', 13th June, 1907. NAA: MP341/1, 1907/4373, Report of Wireless Telegraphy conference, 1907.

[40] See the abortive tender processes described in R. Curnow, "The Origins of Australian Broadcasting", p. 55.

[41] E. Harcourt, *Taming the Tyrant*, p. 187.

[42] *Commonwealth Parliamentary Debates*, House of Representatives, 9th September 1909, p. 3271.

[43] *Commonwealth Parliamentary Debates*, House of Representatives, 9th September 1909, pp. 3272-3273.

The Australasian Wireless Company's offer was roughly one-fifth of the price quoted by the Marconi Company. It was able to offer such a competitive price because it was a Telefunken subsidiary receiving indirect financial support from the German government. When the company was registered in December 1909, Telefunken was allocated ninety percent of the firm's shares in exchange for the use of its patents in Australia.[44] Furthermore, all of the equipment used in the erection of the two stations was imported from Germany.[45]

The decision of the Postmaster-General's Department to accept the offer of the Australasian Wireless Company, rather than that of the Marconi Company, worsened the relationship between the British company and the Commonwealth. The Marconi Company's aforementioned 1906 letter had cautioned the Commonwealth against signing contracts with other companies, even if those companies could offer lower prices. The threat was made on the basis of the Marconi Company's contention, supported by "the most expert Counsel in England", that all competing wireless systems "have copied and annexed Marconi's invention".[46] Therefore, any adoption of a rival system would be treated as an infringement of the Marconi Company's patent rights. Several months after the government accepted the Australasian Wireless Company's tender, in March 1911, Godfrey Isaacs wrote to Defence Minister George Pearce claiming that the Telefunken system "is an infringement of the Marconi Patent" and stating an intention to take legal action against the Commonwealth "to obtain due compensation for the past, and to prevent any further infringement in the future".[47] However, due to delays associated with the construction of the stations, and a legal technicality wherein litigation could not be launched until the stations in question were operational,[48] no action was ever taken on this point. This was because of other changes that took place in the intervening time.

---

[44] J. Given, *Transit of Empires*, p. 84.
[45] See letter to Geeves from J. Murray Johnson in ML MSS 2954/Add-On 1910; Box 29, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.
[46] Untitled letter, 6th August 1906. NAA: MP341/1, 1906/2849.
[47] Letter to Pearce from Isaacs, 10th March 1911. NAA: MP341/1, 1910/2752, Wireless Telegraphy licence to Marconi Company to conduct experiments in Australia, 1909-1910; NAA: MP341/1, 1911/1503, Wireless – Fremantle & Pennant Hills – Patents Rights – Lipel, 1910-1911.
[48] See memorandum to Hughes from Hesketh, 28th March 1911. NAA: MP341/1, 1911/2513, Wireless – Fremantle and Pennant Hills Patent Rights Marconi Co., 1911.

The election of Andrew Fisher's Labor government in April 1910 was a watershed moment, marking Australia's first majority government.[49] While it held power between 1910 and 1913, the Fisher government embarked upon an ambitious programme of national development led by the Commonwealth government.[50] This change in political circumstances would prove consequential for the development of wireless in Australia through the establishment of a dedicated wireless branch within the Postmaster-General's Department – leading to the further consolidation of bureaucratic control over the medium – and worsening relations between the Commonwealth and commercial wireless interests.

One of the Fisher government's early initiatives was to invite Admiral Reginald Henderson of the Royal Navy to visit Australia to make recommendations for the naval defence of the Commonwealth under the newly-created Royal Australian Navy. The report presented by Henderson, which included recommendations for wireless policy, provided the foundation for the Fisher government's policy towards the medium.[51] Henderson's report, delivered in March 1911, stressed the importance of wireless for communication with the fleet. It urged the construction of a series of stations, to be integrated with the telegraph network, around the Australian coastline under the control of the Postmaster-General's Department but "at the disposal of the Naval authorities in times of national emergency".[52] It also recommended the proposed coastal wireless network be under government control in order to consolidate wireless under a central organisation, which "will provide great advantages for the collection and dissemination of Intelligence in time of National emergency".[53]

> With this object in view it is recommended that the Commonwealth Government should take the whole matter of Wireless Telegraphy in Australian waters firmly into its own hands from the first making it a Commonwealth monopoly similar to the land telegraphic systems…The Commonwealth should erect, maintain, control, and operate all Wireless Telegraph Stations that may be required for either public or private services. It should be independent of all established companies, undertaking the manufacture of its own instruments and the training and control of its own

---

[49] G. Sawer, *Australian Federal Politics and Law 1901-1929*, p. 89.
[50] See chapters 15 and 16 in P. Bastian, *Andrew Fisher*; J. Murdoch, *A Million to One Against*.
[51] R. Curnow, "The Origins of Australian Broadcasting", p. 61.
[52] Parliament of the Commonwealth of Australia, *Naval Forces – Recommendations by Admiral Sir Reginald Henderson, K.C.B.*, 1st March 1911, p. 61.
[53] *Naval Forces – Recommendations by Admiral Sir Reginald Henderson*, p. 61.

operators…The Government should also require that all ships registered in Australian ports and fitted with wireless apparatus should carry apparatus manufactured and operated by the Commonwealth.[54]

To achieve these goals, the Henderson report also recommended the creation of a separate branch of the Postmaster-General's Department to administer wireless, under the control of an expert who "must be personally responsible for the design and construction of all instruments, the erection and proper equipment of all stations, and for the training and discipline of all operators".[55] With its recommendations for the assertion of complete governmental control over the medium, the Henderson report represented a policy blueprint aligned with the doctrine embraced by the Fisher government in other areas. It also reflected the centrality of military priorities in the area, with the rationale for total government control of the medium being the ease of transition to military administration in the case of war.

Later in 1911, the Wireless Telegraphy Branch of the Postmaster-General's Department was established under the stewardship of John Graeme Balsillie.[56] Balsillie, who would become the most important figure in Australian wireless for the next few years, was personally selected for the role by Fisher while the Prime Minister was in Britain for the 1911 Imperial Conference. He had prior experience in the field of wireless, having erected a number of government stations in Britain and continental Europe.[57] Notably, he had also been at the centre of a patent dispute with the Marconi Company while in Britain. In March 1910 the Marconi Company took legal action against the British Radio Telegraphy Company, which had been using a wireless system of Balsillie's design.[58] In February 1911, prior to Balsillie's appointment as the Commonwealth's wireless expert, the British judge found in favour of the plaintiff, ruling that the system in question was an infringement of one of the Marconi patents.

---

[54] *Naval Forces – Recommendations by Admiral Sir Reginald Henderson*, pp. 61-62.
[55] *Naval Forces – Recommendations by Admiral Sir Reginald Henderson*, p. 62.
[56] 'Wireless: Information re', 3rd February 1913. NAA: MP341/1, 1913/1132, Unknown Title, Unknown Date Range.
[57] J. Given, *Transit of Empires*, pp. 86-87.
[58] Letter to the Secretary of the Department of External Affairs from the British Radio Telegraph & Telephone Company, 18th March 1910. NAA: MP341/1, 1910/2752.

Given the Marconi Company's successful case against Balsillie's company in Britain, the Prime Minister's decision to employ him in the role was provocative. Once in position, Balsillie wasted no time asserting control over the sector and working towards implementing the recommendations of the Henderson report. In one of his first actions, using the justification of a worldwide legal battle over wireless patents taking place at the time,[59] Balsillie recommended suspending the tender process for any new wireless stations "pending the solution of the legal situation".[60] In the following month he urged "that radio-telegraphy be recognised as a Government monopoly" and, more importantly, "that all apparatus necessary for a scheme of wireless communication for Australia be manufactured, where possible, in Australia".[61]

Towards this end, and at the behest of Postmaster-General Charles Frazer, letters were sent to the Australasian Wireless Company and the Marconi Company's Sydney office asking for the terms under which those firms would permit the Commonwealth to manufacture and use their patented equipment.[62] In response, the Telefunken subsidiary asked for £25,000 while the Marconi Company wanted £50,000, and both companies expected the payment of royalties in addition to these sums. While Balsillie thought the former offer preferable to that of the Marconi Company, which he declared "impossible", he nevertheless considered that neither was a good deal for the Commonwealth to make.[63]

As an alternative to arrangements with international firms to secure the use of their patents, Balsillie offered the use of another system of his own design. Based upon cobbling together "a certain combination of parts", this was a different design to that which had been found in breach of a Marconi patent earlier in the year.[64] Prior to applying for the patent, he had received assurance from the Patent Attorney and Attorney-General Hughes that the design

---

[59] See J. Given, *Transit of Empires*, p. 87.
[60] Memorandum to the Secretary of the Postmaster-General's Department from Balsillie, 19th September 1911. NAA: MP341/1, 1911/12142, Patents Rights Marconi, 1911.
[61] 'Wireless – Policy', 20th October 1911. NAA: MP341/1, 1914/4383, Wireless – Policy, 1911-1914.
[62] Memorandum to the Secretary of the Attorney-General's Department from the Secretary of the Postmaster-General's Department, 17th November 1911. NAA: MP341/1, 1912/112, Wireless – Sale of apparatus by companies (Re Royalties e.c.), 1911-1912.
[63] 'Wireless – Australasian Wireless Co's Offer re Use of Their System', 8th December 1911. NAA: MP341/1, 1912/112.
[64] 'Wireless – Re Apparatus to be Employed in Scheme of Radiotelegraph Communication for Australia', 19th January 1912. NAA: MP341/1, 1919/489, Wireless Systems . Commonwealth, 1911-1919.

"was novel and patentable".[65] He assigned full patent rights to the 'Balsillie system' of wireless to the Postmaster-General's Department without charge, and it was this system that was installed in the Commonwealth's shore stations subsequent to the two that had already been contracted to Telefunken's subsidiary.

The government's decision to reject the Marconi and Telefunken offers and instead embrace the Balsillie system was announced by the Postmaster-General in Parliament on 7th December 1911. Frazer described the decision as a risk that was justified by the need to commence construction of the coastal network immediately:

> After protracted negotiations with the Marconi and the Telefunken Companies, the Government have been unable to arrive at a position that would warrant them in accepting the responsibility of buying the patent rights of either of these companies…the Government have now decided that the urgency of wireless telegraphy does not justify any longer delay; and we intend to proceed with the erection of stations round the coast of Australia…we are following the advice of the expert that was engaged by the Prime Minister when he was in London, as to the system we are about to adopt…we may, at some future time, as a Commonwealth, have to defend parts of the apparatus comprising the system… I cannot guarantee that we will be clear, but if we infringe rights in any way the Government will accept the responsibility of paying reasonable compensation for the infringement.[66]

This extract reveals that the government had accepted the inevitability of a legal challenge to the Balsillie system by the established firms, but was willing to push ahead with its policy decision regardless. The government was correct to assume that legal action would be forthcoming. Soon after the opening of the first station using the Balsillie system in February 1912, the Marconi Company initiated legal proceedings against the Commonwealth. Balsillie was confident about the validity of his invention, however, and wrote in a March 1912 memorandum that "there is…small likelihood of any real trouble arising from this".[67]

---

[65] 'Wireless – Australasian Wireless Co's Offer re Use of Their System', 8th December 1911. NAA: MP341/1, 1912/112.

[66] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1911, p. 4061.

[67] 'Wireless – General Scheme – Information for Attorney-General', 28th March 1912. NAA: MP341/1, 1913/12096, Wireless – General Scheme – Main file, 1912-1913.

Nevertheless, the Marconi Company's legal challenge would drag on for over a year before its resolution.

It was because of this hostility from the Marconi Company that the Commonwealth refused to countenance engaging the services of the British firm in relation to its plans for participation in the Imperial scheme. In an internal memorandum from May 1912, Balsillie urged delaying any Australian accession to the agreement that was under negotiation. He claimed that it would be "a sign of weakness" to enter into any arrangement with the Marconi Company when the firm had just commenced legal action against the government, and noted that the offer of a contract was a potential bargaining chip that the Commonwealth could use "to force a satisfactory conclusion to all this litigation".[68] Rather than contracting with private enterprise, Balsillie aimed to use his position to extend the principles underpinning the Henderson report to international wireless as well, recommending that the Commonwealth construct a high-power station for the Imperial scheme itself. In January 1913, several months after the British government had acquiesced to Australia determining the terms under which it would participate in the scheme, he presented detailed plans for this. The plans insisted that "the gear for such a scheme be manufactured within the Commonwealth of Australia in order that absolute independence from the outside world could be maintained" – a clear rejection of any engagement with the Marconi Company.[69]

The eventual resolution to the Marconi Company's legal challenge came as a result of political developments. In May 1913 the Fisher government was defeated in its bid for re-election and replaced by a Liberal government under Joseph Cook.[70] While in opposition, Cook's party had been critical of the Fisher government's stridency in the field of wireless policy, particularly its decision to adopt the Balsillie system for the stations of the coastal network.[71] Once in power, the Cook government sought to settle the dispute with the Marconi Company. It transported James Swinburne – a British wireless expert involved in Marconi's earlier litigation against the British Radio Telegraphy Company – to Australia to investigate the question of whether the

---

[68] 'Wireless. Empire Scheme', 14th May 1912. NAA: MP341/1, 1912/4563.
[69] 'Wireless. General Scheme', 20th January 1913. NAA: MP341/1, 1913/12096.
[70] G. Sawer, *Australian Federal Politics and Law 1901-1929*, p. 112.
[71] See the extended exchange in *Commonwealth Parliamentary Debates*, House of Representatives, 18th December 1912.

Balsillie system was an infringement of the Marconi patent.[72] In April 1914 Swinburne submitted a report to the Marconi Company in London and the Postmaster-General's Department.[73] This report concluded that the Balsillie system was not an infringement of any of the Marconi Company's patents, and that the company's legal challenge against it would fail. After he returned to Britain, Swinburne was able to dissuade Isaacs from pursuing the case against the Commonwealth any further.[74] In July 1914 the two parties settled the matter out of court, thus avoiding any further costly litigation.[75] The terms of settlement saw the Commonwealth gain the rights to use all of the Marconi Company's patents in exchange for a payment of £5000. This represented "an excellent settlement", according to Balsillie, and represented a dramatic decrease in price compared to the Marconi Company's price of £50,000 offered to the Commonwealth in 1911.[76]

Meanwhile, the stations of the coastal network were erected by the Postmaster-General's Department at great speed. With the exception of the first two constructed near Sydney and Perth, which used Telefunken equipment, the network's stations utilised the Balsillie system. The hardware was produced by a small Australian firm named the Maritime Wireless Company, covered below. By December 1912 – a year after the scheme was announced – there were stations operating in all of the state capitals.[77] A year later, eleven more stations were in operation around the Australian coastline.[78] Construction of further stations continued apace, with nineteen in operation at the outbreak of war in August 1914.[79] At this time the attention and resources of the Postmaster-General's Department were diverted elsewhere.

---

[72] See NAA: MP341/1, 1913/15455, Marconi ats. Commonwealth – Visit – by James Swinburne, 1913.

[73] *Commonwealth Parliamentary Debates*, House of Representatives, 16th April 1914.

[74] Letter to Postmaster-General Agar Wynne from Swinburne, 8th May 1914. NAA: MP341/1, 1914/17830, Wireless Systems. Commonwealth. Marconi Case, 1913-1914; NAA: MP341/1, 1914/10384, Wireless – Marconi v Commonwealth, 1914.

[75] R. Curnow, "The Origins of Australian Broadcasting", p. 65.

[76] 'Wireless: Systems: Commonwealth', 5th November 1914. NAA: MP341/1, 1914/19888, Patents in England, 1914.

[77] Letter to 'The Electrician' Printing and Publishing Company from the Secretary of the Postmaster-General's Department, 11th December 1912. NAA: MP341/1, 1914/10400, Wireless regulations, 1911-1914.

[78] Letter to the International Telegraph Bureau from the Secretary of the Postmaster-General's Department, 26th November 1913. NAA: MP341/1, 1915/4725, Statistics Wireless General, 1914.

[79] L. Durrant, *The Seawatchers*, p. 23.

Though it had taken some years, the construction of a coastal network of wireless stations had forced the settlement of major constitutive questions. The primacy of government control over the medium, in the hands of the Postmaster-General's Department since the passage of the *Wireless Telegraphy Act* in 1905, had been consolidated through the establishment of the Wireless Telegraphy Branch and the appointment of a wireless expert with a strong influence over policy. The Commonwealth bureaucracy had thus assumed a central role in the development of Australian wireless. The coastal scheme – the major focus of this period – was an initiative that originated in the Postmaster-General's Department in 1906. The only other organisations that were consulted on policy questions in this area were other branches of government, primarily defence officials who had a strong interest in the military application of the medium. Following the creation of the Wireless Telegraphy Branch in 1911, and the appointment of Balsillie as its head, the bureaucracy assumed even more importance with regard to policy. Bureaucratic control brought with it the centrality of government priorities to the sector's development. Principal of these was the development of a coastal network of stations for the purpose of communicating with naval vessels.

The pre-war years also saw the prevalence of international influences upon policy developments in Australia. The Henderson report was a key illustration of this. Its recommendations to establish a centralised network of wireless stations under the Postmaster-General's Department, and to nationalise every dimension of the emerging industry, were a strong influence on Australian decision-makers. Their embrace of these principles reflected several things. One was a drive to extend the established paradigm of government enterprise over Australian communications to the new field of wireless. Another was a desire to keep in step with British recommendations; to develop Australia's wireless capabilities commensurate with the need to communicate with naval forces for the defence of the continent.

Tension between the Commonwealth government and private interests, particularly the Marconi Company, was another important feature of this period. While this was foreshadowed in the earliest years after Federation, with the Commonwealth refusing to permit the British company to erect stations for anything more than demonstrative purposes, relations between these organisations deteriorated with each passing year. They reached a nadir in the Fisher years when the government decided to erect the coastal scheme using the Balsillie system

despite the Marconi Company's threats of legal action. But while a poor relationship between the Commonwealth and the British company was a constant feature of the period, the Fisher years also saw the shutting out of Telefunken, which had previously attained contracts to construct the first two stations of the coastal scheme.

At the dawn of the twentieth century the new Commonwealth government had faced a range of questions regarding the constitution of wireless telegraphy services. These concerned what the primary use of the new medium would be, and who would control it. By 1914 these constitutive questions had been given answers. Wireless telegraphy was to be developed in accordance with government priorities, focused on its potential for trans-oceanic and maritime communication. These goals related to the medium's defence applications, and also to its capacity to exchange commercial and distress messages with the mercantile marine. Control over wireless was vested in the bureaucracy, namely the Postmaster-General's Department working in collaboration with the Defence Department. With one key exception, outlined below, there was no latitude for private participation in the field.

The First Domestic Interests

Despite the consolidation of bureaucratic control over Australian wireless in the pre-war years, a number of small private interests managed to emerge during this period. Of these, the most important for future developments – the company which was granted control over Australia's international wireless service in 1922 – was AWA. The formation of the company in 1913, an amalgamation of the domestic Marconi and Telefunken subsidiaries, was a result of international and domestic circumstances. Though its operations were limited by government policies, it nevertheless managed to attain a small commercial foothold in Australia by 1914.

The Commonwealth government's control of the sector precluded any private interests from establishing commercial wireless stations on the Australian continent without permission from the Postmaster-General. With the minor exception of the Marconi stations erected for demonstrative purposes in 1906, this was never forthcoming. This restriction left two means by which private firms could make money from Australian operations. One was through

providing equipment for government stations, such as in the Australasian Wireless Company's and Maritime Wireless Company's provision of apparatuses for the coastal scheme. The other was through providing shipborne wireless equipment and services, a practice which was licenced through regulations under the *Wireless Telegraphy Act* gazetted in 1911. From 1910, the increasing adoption of wireless by shipping in Australian waters, and the imminent construction of the coastal scheme's first stations, which would allow communication with vessels at sea, compelled the Postmaster-General's Department to devise a set of regulations under the Act covering ship-to-shore communication. A new system of regulations was instituted in July 1911, introducing 'general' licences. These were exclusively available to stations on board ships, and a mandatory requirement for the lawful use of seaborne wireless.[80]

The provision for general licences, which was in contrast to the Henderson report's recommendation to nationalise maritime wireless, would prove to be of great importance to the future of the industry. By granting scope for the commercial provision of maritime wireless equipment and services, it provided an opportunity for firms to establish domestic operations and gain a foothold for private enterprise. According to a later account from Balsillie, the decision to permit private operations in this field was made so as to limit the Commonwealth's potential liabilities in relation to legal challenges from the Marconi Company over patents:

> [Nationalisation of maritime wireless] was the original policy propounded by myself,
> but could not be applied – or, to be more accurate – it was considered not wise to
> apply this scheme until the patent position had been defined, as considerable
> opposition was raised by the Marconi Company…It was considered that the fitting of
> vessels by the Commonwealth until the Patent position was defined, would be unwise,
> as it was merely incurring further liability; after Swinburne's report was made on the
> [Balsillie] System, I did not raise the point, because this Branch was too busily
> engaged…to attend to any necessary or advisable policy matters.[81]

---

[80] Regulations under the *Wireless Telegraphy Act 1905*, Statutory Rules 1911. No. 105.
[81] 'Wireless: Ship Scheme', 23rd October 1914. NAA: MP341/1, 1914/18660, Wireless – Ships scheme, 1914/1915.

This is a rare example from this period of a policy decision which was made at the ministerial level against Balsillie's advice. Though it was made in response to short-term pressures, the private activity that it enabled would have long-term consequences. From this point the scope of private participation in Australian wireless grew steadily.

The first notable private wireless firm in Australia was the Australasian Wireless Company, which won the contracts to build the first two stations of the coastal scheme. It was formed in December 1909, as a venture of Hugh Denison, a wealthy tobacco and newspaper proprietor, in partnership with Telefunken, with the German company holding a substantial stake in exchange for the use of its patent rights in Australia.[82] In addition to the provision of equipment for the coastal scheme, the company began outfitting a small number of ships with imported Telefunken equipment, the first time that this had been done in Australia.[83] Despite these minor successes, it remained a small organisation.

The Marconi Company had had representatives in Australia since 1905, tasked with opening the local market for the company. As described above, it was completely unsuccessful in attaining any business from the Commonwealth government, and it also lagged behind the Australasian Wireless Company with regard to fitting ships with wireless equipment.[84] When Ernest Fisk – who was to become the Managing Director of AWA in 1917, and one of the key figures in the future development of Australian wireless – arrived in Australia in 1911 as the Marconi Company's newest representative, the company's antipodean operations were virtually stagnant.

AWA was born from an amalgamation of these Australian subsidiaries of the Marconi and Telefunken companies. There were both global and domestic factors behind this merger. Internationally, the raft of patent-related litigation around the world between the two rival companies culminated in an agreement in which they agreed to share patents and divide the world into spheres of influence, as described in the previous chapter. One dimension of this

---

[82] J. Given, *Transit of Empires*, pp. 82-85.
[83] L. Durrant, *The Seawatchers*, p. 19.
[84] J. Given, *Transit of Empires*, p. 81.

arrangement was the formation of several joint enterprises in continental Europe.[85] Specific to Australia, the Commonwealth's stranglehold over the sector meant that neither of the foreign wireless subsidiaries were making money in their operations.[86] As a result, there was an incentive for the two companies to combine and end the unrewarding competition between them. Denison, in his capacity as Managing Director of the Australasian Wireless Company, embarked for London and negotiated a merger deal with the Marconi board, which was approved in November 1912.[87]

As a result of the deal brokered in London, AWA was formally registered in July 1913, with Denison appointed as Managing Director and Fisk second-in-charge. With rights to both the Marconi and Telefunken patents, the new company was comprised of 140,000 £1 shares. Half of these were owned by the Marconi Company, with Telefunken holding less than ten percent and the remainder held by Australian owners.[88] At the end of June 1913 Fisk wrote to the Postmaster-General's Department to give notice of the merger and outline the new company's intention to consolidate the control of shipborne wireless in Australian waters under a single commercial organisation.[89] Balsillie responded to this development with enthusiasm, noting that bringing maritime wireless under a single domestic organisation "will add to the value and efficiency of the radiotelegraph service" and make it easier for the Wireless Telegraphy Branch to monitor the use of wireless on oceangoing vessels.[90] Unstated in Balsillie's letter, but revealed by the action he took after the outbreak of war – covered in the following chapter – was the source of his enthusiasm: the centralisation of control over Australian maritime wireless would ease the administrative complications of a future decision to nationalise this section of the industry.

From its inception AWA took over all shipborne wireless services in Australia, essentially without competition. It quickly established a foothold in the sector by signing agreements with Australian shipping firms for the provision of wireless equipment and services on their vessels.

---

[85] A. Huurdeman, *The Worldwide History of Telecommunications*, John Wiley and Sons, Inc., Hoboken, 2003, p. 273.
[86] J. Given, "Not Being Ernest", p. 165.
[87] J. Given, *Transit of Empires*, pp. 92-93.
[88] J. Given, *Transit of Empires*, pp. 94-96.
[89] Letter to the Secretary of the Postmaster-General's Department from Fisk, 30th June 1913. NAA: MP341/1, 1913/11258, Wireless – Marconi's Wireless Transmitting Co. Pty Ltd, 1913.
[90] 'Wireless: Marconi's Wireless Telegraph Co Ltd', 18th July 1913. NAA: MP341/1, 1913/11258.

In contrast to the two companies from which it was born, AWA managed to turn an £8000 profit in its first year of operation, demonstrating the benefits of a united approach.[91] At the time of inception the new company had 44 Australian vessels under contract, and this number had increased to 75 by mid-1914.[92] Recognising its dependence on the maritime sector, AWA was "maintaining the closest possible liaison with shipowners", who were also well-represented amongst its shareholders.[93]

AWA's expansion in the field of maritime wireless brought with it a need for the domestic manufacturing of equipment. At first the company was forced to import its equipment, as the small workshop it was operating in Sydney was only suitable for repairs. However, because it had attained a viable foothold in maritime wireless, in May 1914 the company opened a new, larger, workshop and began the domestic production of wireless equipment for installation on ships. The company also established an Australian branch of the Marconi School of Wireless in 1913 for the purpose of training wireless operators for service at sea.[94] Thus, the commercial opportunities provided by the maritime use of wireless, along with the consolidation of the small field under a single company, allowed private enterprise to take root in Australia.

Although AWA had managed to establish a foothold in Australia on the eve of war in 1914, it remained a small-scale operation. The company employed around 40 staff in mid-1914.[95] This compared to the 93 personnel working in the Wireless Telegraph Branch of the Postmaster-General's Department in December 1913, and a number of RAN personnel who were also working with the new technology.[96] With the Commonwealth in exclusive control of the coastal scheme, AWA's commercial operations were confined to the provision of equipment and services for the maritime trade, and training operators. Nevertheless, AWA was the largest non-government organisation involved in wireless, and its importance would grow

---

[91] Extract from the *'Wild Cat'* Monthly, 2nd June 1928. ML: MSS 2954/Add-On 1910; Box 73, Non-AWA Published Material, Printed Material on AWA, being Journal Articles, Newscuttings, Pamphlets, etc.
[92] J. Given, *Transit of Empires*, p. 102.
[93] 'Amalgamated Wireless (Australasia) Limited – History of Marine Department – 1913-1962'. ML: MSS 2954/Add-On 1910; Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.
[94] J. Given, *Transit of Empires*, pp. 102-103.
[95] 'Wireless in Australia – Its Rise and Development', 18th October 1934. ML: MSS 2954/Add-On 1910; Box 73.
[96] Letter to the International Telegraph Bureau from the Secretary of the Postmaster-General's Department, 26th November 1913. NAA: MP341/1, 1915/4725.

tremendously in the near future as the outbreak of war compelled the Commonwealth to utilise its stocks of equipment and trained operators.

Though it was the largest and most professional, AWA was not the only private commercial wireless interest operating in this period. There was also a small enterprise named the Maritime Wireless Company run by a Catholic priest, Father Archibald Shaw.[97] This firm was based out of an electrical workshop in the Sydney suburb of Randwick. When the decision was made to source wireless equipment for the coastal scheme from within Australia, rather than importing it, Shaw offered to sell his plant to the Postmaster-General's Department for this purpose. Though the department rejected that offer, the Maritime Wireless Company was commissioned to produce the equipment of Balsillie's design for use in the coastal scheme, and it was the only supplier of such.[98] Though little is known about the operations of the company, a Royal Commission, covered in the next chapter, later revealed disreputable connections between Shaw and members of the Labor Party, helping to explain how the Maritime Wireless Company became the sole supplier of material for the coastal scheme under the Fisher government.[99]

Australian Wireless on the Eve of War

By mid-1914, a number of distinctive features were apparent in the field of Australian wireless. Most prominent was its division into separate spheres of activity, with the Commonwealth exerting a monopoly over land-based stations – with a minor exception for experimental use by the general public – while leaving maritime wireless to commercial interests operating under the regulatory control of the Postmaster-General's Department. The central developmental role assumed by the Commonwealth government – with private enterprise mired in a subsidiary role – was a prominent feature of this period. Though the Fisher government had amplified this, by refusing any cooperation with private enterprise (except for

---

[97] See J. McMahon, "Father Archibald Shaw: The Wireless Priest" in *Journal of the Australian Catholic Historical Society*, Vol. 7, Part 3, 1983.

[98] 'Case for the Opinion of Counsel. Marconi v. Commonwealth – Opposition. Re Shaws Patents'. National Archives of Australia: Attorney-General's Department, Central Office; A432, Correspondence files, annual single number series, 24 Nov 1857-; 1929/2756 Part 3, Wireless telegraphy – Fr. Shaws Patent No. 1683 of 1911 Part 3, 1915.

[99] See R. Curnow, "The Origins of Australian Broadcasting", p. 63.

the Labor-linked Maritime Wireless Company), the non-Labor governments of Deakin and Cook had similarly endorsed government ownership and operation of wireless stations.

The pre-eminence of government in the sector during the pre-war years can be explained with reference to a number of factors. One, specific to the field of wireless, was the poor reputation of the Marconi Company within government circles, owing to its aggressive conduct elsewhere in the world.[100] However, this cannot explain the refusal of Commonwealth officials to countenance *other* private firms establishing commercial wireless services in Australia. Although the Commonwealth consistently used private enterprise to source the equipment for its stations throughout this period, there was never any indication of an appetite to open the field to commercial exploitation. Even the private usage of shipborne wireless permitted under the 1911 regulations was tolerated, rather than encouraged, by the government. Another important influence on the assertion of governmental control over wireless in the pre-war years was the Australian tradition of communications as a governmental monopoly that had been in place since the colonial era. The Postmaster-General's Department's control over other forms of communication, particularly the telegraph, provided compelling reasons for that department to also take control over the new medium, as was formally instituted in the 1905 *Wireless Telegraphy Act*. Indicative of this, control of wireless was initially invested in the same official that was responsible for telegraphy – the Chief Electrical Engineer – before the creation of a dedicated Wireless Telegraphy Branch under Balsillie. Internal departmental records discussing policy towards wireless are also replete with mention of its control of telegraphy, demonstrating that a connection between the mediums was widespread in the minds of officials at the time. Since the Commonwealth maintained complete control over telegraphy, it followed that it should also exert its power over wireless telegraphy.

From the very beginning Australia's principal interest in wireless was as a strategic asset that would enable communication with other lands of the Empire and, vitally for national security, the ships of the Royal Navy. This was a vital factor in the trajectory of Australian wireless development in the pre-war years. The impetus for the Commonwealth considering the constitution of the medium in the first instance came from the recommendations of the

---

[100] For instance, officials of the Postmaster-General's Department were referring to international experience to caution against any engagement with the company from as early as 1905. See 'Electrical Conference – Wireless telegraphy', 20th April 1905. NAA: MP341/1, 1906/362.

Admiralty as it took the first steps towards equipping the British fleet with wireless in response to the experience of the Russo-Japanese War, in which the utility of the medium for naval operations was first demonstrated. Similarly, the recommendations of Admiral Henderson in relation to developing Australian wireless were held in high esteem after the publication of his report in 1911. Henderson's report recommended developing a single wireless organisation that would be run by the Postmaster-General's Department in peacetime, but would be capable of transferral to military authorities in a conflict. The Commonwealth's prioritisation of this objective explains that, though Henderson also recommended the nationalisation of shipborne wireless services, it was willing to tolerate private intrusion into this sphere of operations. Because the priority was to construct a coastal network that could, in times of war, coordinate the naval defence of the Australian continent, it was a lesser concern that the merchant marine would be utilising the services of private enterprise. Though government control of these installations was desirable, as evidenced by Balsillie's enthusiasm for AWA bringing Australian maritime wireless under a single organisation, it was not seen as essential in the same way as the construction of a coastal network that would enable communicate with naval vessels was. Nationalisation of maritime wireless could be deferred until a later point in time.

This chapter also demonstrates the impact of short-term factors upon various aspects of policy. Though they did exert strong influences, it is insufficient to see developments as simple manifestations of larger structural trends. The two principal examples of this were Australia's reaction to the first incarnation of the Imperial scheme, and in the shape of the 1911 regulations. Despite the compelling reasons for acquiescing with British plans for the Imperial scheme, the Australian government determined its response with reference to immediate domestic concerns: the ongoing patent dispute with the Marconi Company. Domestic considerations were also behind the form of the 1911 regulations, with space being left for the private sector to enter the market for the provision of maritime wireless services out of concerns relating to the Commonwealth's financial exposure and the Marconi Company's ongoing legal challenge. In each of these cases, which represented significant policy decisions, the same pattern appeared. This pattern was one of external developments – that is, outside of the Australian wireless community – forcing the consideration of questions related to policy, which were then decided in response to proximate circumstances.

Another characteristic of this period was the emergence of domestic wireless interest groups. From the earliest years after Federation the Marconi Company had sought, without success, to expand its international business into Australia. It was later joined in these endeavours by the Australasian Wireless Company, a subsidiary of Telefunken. Though global rivals, these concerns had the common element of being international companies seeking to open up the Australian sector against the suspicions of Commonwealth policymakers. From around 1910, this landscape became more domesticated, with the emergence of Shaw's Maritime Wireless Company as the supplier of material for the coastal scheme, and the Marconi and Telefunken subsidiaries beginning to install imported equipment on Australian vessels. A further step towards domestication happened in 1913 with the formation of AWA, which shortly thereafter began its own domestic manufacturing and training operations.

Of these private interests, AWA was the best placed to emerge as a significant force in the future of Australian wireless. While it had not been granted the opportunity to participate in the coastal scheme, AWA had nevertheless gained an effective monopoly over the wireless sets on Australian shipping by 1914. Unlike the earlier domestic operations of its parent companies, this allowed it to turn a profit; providing a commercial basis for its future expansion.

Along with the roots of a domestic industry centred on the maritime trade, this period also saw the first development of an Imperial scheme of wireless. The negotiations over this scheme had seen the Commonwealth government assert its preferences against the remainder of the Empire by determining the terms under which it would participate. The timing of these negotiations, coming at the height of tension between the government and the Marconi Company, saw Australian officials determine that the erection of a station to integrate with the remainder of the scheme would be undertaken by the government itself, and that there was no place for cooperation with private enterprise on this matter. This indicates that the strategic imperatives necessitating the establishment of a wireless connection between Australia and the rest of the Empire were not immune from the influence of domestic politics. This influence would reappear when the question of international wireless was reopened after the hiatus forced by the Great War.

Unbeknownst to all involved, the prevailing state of affairs in Australian wireless was about to be upended by the outbreak of the Great War. The remainder of this study is dedicated to exploring the process by which the key feature of this period – the importance of the Commonwealth government, centred on the Postmaster-General's Department, and the relative unimportance of private enterprise to the sector's development – was overturned and replaced by a state of affairs in which private enterprise came to play a leading role in the industry's expansion in the early 1920s. To understand these changes, it is necessary to examine the experience of Australian wireless during the Great War.

Chapter 4 – The Great War and Australian Wireless, 1914-1918

This chapter concludes Part III of the study through examining the disruptive impact of the Great War on Australian wireless communications. By August 1914 an equilibrium had emerged in the sector. After some delay, the medium had bifurcated into largely separate public and private areas of operation. The Postmaster-General's Department, responsible for enforcing the *Wireless Telegraphy Act*, had erected a network of stations around the Australian coastline under its own monopoly control exercised through the Wireless Telegraphy Branch. Stations aboard commercial shipping, on the other hand, were all in private hands. Following the lead of the Marconi Company internationally, AWA had secured agreements with commercial shipping lines operating in Australian waters for the provision of wireless sets and services. A clear separation between public and private involvement in the wireless industry had been established, characterised by tension and mistrust. The outbreak of the Great War in August 1914 was the impetus for this status quo being unwound.

The Assertion of Military Control

Wireless' military utility immediately came to the forefront during the conflict. On 2nd August, with the deteriorating situation in Europe making war imminent, the British Colonial Secretary cabled the Governor-General directing the Commonwealth to institute a regime of censorship over cables and other forms of communication. As Ernest Scott describes, no action like this had ever been undertaken in Australia prior to this point.[1] Responsibility for implementing censorship fell upon the Postmaster-General's Department and, according to an internal history of the department's operations during the war written shortly after the Armistice, the implementation of censorship presented an unprecedented challenge for the organisation.[2]

---

[1] E. Scott, *Australia During the War*, pp. 58-59.
[2] See NAA: MP341/1, 1921/4656, History of Operation of Postmaster General's Department during war – all states, 1917-1921.

Though the main targets of censorship were Australia's fixed telegraph, telephone and cable services, wireless was also included. On 3rd August the Acting Defence Minister sent an urgent telegram to the Acting Postmaster-General, asking the latter to "suspend all private wireless licences" as quickly as possible under the authority provided by the *Wireless Telegraphy Act*.[3] These censorship measures, undertaken by the caretaker Cook government under emergency powers, were formally instituted by the Fisher government after its electoral victory in September.[4] By the end of 1914 the censorship regime had solidified. Notwithstanding a handful of prosecutions for the illegal possession of wireless equipment,[5] there was very little change in this arena for the remainder of the conflict. The unauthorised use of wireless by civilians would result in punishment from the government.

Another major change in the field of Australian wireless that took place during the war was the displacement of the Postmaster-General's Department's administration of the medium from 1915, and its shift to the control of the newly-created Department of the Navy. While at the time of the war's outbreak the RAN had a limited involvement in the area for its own purposes – operating ten wireless stations on board its vessels and three land-based stations separate from those of the coastal network – it was the Postmaster-General's Department that had primary responsibility for the area under the *Wireless Telegraphy Act*.[6] However, the outbreak of war and the resultant shifts in the usage of wireless prompted new administrative priorities.

One incident in 1914 illustrated a problem posed by the continued civilian control of wireless under wartime conditions. It saw the operator of the Sydney coastal station, an officer of the Postmaster-General's Department, send an uncoded message to all other coastal stations asking about the location of the first troop convoy that had departed Australia for the main theatre of war. In response, the operator of the station at Esperance, Western Australia, replied that "they are here old man" in another uncoded message capable of being received

---

[3] Telegram to Acting Postmaster-General from Acting Defence Minister, 3rd August 1914. NAA: MP341/1, 1914/42, Wireless Licences. Suspension of O/A of war, 1914-1919. Original capitalisation removed.
[4] Executive Council Order, 30th September 1914. NAA: MP341/1, 1914/42.
[5] See NAA: MP341/1, 1915/3457, Wireless Licence Generally Unauthorised Experimenters, 1914-1915; NAA: MP341/1, 1915/6509, Unauthorised Experimenter's Bleeck W. A., 1915.
[6] Memorandum to the Secretary of the Postmaster-General's Department from the Secretary of the Defence Department, 7th December 1914. National Archives of Australia: Navy Office [I], Department of Defence [I]; MP472/1, Correspondence files, annual single number series, 1901-1925; 1/15/4232, Visits of HMA Ships and Establishments. Mercantile Fleet Auxiliaries and Transports employed in conveyance of Troops fitted with Wireless Transmitters, 1913-1915.

over 1500 kilometres away.[7] Though nothing adverse came from this episode, the careless transmission of uncoded information about shipping movements could potentially have been intercepted by enemy vessels in the region. Curnow points to this incident as being the impetus for a transfer of wireless responsibilities away from the Postmaster-General's Department to the Navy, but the available evidence does not support such a clear line of causation. It does appear, however, to have provided RAN officials with "an example of the dangers attending the untrained civilian operators in war operations".[8]

Contra Curnow, there is no evidence to suggest that the idea of transferring responsibility over wireless to the RAN originated within that organisation. It appears to have originated within the Cabinet, as an accompaniment to that body's decision to transfer the Navy from the Department of Defence and, from July 1915, to create a separate Department of the Navy with Jens Jensen as its minister.[9] One document states that Cabinet decided to transfer the Commonwealth's wireless responsibilities from the Postmaster-General's Department to the new department from the latter's very inception on 1st July 1915.[10] In early September 1915 Parliament passed an amendment to transfer responsibility over the *Wireless Telegraphy Act* away from the Postmaster-General to the more ambiguous "Minister for the time being administering the Act".[11] Following this, the next month saw the Secretary of the Navy Department write to Balsillie "in view of the transfer of your Branch to the control of the Department of the Navy".[12] In anticipation, Balsillie began to furnish the Navy Department with details of the Wireless Telegraphy Branch's operations, and its employees were transferred to the new department. This marked the end of the Wireless Telegraphy Branch as an influential body in the field. The transfer of wireless was finalised in March 1916, when Cabinet decided that responsibility for the administration of wireless would be placed under a new organisation called the Royal Australian Navy Radio Service (RANRS) under the command

---

[7] Memorandum to the Secretary of the Navy Department from Cresswell, 22nd March 1919. NAA: MP341/1, 1916/1066, Organization Papers re offer made to staff and various questions arising therefrom, 1915-1919.

[8] Memorandum to the Secretary of the Navy Department from Cresswell, 22nd March 1919. NAA: MP341/1, 1916/1066.

[9] See C. A. Hughes and B. D. Graham, *A Handbook of Australian Government and Politics*, p. 44.

[10] Memorandum to the Secretary of the Treasury from the Secretary of the Postmaster-General's Department, 26th May 1916. National Archives of Australia: Australian Archives, Central Office; A6006, Folders of copies of Cabinet papers, 01 Jan 1901 -; 1915/12/31, Transfer of Wireless Branch from PMG to Navy, 1915.

[11] Amendment to the *Wireless Telegraphy Act* 1905, No. 33, 1915.

[12] Memorandum to Balsillie from the Secretary of the Navy Department, 12th October 1915. NAA: MP341/1, 1916/1066.

of Engineer Lieutenant Frank Cresswell.[13] Though Balsillie was retained by the Navy Department as a consultant, the transfer to the RANRS effectively ended his influence in the field. According to one contemporary, after the switch to RAN administration Balsillie "never came near the Navy Radio Section" despite being employed as a consultant.[14]

For the remainder of the conflict, and for some time after its conclusion, wireless remained in the hands of the RAN. This brought a large increase in the department's responsibilities in the field. In addition to its stations on warships and bases, it attained control of the Commonwealth's coastal stations and those former German stations in the South Pacific which came under military occupation in late 1914. The RAN also became responsible for the inspection of stations aboard ships, along with licencing, training, and examining wireless operators.[15]

The wartime reorganisation of Commonwealth wireless administration was a great departure from the status quo that had emerged prior to August 1914. Wartime circumstances, which elevated the importance of wireless' military applications, saw the displacement of the Commonwealth's wireless expert, who had emerged as one of the most important architects of policy over the medium since his appointment in 1911. New figures within the Navy Department, Cresswell in particular, would seek to promote policies in accordance with their own preferences. However, as will be shown below, the consolidation of all levers of formal control over wireless by the RAN did not give that organisation free rein to reshape policy. Its capacity to do so was constrained by the importance that AWA assumed during the war years, allowing the company to act as a counterweight to a number of policy suggestions emanating from the Navy Department. Furthermore, some policy alternatives proposed by RAN officials were not enacted because they were at odds with political conditions.

---

[13] "The Wireless Service – To Be Under Naval Control – Statement by Minister" in *The Age*, 2nd March 1916.

[14] "Transcript of Interview with C.B. Cutler". ML: MSS 2954/Add-On 1910; Box 28, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.

[15] 'Wireless: Naval Organisation of Commonwealth Radiotelegraphic Service', 25th January 1916. NAA: MP341/1, 1916/1066.

AWA/Commonwealth Cooperation in the South Pacific

As mentioned in Chapter Two, Australian forces were involved in a campaign against German colonial possessions in the South Pacific at the war's outbreak as part of a broader strategy to dismantle the enemy's global communications network. Detailed exposition of this dimension of the Great War can be found elsewhere.[16] One subsidiary, yet consequential, development associated with the South Pacific campaign was the beginning of cooperation between AWA and the Commonwealth. This represented the first instance of cooperation between these organisations, as the hostility and disengagement that had previously characterised their relationship began to dissolve under wartime conditions.

On 6th August 1914, two days after the declaration of war, a request from the British Colonial Secretary was received by the Governor-General, stating "if your ministers desire and feel themselves able to seize German wireless stations at Yap in Marshall Islands, Nauru on Pleasant Island, and New Guinea, we should feel that this was a great and urgent Imperial service".[17] An impromptu task force, comprised of several RAN warships carrying 1500 infantry and naval reservists, was dispatched from Sydney on this mission the following night.[18] This force had conquered the German South Pacific colonies, with a minimum of bloodshed, by the end of 1914.

There were considerable logistical challenges associated with the preparation of the task force within two days. Unable to deal with the increased need for wireless equipment and trained operators generated by the operation, Commonwealth officials reached out to AWA to secure the company's assistance. According to a contemporary description, cribbed from an October 1914 edition of *The Bulletin*, Fisk received a phone call at his house from Cresswell on the evening of 7th August, as the expeditionary force was preparing to embark. In their conversation Cresswell asked Fisk to "enlist 12 expert operators and deliver them between

---

[16] See S.S. Mackenzie, *The Australians at Rabaul: The Capture and Administration of the German Possessions in the Southern Pacific*, Volume X of the *Official History of Australia in the War of 1914-18*, Angus and Robertson Ltd, Sydney, 1937; J. Beaumont, *Broken Nation*, pp. 28-31; chapter 3 in N. Meaney, *Australia and World Crisis, 1914-1923*; chapters 1 and 2 in H.J. Hiery, *The Neglected War*.
[17] Quoted in S.S. Mackenzie, *The Australians at Rabaul*, pp. 5-6.
[18] J. Beaumont, *Broken Nation*, p. 29.

now and midnight aboard HMAS Melbourne, under steam for 'hush destination'".[19] This account notes that within hours a group of operators in the employ of the company had been recruited by Fisk and despatched to the RAN "ready to face hell for his country, provided they'd give him 10 minutes to get his toothbrush and say goodbye to Mother".[20] Along with operators, AWA also supplied the task force with the components for half a dozen wireless stations. A number of these stations were subsequently erected in the captured territories for the purpose of establishing communication with the Australian mainland.[21]

This contribution to the South Pacific campaign was not the only way in which the Commonwealth relied upon AWA for assistance upon the war's outbreak. In August the company was also hastily contracted to erect a new shore station at the RAN's Garden Island base in Sydney, for which it also supplied the wireless operators for a number of months until the Navy had time to train its own.[22] Furthermore, at the behest of the Defence Department, AWA established a wireless direction finder near Sydney, with which "a watch was observed for unauthorised or suspicious signals, which when heard would be traced as to direction by means of the new instrument".[23] The company also provided the government with other pieces of equipment, such as three portable stations purchased by the Defence Department under direct instruction from Acting Prime Minister Cook,[24] and loaned a Telefunken set to the Postmaster-General's Department "for the purpose of intercepting...traffic which is passing between certain German stations".[25]

---

[19] Quoted in 'Chapter II: The Early Days of Wireless in Australia'. ML: MSS 2954/Add-On 1910; Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.

[20] Quoted in 'Chapter II: The Early Days of Wireless in Australia'. ML: MSS 2954/Add-On 1910; Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.

[21] See the entry labelled '7/8/14' in the untitled, undated timeline of AWA's milestones in ML: MSS 2954/Add-On 1910; Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.

[22] See the entry labelled 'August, 1914' in the untitled, undated timeline of AWA's milestones in ML: MSS 2954/Add-On 1910; Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.

[23] See the entry labelled '1914' in the untitled, undated timeline of AWA's milestones in ML: MSS 2954/Add-On 1910; Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.

[24] See NAA: MP341/1, 1915/19589, Amalgamated Wireless War Office, 1914-1915.

[25] Letter to the Secretary of the Postmaster-General's Department from Balsillie, 29th August 1914. NAA: MP341/1, 1914/18687, Wireless. Accounts. Amalgamated Wireless Ltd, 1914-1915.

In all of these cases officials from the Commonwealth government reached out to AWA for assistance with the provision of equipment and operators in the first days of the conflict. This represented the first steps towards cooperation between these entities, and provided a foundation for further cooperation in the years to come. Because it was not equipped with the materiel and qualified personnel required for military operations, the crisis compelled the Commonwealth to overturn the established policy of avoiding commercial transactions with AWA – the company was the only organisation with the capacity to immediately meet the Commonwealth's wireless requirements. Therefore, the beginning of cooperation between AWA and the Commonwealth in 1914, which would develop into formal partnership eight years later, was based upon circumstances that were short-term and incidental. However, these initial instances of cooperation were not sufficient to immediately dispel the widespread mistrust of AWA within the government. An example of the lingering tension came in late 1914 in relation to the terms demanded by AWA for its provision of the six wireless stations supplied to the South Pacific task force. After receiving an invoice from the company, Cresswell claimed that its charges were excessive and included royalties from which the Commonwealth should have been exempt. Consequently, he recommended that the Commonwealth should refuse payment; a stance supported by the Naval Board and departmental secretary.[26] Although the company's charges were eventually paid in mid-1917, this was an indication that tension endured between the organisations despite the cooperation in the war's first weeks.

Balsillie's Failed Gambit

While the coming of war created the conditions that led to the first collaboration between AWA and the Commonwealth, it also provided an opportunity for a restructuring of the entire sector. In late 1914, using the opening presented by the coming of war, Balsillie attempted to orchestrate a fundamental change to the organisation of the Australian wireless industry by removing AWA's foothold in the area. Though it came close, his proposal was ultimately not implemented. Had it been, the subsequent development of Australian wireless could have been very different.

---

[26] See NAA: MP472/1, 9/15/1982, Purchase of WT Sets from the Amalgamated Wireless Co, Sydney – Question of Patents Right – Claim by firm for extra apparatus shipped in Melbourne, 1914-1917.

Balsillie's proposal to reorganise the sector was first detailed in an October 1914 memorandum circulated within the Postmaster-General's Department. With frustration, it noted that, despite Admiral Henderson's pre-war recommendations, the Commonwealth had not instituted a requirement that "all ships registered in Australia, and fitted with Wireless apparatus, should carry apparatus manufactured and operated by the Commonwealth government".[27] Balsillie's frustration came from the fact that "had we applied this policy from the inception, we would have been in a better position to control Wireless than we are at the present day".[28] Nevertheless, using the cover provided by wartime circumstances, Balsillie proposed to attain exclusive Commonwealth control over maritime wireless. He advocated that "the Government should protect the Ship Owner from exploitation by commercial radiotelegraph companies, on whose tender mercies they are doubtless thrown".[29] This 'protection' would take the form of the Commonwealth installing and operating ship-borne sets itself, which, Balsillie also claimed, would also enable streamlined administration due to the fact that "the whole of the land and ship organisation, that is practically all radiotelegraphy of the Commonwealth, could be controlled from the one source".[30] This proposition, Balsillie claimed, was supported by commercial shipping firms upset at the rates charged by private enterprise for the provision of wireless services on their vessels.

Following up on the matter over a year later, in December 1915, Balsillie noted that his proposal to nationalise the maritime wireless market had gained ministerial approval and was subsequently put before the Cabinet.[31] He wrote that "the Postmaster-General informed me in May of this year that the Ship Scheme was approved" by Cabinet, but lamented that "no action has however been taken".[32] Due to a paucity of surviving evidence, it is not clear why no action was ever taken on this proposal, given the assent of Cabinet. Balsillie's follow-up correspondence on the matter in late 1915 was an attempt to push the policy again, but in this case he did not receive a reply. By this time Balsillie was no longer a central figure in the field of Australian wireless, with responsibility having been transferred to the Navy Department. Furthermore, Hughes' replacement of Fisher as Prime Minister in October 1915 saw a greater

---

[27] 'Wireless: Ship Scheme', 23rd October 1914. NAA: MP341/1, 1914/18660.
[28] 'Wireless: Ship Scheme', 23rd October 1914. NAA: MP341/1, 1914/18660.
[29] 'Wireless: Ship Scheme', 23rd October 1914. NAA: MP341/1, 1914/18660.
[30] 'Wireless: Ship Scheme', 23rd October 1914. NAA: MP341/1, 1914/18660.
[31] This is confirmed in Cabinet records. See NAA: A6006, 1915/12/31, Wireless – Ship Scheme, 1915.
[32] Memorandum to the Secretary of the Navy Department from Balsillie, 16th December 1915. NAA: MP341/1, 1914/18660.

centralisation of decision-making and a diminished capacity for other ministers to influence policy. As the remainder of this study will demonstrate, Hughes was more favourably disposed towards AWA than his Labor predecessor had been.

Had Balsillie's proposal been put into effect, the potential consequences for the future of Australian wireless were great. Maritime operations represented AWA's largest foothold in the sector in Australia, given Commonwealth control of the land-based stations. Had this foothold been removed, AWA would have been without the principal component of its business organisation, and this would have had profound effects on the course of future development. Though the company was extending its operations into other areas throughout the war years, and though the scale of its maritime services was reduced due to the censorship regime, its internal records demonstrate the continued importance of this branch of the enterprise's operations, and an increase in the number of ships contracted to use AWA's services between 1914 and 1918.[33] Its expulsion from this field of operations may have made the company commercially unviable. Furthermore, the attainment of a Commonwealth monopoly over the whole of Australian wireless, the core of Balsillie's proposal, would have presented a major obstacle to any future commercial involvement in the sector.

Changes in AWA's Ownership

The war also prompted changes in AWA's ownership, transforming it from a company with a substantial foreign stake to one that could claim itself a national enterprise. This would later enable the company to promote itself as a national asset rather than a foreign tool, and this change proved to be of great importance to policy development in the post-war years by allowing the company to portray policies to promote its commercial expansion as serving the national interest.

Though the amalgamation between the Australian subsidiaries of Marconi and Telefunken had taken place over a year earlier, by August 1914 no formal agreement had yet been signed

---

[33] See the Director's Reports from 1914-1918 in ML: MSS 2954/Add-On 1910, Box 37, Shareholders Reports, 1914-1921 (Printed).

between AWA and Telefunken granting a licence to the former to use the latter's patents in exchange for 13,000 shares in the new Australian company. While, according to contemporary newspaper coverage, a licencing agreement had been drafted "for a considerable time before the war", it was not formally signed by representatives of the two firms until 8th December 1914.[34] The signing of this agreement with enemy subjects after the outbreak of hostilities led to the Commonwealth taking legal action against AWA executives under the *Trading with the Enemy Act* – which had been enacted several weeks earlier.[35] It also saw the government confiscate Telefunken's shares in the AWA and place them under the control of the Custodian of Enemy Property.

In September 1915 three of AWA's executives – Fisk, Denison and Bartholomew – appeared before a Sydney court charged with breaching the *Trading with the Enemy Act*. The prosecution's case centred upon the agreement signed between Denison and a Melbourne Patent Attorney who held the power of attorney for Telefunken's patents in Australia.[36] This, the prosecution argued, constituted a breach of the Act with the potential punishment of "a fine not exceeding £500, or 12 months' imprisonment, or both".[37] According to press coverage at the time, the AWA representatives executed this agreement because they were "afraid the Telefunken Company might go back on them after the war. Another reason was that the company wanted to be in a position to show that the exclusive rights of the Telefunken Company's patents had been purchased by them in the event of application being made to the Commissioner of Patents by other persons to use those patents".[38] However, as discussed below, these patents were later nullified by the Commonwealth. After two days of hearings, the three AWA directors were all found guilty of a technical breach of the law. However, their punishment was lenient, consisting of a minimal fine of £10 each, with the company itself fined a further £10. Though the potential sentence was considerably heavier, the magistrate's opinion was that the need for more substantial punishment was mitigated by the fact that "after the war began, the company offered their plant to the Government, and this offer was availed of by the naval and military authorities on several occasions".[39] AWA's directors

---

[34] "The Wireless Case. Alleged Trading With The Enemy" in *The Advertiser*, 21st September 1915.
[35] J. Beaumont, *Broken Nation*, p. 44.
[36] See the transcript of Geeves' interview with J. Wilson, 12th October 1972. ML MSS 2954/Add-On 1910; Box 29, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.
[37] "Enemy Trading – Small Fine Imposed" in *The Sydney Morning Herald*, 23rd September 1915.
[38] "Enemy Trading Act – Wireless Company in Court" in *The Sydney Morning Herald*, 21st September 1915.
[39] "Enemy Trading – Small Fine Imposed" in *The Sydney Morning Herald*, 23rd September 1915.

therefore received a lighter punishment for their infraction as a direct result of their company's enthusiastic support of the war effort, a sign of the special position that the company had assumed.

Of greater long-term importance, though, was the fate of the 13,000 shares in AWA that had been the property of Telefunken prior to their confiscation by the Commonwealth. This, in connection with the broader question of AWA's ownership, was a subject to which Commonwealth officials paid close attention. In November 1917, the AWA shares formerly owned by Telefunken were scheduled to be put on public auction in accordance with procedures put in place for the disposal of enemy property. A Nationalist MP, Willie Kelly, contacted Navy Minister Cook urging the latter to ask Cresswell's opinion on the matter. Kelly's suggestion, on which Cresswell's advice was sought, was that the shares should be purchased by the Commonwealth so as "to prevent the Marconi Company getting complete control of Amalgamated Wireless".[40] In response, Cresswell composed a brief report on the subject. Noting that more than two-thirds of AWA's shares were held by a combination of the Marconi Company and AWA's management – implying a unanimity of these interests – and claiming that "there is little doubt that the Marconi Company will make an attempt to extend its operations and influence in Australia", he nevertheless rejected the notion of the Commonwealth purchasing the shares at auction.[41] He justified this recommendation by noting that it would be preferable to nationalise the entire sector:

> The Government's interests are adequately protected, and there is no reason why the Government should not at any time declare Wireless Telegraphy to be an entire Government Monopoly so far as Australia is concerned. Of course such declaration would necessitate the taking over of the Marconi Company's interests in Australia. I cannot justify the suggestion that the Government should compete in the open market for the purchase of the Shares held by enemy subjects.[42]

---

[40] Memorandum to the Acting Director of the Commonwealth Radio Service from the Secretary of the Navy Department, 20th November 1917. NAA: MP472/1, 1/17/8181, Amalgamated Wireless – Suggested purchase by C'wealth of enemy Shares, 1917.
[41] 'Amalgamated Wireless (A/asia) Ltd.: Re Suggested Purchase by Commonwealth of Enemy Shares', 21st November 1917. NAA: MP472/1, 1/17/8181.
[42] 'Amalgamated Wireless (A/asia) Ltd.: Re Suggested Purchase by Commonwealth of Enemy Shares', 21st November 1917. NAA: MP472/1, 1/17/8181.

In line with these recommendations, discussion of the matter was dropped and the Commonwealth did not seek to acquire the shares. They were instead purchased by a pair of Sydney solicitors at the behest of Fisk, who arranged for their subsequent resale to shipping firms.[43] An important consequence of this was its confirmation that ownership of the enterprise was now exclusively Anglo-Australian, with an increased proportion now under domestic control. This change was an important step towards the company being "made local" after being "born global", and would prove to be of great importance to AWA's future expansion and the post-war direction of wireless policy.[44]

Cresswell's memorandum reveals that, like his predecessor Balsillie, he supported the goal of bringing the entire wireless sector under the control of the Commonwealth and removing AWA's foothold in the industry. Though he did not directly advocate for such, his view of the desirability of such a step is clearly embedded in this document. This demonstrates that even in 1917, by which time AWA had become further entwined in the war effort, a good deal of hostility towards the company remained within the Commonwealth bureaucracy.

Evidence uncovered by Given suggests that Cresswell's suspicion that the Marconi Company would seek to extend its stake in the Australian company was well-founded, and that Fisk had arranged for the shares to be resold to domestic concerns so as to prevent "Marconi increasing its stake at a time when the share price was depressed".[45] These changes in AWA's ownership were also consistent with broader structural changes in the Australian economy associated with the Great War outlined in Chapter Two. Like the metals sector, it saw the Commonwealth directing the removal of German ownership and influence from a strategic industry and those former German assets coming under domestic control. It was also consistent with a larger shift in the direction of economic nationalism that was emerging at the time.

---

[43] Memorandum to the Chief Clerk of the RANRS from the Acting Comptroller-General, 12th December 1917. NAA: MP472/1, 1/17/8181.
[44] J. Given, "Born Global, Made Local".
[45] J. Given, "Born Global, Made Local", p. 9, fn 50.

Wireless Training Schools

As was revealed in the preparations for the South Pacific campaign, the beginning of the conflict saw the Commonwealth short of trained wireless operators in its employ. As a result, the government was forced to rely upon AWA's cache of trained personnel for its operations in the war's first weeks. As the conflict became a protracted one, and particularly as the use of wireless became more important to operations in its latter stages, demand for qualified wireless operators in both the armed forces and the merchant marine grew. The provision of training services, both directly through its own facility, and indirectly through the involvement of senior personnel in military training facilities, represented another dimension of AWA's contribution to the war effort, and another axis along which it expanded its operations.

AWA's Marconi School of Wireless, which had begun training operators for maritime service in the pre-war years, had been forced to disassemble its equipment to comply with the censorship regime in August 1914. However, within weeks the company wrote to the Naval Board seeking permission to resume its training operations and reinstall those sets at the facility that had been dismantled. With reference to an "arrangement" for the supply of trained operators between AWA and defence officials, presumably referring to those personnel supplied for the South Pacific campaign and elsewhere, Balsillie recommended this request be approved by the Naval Board in September 1914 "on the distinct understanding that, at no time, is either the receiving or transmitting apparatus to be associated with an antenna or ground connection".[46] Given that it was impossible to use this equipment without antennae, this was a small concession by Balsillie. Nevertheless, it represented an early exemption to the strict rules covering the private use of wireless introduced upon the outbreak of war, and a sign of Commonwealth officials' recognition of AWA's usefulness as a provider of operators for the war effort.

---

[46] 'Wireless: Licences: McKail H.', 22nd February 1915. NAA: MP341/1, 1915/16282, Amendment of Regns. under the Wireless Telegraphy Act 1905. to come into operation forth with, 1912-1915.

By April 1915, a number of other, smaller, organisations besides AWA had also sought permission to instruct students in the use of wireless. In response to these requests, Balsillie outlined a proposal for a formal policy to cover the training of wireless personnel. Recognising the need for more qualified operators, he recommended that certain institutes, upon successful application, should be permitted to "conduct experiments in Radiotelegraphy" for training purposes.[47] Rather than being issued licences, approved institutes would be covered by a permit system, whereby permission would be granted by a letter from the Postmaster-General which could be withdrawn at the minister's discretion. Balsillie's proposal was recommended by the departmental secretary a few weeks later, and subsequently assented to by the Cabinet and formalised in September.[48] This month also saw the Postmaster-General's Department begin to issue proficiency certificates to wireless operators, without which one could not legally operate a set.[49]

In addition to AWA, a dozen other small private schools and colleges became involved with wireless training under the new procedures.[50] However, none of these matched the scale of AWA's endeavours in this area. In addition to dwarfing the other organisations in the scale of its operations, AWA was also the only organisation involved in training that regularly corresponded with Commonwealth authorities on the subject and vouched for the bona fides of its students. From early 1916 onwards, in response to the introduction of similar restrictions in Britain, Navy Minister Jensen introduced additional prerequisites for the awarding of wireless proficiency certificates. These required holders of certificates to demonstrate they were not enemy subjects by providing particulars of their, and their parents', places of birth.[51] These restrictions were further tightened in 1917, again in response to policy changes in Britain, whereby only those of "purely British descent" were permitted to gain instruction in the use of wireless.[52] Those of enemy background were to be excluded automatically, while

---

[47] 'Wireless: Licences: McKail H.', 15th April 1915. NAA: MP341/1, 1915/16282.
[48] 'Regulation Under the Wireless Telegraphy Act, 1905', 17th September 1915. NAA: MP341/1, 1915/16282.
[49] See NAA: MP472/1, 1/15/7596, Wireless Operations Certificate of Proficiency in R/T forwarded for signature, 1915-1920.
[50] See the list in a memorandum to the Secretary of the Navy Department from Cresswell, 9th October 1917. NAA: MP472/1, 1/19/6333, R/T in relation to persons of foreign parentage, 1915-1919.
[51] See NAA: MP472/1, 1/15/9963, Grant of licences to act as wireless operators on ships, to Brit Subjects, 1915-1916.
[52] Unaddressed memorandum from the Secretary of the Navy Department, October 1917. NAA: MP472/1, 1/19/6333.

those of Allied or neutral background would have their individual cases considered by the Naval Board.

In line with this change in procedure, the Navy Department asked those institutions authorised to engage in wireless instruction to furnish lists of their students affected by the change in policy. The largest number of responses came from AWA, who advocated for their students to be permitted to continue training, though with mixed results.[53] Nevertheless, AWA was the only organisation that played an active role in assisting applicants to gain permission to undertake training, such as through providing letters attesting to the credibility of applicants. While its advocacy did not always persuade the Naval Board, it demonstrated a greater level of organisational sophistication than any other institution offering wireless training. Furthermore, applications associated with AWA received considerably more attention from RAN officials. Questionable applicants at other institutions were often summarily refused by the Naval Board, such as in the cases of several applicants associated with Stott's Correspondence College in Melbourne.[54] Most notable about these cases was the department's perfunctory treatment of them when compared to applications connected with AWA's training school. This is further evidence of the special position AWA had assumed in the eyes of Commonwealth officials.

In addition to its own training of wireless operators for the war effort, there was also a significant AWA connection with a large-scale military wireless instructional facility established in the latter years of the conflict. At the beginning of the war the Army's Signal School provided training in wireless for military personnel. However, by 1915 this institute was stretched to capacity and unable to provide adequate instruction in the medium for the number of trainees passing through it. As a result, "half-trained men, technically unfitted for service abroad" were graduating from the school.[55] To rectify this problem, military authorities arranged for Captain Payne, AWA's Traffic Manager, to come to the Army's Moore Park facility in Sydney on a part-time basis to conduct instruction in wireless once per week. However, recognising that simply providing supplementary training to graduates of the Signal School was

---

[53] See the individual cases in NAA: MP472/1, 1/19/6333.
[54] See the individual cases in NAA: MP472/1, 1/19/6333; NAA: MP472/1, 1/17/2187, R/T [Radio Telegraph] Students – Signed forms respecting nationality of, 1917-1918.
[55] K. Burke (ed.), *With Horse and Morse in Mesopotamia: The Story of Anzacs in Asia*, Arthur McQuitty and Co., Sydney, 1927, p. 80.

not an ideal practice, Payne advocated for the establishment of a single Wireless Training School wherein trainees from around the country would be sent to Moore Park for half a year to undergo instruction.[56] Payne himself designed and developed a systematic program of instruction and "under his command, the Wireless Training School grew rapidly, [with] the standard of the trainees soon reaching a high level", thereby ensuring that "the units in the field…[received] trained reinforcements, capable of taking their place in the day's work without delay".[57] In total, over 3000 men received instruction from the school throughout 1917 and 1918. Though Payne was later deployed to – and killed in – the Middle East in command of an army signalling unit,[58] he played an instrumental role in the institutionalisation of wireless training for the Australian armed forces.

Both directly – through the Marconi School – and indirectly – through Payne's creation of the Wireless Training School – AWA was instrumental in the provision of wireless instruction for Australians during the war. This fact would further contribute to the company's cache of credibility in the post-war years, and represents another example of the unique capacity it possessed to assist the war effort in the field of wireless. The company's assistance in this area proved to be of particular importance in the latter stages of the war, by which time technological improvements had seen the incorporation of wireless into a wider range of military operations on sea, land and, eventually, in the air. This led to a greater demand for qualified operators and, consequently, a need for expanded training operations.

Domestic Manufacturing

As was the case with other Australian industries, the war provided stimulus for the domestic manufacturing of wireless equipment. The root cause of this, discussed in Chapter Two, was the 'natural protection' offered by a marked decline of foreign imports resulting from the shipping crisis and the widespread dislocation of world trade patterns. In addition, the aforementioned increase in demand for equipment, as wireless became increasingly important for military operations, contributed to the growth of manufacturing in Australia. AWA was the

---

[56] K. Burke (ed.), *With Horse and Morse in Mesopotamia*, p. 80
[57] K. Burke (ed.), *With Horse and Morse in Mesopotamia*, p. 80
[58] 'Reports to Shareholders'. ML: MSS 2954/Add-On 1910, Box 34, Miscellaneous Material.

organisation best positioned to capitalise on this opportunity, and the flourishing of its manufacturing provided another dimension of the company's growth during the Great War.[59] However, it was not the only organisation to involve itself in this area. The war years also saw the Navy Department acquire its own plant and commence manufacturing wireless equipment. However, due to controversy surrounding the circumstances under which this facility was purchased, the potential threat that government manufacturing posed to AWA was never fully realised.

In the pre-war years much of Australia's wireless equipment was imported, with AWA's non-service operations focused upon a small workshop in which it conducted repairs. The domestic manufacturing that was taking place was done by Father Archibald Shaw's Maritime Wireless Company – which had supplied the Commonwealth with the Balsillie equipment for its coastal network – at a facility in Randwick.[60] By the war's end, AWA had established its own manufacturing plant and begun producing equipment to compensate for the diminished level of overseas imports.[61] The Randwick facility, sold to the Navy Department prior to Shaw's death in 1916, was on the brink of an ignominious closure. The war years, therefore, saw a reversal of the position in 1914; AWA had emerged as the only wireless manufacturing operation on the Australian continent, further cementing its importance to the future of Australian wireless.

During the war AWA's manufacturing operations allowed it to expand its customer base. While it continued to supply apparatuses to oceangoing vessels, it also started to receive government orders. These were not limited to the aforementioned instances of the Commonwealth purchasing equipment from the company. AWA also sold sets to the governments of New Zealand and Tonga.[62] Furthermore, in 1917 the company was contracted by the British government to outfit a number of steamships being constructed in Japan with wireless.[63]

---

[59] J. Given, "Born Global, Made Local", p. 9.
[60] J. Given, *Transit of Empires*, p. 171.
[61] J. Given, *Transit of Empires*, p. 103.
[62] J. Given, *Transit of Empires*, p. 102.
[63] Memorandum to the Secretary of the Navy Department from Fisk, 21st August 1917. NAA: MP472/1, 1/17/8193, Installation of improved receiving apparatus on ships, 1917-1918.

The increased demand for wireless was a boon for AWA due to the virtual disappearance of other sources of equipment in the Pacific region. In the recollection of one of its employees, "all the Marconi Company equipment was diverted to England's own war effort, so that AWA was obliged to take its first steps in manufacturing its own equipment".[64] The increased demand for production during the war years prompted the company to move its manufacturing operations to a new, bigger, facility.[65] Related to this change, the number of staff employed by AWA in its manufacturing operations increased fivefold during the war, from 30 to 150.[66]

AWA's establishment of wireless manufacturing at a significant scale in Australia, consistent with larger patterns of economic development outlined in Chapter Two, would also prove influential over the trajectory of post-war developments. Its central position in the domestic arena endowed it with a good deal of influence over policy formation in the sphere of wireless. However, the dominance of the company in the field of manufacturing by the time of the Armistice was not a foregone conclusion, and in the mid-war years it was faced with a potentially powerful new competitor when the Commonwealth government thrust itself into wireless manufacturing operations. Though it would prove short-lived, this was a meaningful development. In the pre-war years, despite the Commonwealth's monopoly over land stations, it had never entered the business of manufacturing, instead relying on tenders to procure the necessary equipment. The direct entry of the Commonwealth into the manufacturing business represented a great potential threat to AWA's position, although this was never fully realised because of the irregular circumstances under which the government's plant was acquired.

Shaw, the Catholic priest who owned the Randwick facility, had offered to sell it to the Postmaster-General's Department in 1914. After some consideration, the department declined this proposal.[67] Following this, in 1915 he had approached AWA offering a merger between

---

[64] Letter to Phillip Geeves from Harry de Dassel, 28th August 1969. ML: MSS 2954/Add-On 1910; Box 28, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.
[65] 'Radio in Australia. Modern Communications. Influence of AWA'. ML: MSS 2954/Add-On 1910; Box 24, Fisk, Sir E.T. – Addresses, Articles, Lectures and Reports, 1921-1942 (MSS); Articles by Sir E.T. Fisk, 1921-1932 (Printed).
[66] 'AWA Radio Electric Works – Sydney'. ML: MSS 2954/Add-On 1910; Box 24, Fisk, Sir E.T. – Addresses, Articles, Lectures and Reports, 1921-1942 (MSS); Articles by Sir E.T. Fisk, 1921-1932 (Printed).
[67] Parliament of the Commonwealth of Australia, *Report of the Royal Commission on Navy and Defence Administration*, Melbourne, 2nd December 1918, p. v.

that entity and his Maritime Wireless Company, but AWA's executives quickly dismissed the offer, considering Shaw's proposed terms unfavourable.[68] However, after these two rejections a confluence of circumstances enabled Shaw to offload his plant to the Navy Department in an agreement made in 1916.

In March 1915, while responsibility for wireless remained with the Postmaster-General's Department, Cresswell authored a memorandum to the Naval Board recommending that the Commonwealth form its own plant capable of manufacturing wireless equipment. He argued "that the developments of wireless telegraphy within the Commonwealth, apart from the W/T demands consequent upon the outbreak of war, justify the Government in establishing its own workshops for the manufacture and repair of all wireless apparatus used by the Government".[69] This document provides further demonstration of a sentiment that the whole of the wireless industry properly belonged under the direct control of the government and an opposition to the private development of wireless.

Of more importance to the later course of events, however, was the opportunity that Cresswell's manufacturing aspirations gave to Navy Minister Jensen in 1916. In May, Shaw wrote to Jensen offering to sell the assets of the Maritime Wireless Company to the Navy Department. In response Jensen directed his department to obtain a valuation of the company's assets. In the following month Cabinet, under Acting Prime Minister Pearce while Hughes was on his first overseas trip as Prime Minister, approved the decision to seek a valuation and resolved to consider the question of purchase once one had been attained. In July, with reference to a report authored by Cresswell recommending the purchase of the Randwick works for £55,000, Cabinet approved the Navy Department's acquisition of the site.[70]

From the time of purchase to its closure in 1919, the Randwick works were engaged in manufacturing wireless apparatus – consisting mostly of maritime sets – along with other war

---

[68] *Report of the Royal Commission on Navy and Defence Administration*, p. 28.
[69] *Report of the Royal Commission on Navy and Defence Administration*, p. vi.
[70] *Report of the Royal Commission on Navy and Defence Administration*, pp. vi-viii.

materiel.[71] Around 20 new wireless sets were constructed at the site during the war years.[72]
This allowed the RAN to avoid doing business with AWA when it came to obtaining equipment
for its own purposes, and to create an alternative source of wireless equipment for those
authorised to use it. AWA's executives, for their part, were acutely conscious of the threat that
the Navy's acquisition of the Randwick plant posed to their company's operations. Denison,
AWA's Managing Director at the time of the purchase, claimed that the Commonwealth's
entry into wireless manufacturing saw his company receive fewer government orders for the
provision of equipment. While he denied that this was a problem in the short-term, he
conceded that it posed a substantial threat to AWA's long-term viability, stating that "we did
not want the Government to be a competitor – a competitor with Government money behind
it".[73] The manager of the Randwick site was similarly displeased at not holding a monopoly in
the field of manufacturing, noting in one report that "the problem of competing with outside
Companies is a very difficult one".[74]

However, the potential threat to AWA's commercial position represented by the
Commonwealth's acquisition of its own wireless manufacturing capacity was never fully
realised. In July 1917 a Royal Commission was convened to investigate matters relating to
administration within the Navy Department, with a particular focus on the circumstances
surrounding the purchase of the Randwick works. The Royal Commission's report, presented in
December 1918, found that the Navy Department's purchase of the facility was tainted by
impropriety involving two Tasmanian Parliamentarians: Senator Long and Navy Minister
Jensen. Shaw had bribed Long, who in exchange had drafted the former's offer to sell the plant
to the department and advocated for its purchase by the government. Jensen, for his part, was
deemed to have circumvented proper process regarding the purchase of the site. The report
written by Cresswell and submitted to Cabinet, suggesting the purchase price of £55,000, had
originally recommended £40,000. Jensen had pressured Cresswell to increase his report's
recommended price prior to its submission to Cabinet, but made no mention of this
interference when the matter was put before that body for approval.[75] Both Long and Jensen

---

[71] See NAA: MP472/1, 18/17/7853, W/T [Wireless Telegraphy] Workshops, Sydney – Annual Report for period 18.8.1916 to 30.6.1917, 1917-1918.
[72] 'Report on Operations of RAN Radio Service', unspecified date. NAA: MP472/1, 1/14/8441, Progress Report. Wireless Telegraphy Stations Ashore, 1913-1915.
[73] *Report of the Royal Commission on Navy and Defence Administration*, p. 29.
[74] 'First Annual Report of the Manager, RAN Wireless Telegraphy & Electrical Workshops, Randwick, Sydney, NSW', 14th September 1917. NAA: MP472/1, 18/17/7853.
[75] *Report of the Royal Commission on Navy and Defence Administration*, p. xiii.

resigned from Parliament after the publication of the Royal Commission's findings. In the winter of 1919 Cabinet recommended the Randwick works be transferred to the Repatriation Department from the Navy Department, with Cook, in his capacity as Navy Minister, directing that this transfer was to happen "immediately and that terms were to be adjusted later".[76] Following the transfer of the Randwick works to the Repatriation Department, the Navy's involvement in the manufacturing of wireless ceased. The department did, however, maintain a minor facility, consisting of a number of specialist staff and a small workshop, at its Williamstown base for the purpose of repairing and maintaining the fleet's wireless sets. This was, in effect, a reversion to the pre-war state of affairs after a short-lived attempt to establish the Commonwealth as a direct provider of equipment.

The changes in the area of domestic wireless manufacturing between 1914 and 1918 would prove to be of great consequence for the further development of the medium in post-war Australia. Come the Armistice AWA's predominance in manufacturing, facilitated by the particularities of wartime conditions, provided the company with a basis for further expansion in the years to come. Furthermore, by virtue of its status as the only concern on the Australian continent capable of the mass production of wireless equipment, it was uniquely positioned to influence wireless policy in the early 1920s. The advantage of the company's position was further enhanced by the collapse of the Commonwealth government's brief foray into manufacturing at the Randwick facility following the publication of the Royal Commission's findings. This represented a major blow against the notion of direct government involvement in the industry. Furthermore, the disappearance of Shaw's Maritime Wireless Company left no other source besides AWA from which the Commonwealth could procure equipment for its future needs. These factors presaged a reshaping of the respective roles of the public and private sectors that would become enshrined in policy in the immediate post-war years.

Wireless on the Commonwealth Line of Steamers

---

[76] Letter to the Chairman of the Repatriation Commission from the Secretary of the Navy, 9th November 1920. NAA: MP472/1, 15/20/10935, Transfer of Machines from Repatriation School, Randwick to Garden Island W/T [Wireless Telegraphy] Station and Electrical Workshops, 1920-1921.

The unease between AWA and the Navy Department that arose during the Great War was also reflected in other areas related to wireless, such as in relation to the provision of equipment and services on the Commonwealth Line of Steamers. This area of dispute reflected a larger dynamic of rivalry between these organisations. AWA's ability to secure its position on the vessels of the line in the face of resistance from departmental officials speaks to the limitations of the latter's influence, as well as the idiosyncrasies of Hughes' administrative record as Prime Minister.

As mentioned in Chapter Two, Hughes' first wartime voyage to Britain in 1916 saw the formation of the Commonwealth Line of Steamers as a means of addressing the shipping crisis. As Fitzhardinge documents, the Prime Minister deputised H.B. Larkin, "an experienced shipping man", to act as the organisation's manager and oversee the details of his scheme's implementation.[77] This was typical of Hughes' methods of wartime administration; conceptualising a new scheme but leaving the operational details to a hand-picked figure. This method would prove critical to the wireless-related aspects of the line's organisation. In August an agreement was signed between Larkin and Fisk, under which AWA would supply the government line with its wireless services on terms favourable to the company.[78] The agreement required AWA to install wireless sets in the ships of the line, and also to take responsibility for the maintenance and operation of those sets. In exchange, the Commonwealth committed to pay AWA £250 per ship per year, with an additional clause of the agreement capping AWA's contribution towards operator wages at £100, with any additional wage costs to be borne by the Commonwealth. Furthermore, the agreement was slated to last for a minimum of ten years, with the Commonwealth obliged to compensate AWA for each ship upon which their equipment was installed that fell short of the ten year marker.[79] The signing of this agreement also indicates the importance of the established ties between AWA and shipping companies. The fact that Larkin possessed experience in the sector likely made some arrangement with AWA a natural decision, given the company's predominance in the field of maritime wireless in Australian waters.

---

[77] L.F. Fitzhardinge, *The Little Digger*, p. 138.
[78] See the letter to AWA from Larkin, 7th August 1916. NAA: MP472/1, 1/19/4242, Endorsement by Navy of Agmt between C'wealth Line of Steamers & AWA for provision of wireless service, 1916-1919.
[79] A copy of the agreement, undated, is available in NAA: MP472/1, 1/19/4242.

Fisk must have anticipated that the agreement, and its generous terms, would stir controversy in Australia. The documentation surrounding it contains multiple references to his insistence that it be formally ratified by government officials in Australia as, in Larkin's words, "he is not quite satisfied that the authority which I hold from the Rt. Hon. the Prime Minister renders the agreement sufficiently binding".[80] This suggests that Fisk was concerned that the agreement would be overturned in response to resistance by others with an interest in wireless.

Fisk was correct to anticipate controversy in relation to the matter. In September Cresswell submitted a lengthy, passionate rebuke of the agreement to his departmental secretary. He described the agreement as comparable to the agreements that had previously been signed between AWA and various Australian shipping firms, wherein a number of costs associated with wireless operations, which he estimated as £385 annually per vessel, were shifted from AWA to the shipowner. He also estimated that the £100 set aside to pay operators' annual wages would only cover two-thirds of the costs, and that the Commonwealth would end up paying a further £56 per operator towards this end. Cresswell was indignant at the fact that the Commonwealth was "receiving only the same terms [from AWA] as the private ship owner", despite having "acquired the necessary Patent Rights to enable it to manufacture and equip its own vessels with Government-owned W/T installations".[81]

In addition to his concerns over cost, Cresswell also worried that "entry of the Government into the Agreement in question weakens the Government's position in endeavouring to make Wireless Telegraphy a Government Monopoly".[82] Consequently, he concluded that the Commonwealth should block the agreement's ratification, and that the Naval Board should be consulted before the signing of any future contracts relating to wireless so as to prevent any further arrangements being made on similar terms.

---

[80] Letter to the Secretary of the Navy Department from Larkin, 9th August 1916. NAA: MP472/1, 1/19/4242.
[81] 'Re Agreement between the General Manager of the Commonwealth Line of Steamers and the Amalgamated Wireless (Australasia) Limited', 29th September 1916. NAA: MP472/1, 1/19/4242.
[82] 'Re Agreement between the General Manager of the Commonwealth Line of Steamers and the Amalgamated Wireless (Australasia) Limited', 29th September 1916. NAA: MP472/1, 1/19/4242.

Cresswell was supported in this position by the departmental secretary and Navy Minister Jensen. A memorandum to the Prime Minister's Department from the Navy Department called for Cresswell's report to receive "the earnest consideration of the Prime Minister", and also stated that "Mr Jensen regrets that any arrangements have been entered into with an outside company [because] all such work can be done at the Commonwealth Wireless Workshops" in Randwick.[83] Cresswell's report appears to have had some initial influence, with a later memorandum written by the Secretary of the Navy Department claiming a degree of downscaling: "advice has been received from the Prime Minister's Department per telephone that steps would be taken to confine the Agreement to the 15 ships purchased by Mr Hughes, but that the Agreement otherwise must stand".[84]

However, this apparent compromise of limiting the agreement to 15 vessels was never formalised. Later documentation, dating from September 1918, indicates that the Commonwealth Line of Steamers had recently purchased an additional dozen ships and that those vessels were also being outfitted with wireless equipment by AWA in Sydney. Cresswell again protested that the line's management had embarked upon this course of action without consulting the RANRS, and that the Commonwealth had the means to provide the necessary equipment itself through the Randwick works. With reference to his proposal of two years earlier, he urged that "a definite policy should be laid down by the Government" to bring wireless on the line under the exclusive control of the Commonwealth.[85] This suggestion was, however, brushed off by the departmental secretary, who noted that the decision was consistent with the 1916 agreement signed between the line and AWA.[86]

Cresswell's attempt to secure this policy change in late 1918 was further impeded by the transfer of responsibility over the Commonwealth Line of Steamers, along with other vessels under the control of the government – principally German ships that had been captured in Australian ports at the war's outbreak – away from the Navy Department the previous year.

---

[83] Memorandum to the Secretary of the Prime Minister's Department from the Secretary of the Navy Department, 7th October 1916. NAA: MP472/1, 1/19/4242.

[84] Memorandum to Cresswell from the Secretary of the Navy Department, 31st October 1916. NAA: MP472/1, 1/19/4242.

[85] Memorandum to the Secretary of the Navy Department from Cresswell, 21st September 1918. NAA: MP472/1, 1/19/4242.

[86] Memorandum to Cresswell from the Secretary of the Navy Department, 7th October 1918. NAA: MP472/1, 1/19/4242.

From 1st July 1917 all Commonwealth controlled vessels were placed under the administration of the Prime Minister's Department.[87] Although Cresswell was kept on "in an advisory capacity", his attempts to introduce RAN supervision over wireless on government ships appear to have been fruitless.[88]

The issue of wireless on the Commonwealth Line of Steamers illustrates four interrelated aspects of wartime impacts upon the medium. One was the limits of RAN control. Though the Navy Department had been given formal responsibility for the administration of wireless from 1915, in practice its officials were constrained in their capacity to influence developments. Another was AWA's ability, through the signing of contracts, to carve out market niches for itself and defend them from opposition within the Commonwealth bureaucracy during a period characterised by increased government powers. Third was the company's cultivation of political influence. It was this influence, cultivated across a range of areas from its support of the war effort to its material capacities, which enabled AWA to defend its commercial operations against those within the government who were hostile to the company and desired to see its activities curtailed. Without the support of the Cabinet, which from 1915 on effectively meant the support of Hughes, no such moves against the company could be made. The reliance of the government upon AWA's capacities, in addition to the political capital the company had accumulated from August 1914 onwards, made such a manoeuvre unlikely, despite the pressures from within the bureaucracy to do so. Finally, it demonstrates a dynamic that would prove crucial to the post-war development of Australian wireless: the dominance of Hughes as Prime Minister over the agenda-setting and decision-making processes. The whole dispute over the fate of wireless on the Commonwealth Line of Steamers would not have come about without Hughes' decision to purchase the vessels in the first place, nor if the line's organisation had been left to the established bureaucracy rather than a personal appointee with industry ties. It also represents the earliest instance of Hughes' whims having an impact on the development of wireless, albeit indirectly and in a comparatively minor way. However, in future years he would come to take a personal interest in the medium, and his unmatched influence would prove to be a critical ingredient in future policy decisions.

---

[87] Memorandum to the Secretary of the Navy Department from the Secretary of the Prime Minister's Department, 30th June 1917. NAA: MP341/1, 1920/968, Ships Commonwealth government line – wireless installation, 1917-1920.
[88] Memorandum to the Secretary of the Navy Department from the Acting Director of Naval Accounts, 15th April 1918. NAA: MP341/1, 1920/968.

Experiments in Direct Wireless

Hughes' footprint was also evident in one of the most critical wartime developments, insofar as it would affect the shape of post-war policy. During the conflict's final year Fisk – who had replaced Denison as AWA's Managing Director in 1917 – engaged in the first successful experiments establishing a direct wireless connection between Australia and Britain. As well as demonstrating the new capabilities of wireless – a crucial factor in the direction the medium's development would take in the coming years – this episode further illustrates the political privilege that AWA had assumed by the war's end.

The capabilities of long-distance wireless signalling advanced considerably as a result of technological improvements in wireless during the war years. An AWA promotional booklet from the mid-1920s notes that the first long-distance signals – between New York and Berlin – were intercepted by Australian stations in the winter of 1916.[89] Further corroboration of this is provided by the Navy Department's records. An internal report, written shortly after the end of hostilities, details that during 1917 and 1918 stations under RAN operation were regularly picking up transmissions from stations in Europe and the United States. Of these, the most conspicuous was "the daily intercept from Nauen, High Power Wireless Station in Germany, [which] on many occasions reached over 2000 words – the distance bridged being over 12 000 miles".[90]

AWA's records note that at some point in the middle of the war, while Fisk was in Britain, Marconi discussed with him the possibility of establishing a direct wireless connection between Australia and Britain. According to this account the two men "agreed that at the earliest opportunity experiments would be conducted between England and Australia. Mr Fisk

---

[89] *Wireless in Australia* booklet, 1925, p. 19. ML: MSS 2954/Add-On 1910, Box 57, Australia. Parliament. Committee Appointed to Inquire into Proposed Agreement with AWA re Wireless Communication, 1922- Correspondence, Documents, Report, Printed Material.
[90] 'Report on Operations of RAN Radio Service', unspecified date. NAA: MP472/1, 1/14/8441.

returned to Australia in 1917 and immediately established an experimental receiving station at his home" to work towards this goal.[91]

Fisk's establishment of a powerful wireless station at his home was in contravention of the censorship regime that had been operating since the war's outbreak. His ability to circumvent the restrictions that applied to others is testament to the special position he and his company had assumed. At the end of January 1917, Fisk wrote to the Secretary of the Navy Department requesting permission to erect a station at his home for experimental purposes. Permission for him to do so was summarily communicated by the Secretary, having received ministerial approval. The only conditions attached to this permission were his use of a call sign and particular wavelengths allocated by the department.[92] Besides this, there does not appear to have been any involvement by the government in his long-distance experiments.

Throughout 1918 a number of experimental transmissions were sent from Marconi's station in Wales and received by Fisk at his Sydney home.[93] By the spring of that year these men were sufficiently confident in this direct connection to arrange an audacious public demonstration of direct wireless involving Hughes and Cook, both of whom were in Britain for the 1918 Imperial War Cabinet. On 22nd September, messages composed by the Prime Minister and Navy Minister, praising the contributions of Australians to the Allied cause, were transmitted directly from the Wales station and received by Fisk at his home.[94] The following day this event received widespread coverage in the press. Contained within this newspaper coverage was an early suggestion of Fisk's intentions for the future of Australian wireless, and the cause to which he would dedicate a good deal of effort in the coming years: the establishment of a direct wireless service between Australia and Britain. This suggestion took the form of selling

[91] Untitled document covering AWA's early history, unspecified date, p. 4. ML: MSS 2954/Add-On 1910; Box 24, Fisk, Sir E.T. – Addresses, Articles, Lectures and Reports, 1921-1942 (MSS); Articles by Sir E.T. Fisk, 1921-1932 (Printed).

[92] See the correspondence in NAA: MP472/1, 18/17/247, Manager, Amalgamated Wireless Ltd, Sydney requesting permission to erect an antenna for experimental purposes at his private residence in Sydney, 1917.

[93] Untitled document covering AWA's early history, unspecified date, p. 4. ML: MSS 2954/Add-On 1910; Box 24, Fisk, Sir E.T. – Addresses, Articles, Lectures and Reports, 1921-1942 (MSS); Articles by Sir E.T. Fisk, 1921-1932 (Printed).

[94] The full text of these messages is available in L.A. Hooke, 'Australian Radio Communication Services', Proceedings of the World Radio Convention, 1938. ML: MSS 2954/Add-On 1910; Box 25, Hooke, Sir L.G.A. – Articles by Sir L.G.A. Hooke, 1938-1974 (Printed).

the virtues of direct wireless in comparison to submarine cables: "Mr Fisk is of the opinion that, whereas the present full rate for cables is 3/ per word, there is no reason why direct wireless communication should not be established at 1/ per word at the most".[95] As the following chapter demonstrates further, Fisk's positioning of direct wireless as a way to escape the downsides of communication through cables represented an endeavour to attach a policy proposal – establishing a direct wireless service – with a problem – the expense of cables as a means of international communication.

The involvement of Prime Minister Hughes and Cook, a former Prime Minister now serving as Navy Minister, also demonstrated an important dimension of Fisk's – and the Marconi Company's – efforts to lay the foundation for policy change that would facilitate the construction of a direct wireless service by raising the visibility of the issue. For one, to successfully demonstrate the capabilities of the medium to senior elected officials was a tactic to bring the matter to the politicians' attention and create some manner of personal connection between them and the scheme that Fisk sought to implement. Arranging that statements composed by Hughes and Cook would be the first messages openly sent in this manner was also likely to have been a calculation to appeal to their vainglory, as a means of cultivating future influence. In addition, the participation of two prominent figures increased the likelihood of the demonstration receiving attention from the press, further raising its visibility as an issue in the public sphere. In this demonstration one can identify the first stages of a campaign of 'softening up'. That is, the introduction a new idea – in this case, that of a direct wireless link with Britain – as a precursor to having it placed on the formal agenda.

Another noteworthy aspect of this demonstration is the degree to which Fisk was acting autonomously from the bureaucracy. This was another manifestation of a dynamic that had emerged by the final stages of the war. Despite the Navy's formal responsibilities over the field, and the tight government control over the medium first established in August 1914, its involvement in the demonstration was limited to perfunctory approval in the form of allocating a call sign and wavelength. There is no evidence that the RAN sought to monitor Fisk's activities, nor that departmental officials were aware of the nature of his activities. This demonstrates that the Commonwealth bureaucracy had little effective control over the

---

[95] "Wireless – First Messages from England" in *Sydney Morning Herald*, 23rd September 1918.

activities of AWA's Managing Director and that the company, by virtue of its contribution to the war effort and well-wishers in the political system, had attained a notable degree of immunity from the system of control governing other private wireless users.

The demonstration of direct wireless communication between Australia and Britain, just weeks before the cessation of hostilities, meant that the stage was set for the struggle over international wireless that would be a primary concern of policymakers in this field in the post-war years. As Part IV of the study demonstrates, the successful (and well-publicised) direct transmissions of September 1918 would be portrayed by AWA as proof of the viability of a direct long-distance connection between the two countries. However, there remained a great gulf between a single test transmission and the adoption of policy that would facilitate a fully-functioning commercial service. Advocating for such policy would become Fisk's main focus shortly after the Armistice.

Australian Wireless, 1914-1918

The Great War was a pivotal episode in the development of Australian wireless. A range of changes stemming from the need to orient the medium towards application in wartime would prove to have effects persisting beyond the Armistice, and would also become important factors feeding into policy formation in the early 1920s. For this reason the war years should not be viewed as simply a transitory period, after which development resumed upon the same terms as had been interrupted with the outbreak of conflict. The changes that took place between August 1914 and November 1918 were so great that a reversion to pre-war norms upon the resumption of peace was not possible. Therefore, the war is properly understood as a crucial event that altered the trajectory of development in the field of Australian wireless.[96] The constitutive decisions made in relation to the international wireless service under examination in Part IV of the study demonstrate indelible marks of wartime experience.

---

[96] For discussion of this notion, albeit within a different context, see R. Higgs, *Crisis and Leviathan*, pp. 57-59.

One of the most important ways in which the war changed the course of development was through its effect of breaking down the organisational patterns that had been established prior to its outbreak, and the replacement of actors influencing wireless policy. Although its formal responsibility over the field continued until 1915, from the very first hours of the war the officials of the Postmaster-General's Department became notably less influential as they responded to pressure from defence authorities, such as through the introduction of censorship. The reduced influence of the Postmaster-General's Department was codified with the formal transfer of responsibility over wireless to the Navy Department in 1915 and the disbanding of the Wireless Telegraphy Branch. This transfer signified the end of Balsillie's tenure as one of the most important figures in the field; a power he would never regain. By late 1918 formal control over wireless had been consolidated under the Navy Department and Cresswell, the fleet's wireless officer, had effectively replaced Balsillie as the Commonwealth's wireless maven at the head of the RANRS.

However, the consolidation of formal RAN control belied important changes that had taken place within the sector during the war years. Ironically, in a period of augmented government powers over all sectors of society, Commonwealth bureaucrats were exercising little more direct control over wireless than they had prior to the war's outbreak. Both of the government's experts, Balsillie and Cresswell, harboured ambitions to direct the Commonwealth's wartime powers to crush AWA's position in the sector and bring the entirety of wireless under government monopoly control. While Balsillie's effort to achieve this goal in late 1914 came close to formal execution, as the conflict ground on the likelihood of government action against the interests of AWA steadily decreased. The reason for this relates to Mayhew's observation that "wartime governments may see fit to make use of industries rather than to confront them".[97] Though ire towards AWA persisted within the bureaucracy for the duration, the company had used the opportunities presented by the war's disruption to demonstrate its usefulness. As a result of its support for the war effort, the company was able to accumulate enough political capital to avoid significant consequences for its officials' breach of the *Trading with the Enemy Act*, and also to prevent any action against its business interests initiated by hostile elements within the bureaucracy.

---

[97] D. Mayhew, "Wars and American Politics", p. 481.

This is not to suggest that AWA possessed complete freedom of action in its activities. Instead, what began to take place during the war years was a recasting of the respective roles of public and private within the sector. In comparison to the period prior to 1914, by war's end the Commonwealth had widened its participation in the sphere of wireless substantially. Importantly, however, its *direct* involvement had scarcely increased from its pre-war position, with the exceptions of the military training facility established in 1917 and its ill-fated foray into manufacturing at the Randwick facility. The bulk of its expanded wartime involvement was *indirect*, through increased oversight and stewardship of private activity, principally that of AWA. Whereas in the pre-war period there had been a clean division between the major parts of the wireless industry dominated by public organisation – the coastal network – and private organisation – the maritime trade – no such clear divisions remained at the war's end. Though AWA, by virtue of its contracts with major shipping lines, still controlled the maritime trade, its operations were subject to strict conditions placed upon it by Commonwealth officials under the censorship regime. Similarly, through such means as the introduction of a mandatory certification programme for wireless operators, the company's training school was brought under a framework of government management. Both of these areas saw the extension of government monitoring in ways that had not existed prior to the war.

Another crucial shift resulting from the war was the transition towards private organisation as the key driver of development in the sector. This was the case with the first experiments in direct wireless communication with Britain, in which the role of Commonwealth officials was simply one of light supervision. Whereas the expansions of direct public participation in the sector would not long survive the Armistice, the principle of government acting as a facilitator and regulator of private activity – with the latter taking the lead role in developing the industry – would come to underpin the constitution of the international service in the early 1920s.

Another development driven by wartime conditions that would prove vital in the post-war years was AWA's expansion and domestication. While the censorship regime greatly affected the maritime wireless trade, which had been the company's principal business plank up to 1914, wartime conditions opened new directions for its growth. Most important of these was its manufacturing operations, enabled by the collapse of foreign imports resulting from the shipping shortage and the diversion of Marconi equipment towards Britain's war machine. With this opportunity, AWA increased both the quantity and sophistication of the equipment

produced domestically between 1914 and 1918. Another important effect of the Great War
that would have lasting consequence was AWA's severance with its German stockholders. The
acquisition by Australian investors of the 13,000 shares previously held by Telefunken was
important for future developments because it solidified the company's connection with
Australia after its birth as the amalgamation of foreign subsidiaries, and brought it under
exclusively Anglo-Australian control. Though the Marconi Company still owned the single
largest portion of AWA's shares, the majority were held domestically. These developments,
which combined to strengthen the company's domestic connections, allowed the company's
management to credibly portray AWA as a national enterprise in the post-war years. As Part IV
of the study demonstrates, this would prove to be an important factor in the enactment of
policy favourable to the company's commercial interests.

If the changes that took place within the sphere of Australian wireless during the Great War
made a reversion to the pre-war norms governing the sector impossible, they also created new
possibilities for future development. This was not by conscious design. In many cases wartime
changes in organisation and policy were introduced hastily and without consideration for their
lasting impact; instead designed to address pressing problems. They were emergency
measures and never meant to be permanent, but, through their influence upon the
subsequent course of events, proved to have notable long-term effects. With the conclusion of
the war, and no justification for the retention of heavy-handed restrictions on wireless usage
in peacetime, the principal concern of those actors interested in the medium became what
would supplant the emergency measures of wartime. The process through which these policy
settings came to be replaced, and new policies enabling the further development of wireless
communications enacted, is the primary focus of this study's concluding chapters.

Part IV – Constitution

Chapter 5 – Options for International Wireless, 1918-1921

Part IV of the thesis turns its attention towards the process through which the agreement between AWA and the Commonwealth to construct a direct wireless link to Britain was adopted as policy. It uses the analytical framework of MSA, coupled with a smaller-scale focus than that presented in the preceding chapters. Whereas Part III provided a sweeping view of the industry's origins and the changes wrought by the Great War – covering nearly two decades – this and the following chapter have a narrower focus upon the post-war debate on international wireless. Together, they cover a period of roughly four years between the Armistice of November 1918 and mid-1922, by which time the collaborative project had gained Parliamentary approval.

This chapter focuses on developments between the Armistice and April 1921 – a vital preliminary stage of the policymaking process preceding the formal decision of 1922. The most significant development during this period was the designation of two rival schemes for Australia's international wireless service, and the mobilisation of supporters around them within the political system.

The Armistice, coming mere weeks after the first demonstration of direct wireless communication between Britain and Australia, heralded the beginning of a new period in the history of the medium. As documented in the previous chapter, the imposition of emergency controls during the Great War had swept aside the arrangements that had governed wireless prior to 1914. The return of peace meant that wartime controls were no longer required, bringing the need for new policy settings to guide wireless' development in the post-war world. This presaged a political struggle. While, for some actors, the goal was a restoration of the policy settings that had characterised the sector up to 1914, for others the return of peace presented an opportunity to establish new patterns of development.

The primary concern of wireless policymakers in this period was to establish a connection between Australia and Britain. By the end of the war, there was a consensus amongst Australian policymakers on the desirability of this goal. However, unanimity on the goal did not denote unanimity on the means by which to achieve it. By 1921, two alternative plans for Australia to establish an international wireless service had emerged. One of these was, in effect, a rebirth of the pre-war Imperial scheme consisting of a series of relay stations connecting the Empire. This would see the form of Australian participation derived from the larger design of the scheme put forward by British policymakers. The alternative to this was an ambitious plan to create a direct wireless connection between the two countries, of the type that had been demonstrated with great fanfare by Fisk and Marconi in September 1918.

The principal division that emerged during this period was whether government or private enterprise would drive development in the field. While private interests had pioneered the first direct messages between Britain and Australia, officials within the Australian and British governments sought to shut off the potential for private involvement in international wireless by advocating policies for a service under the monopoly control of government. As outlined in the previous chapter, however, the wartime controls over wireless instituted by the Commonwealth belied an increased reliance upon private organisation to meet its wireless needs during the conflict. The period under scrutiny in this chapter would see efforts on behalf of different Commonwealth officials to reassert the government's primacy over the medium following the Armistice. At the same time, both the Marconi Company and AWA sought to secure a prominent role for private enterprise in any future international wireless scheme.

The First Marconi Proposal

The successful demonstration of direct wireless communication between Britain and Australia in September 1918 presaged a push from the Marconi Company to introduce a regular service, under its own control, between the countries immediately after the Armistice. A development in the problem stream, relating to considerable delays in cable communication, led to the opening of a policy window. However, an unfavourable political environment meant that the window closed without any policy changing. Nevertheless, this episode prompted the development, with political encouragement, of policy alternatives within the bureaucracy.

In December 1918, while in London prior to the Paris Peace Conference, Hughes received an overture from the Marconi Company consisting of two letters dispatched on the same day from Isaacs, its Managing Director. The correspondence centred on his company's aspiration to construct a direct wireless link between Australia and Britain in the same manner as had been demonstrated two months earlier. One of Isaacs' letters represented an attempt to promote his proposal as the 'solution' to a problem that had manifested, to increase the chances of that policy's adoption – playing the role of a policy entrepreneur. The problem was substantial delays in the transmission of cable messages between Australia and Britain, which saw some messages take a fortnight to reach their recipients.[1] Citing this "very considerable delay" in cable transmission, Isaacs suggested that his company "might be able temporarily to relieve the cables by receiving messages, both Government and ordinary, to be transmitted to Australia by wireless".[2] He also declared that the service could commence almost immediately, writing that "we should be prepared to start such a service within the next few days if approved by your Government, subject to the formal consent of the Postmaster-General here".[3] The motivation of the company was to gain a foothold in the provision of communication between the two countries by capitalising on the immediate problem with cables; demonstrating the capabilities of a regular direct wireless service in anticipation of making it permanent.

The goal of a long-term, rather than a merely temporary, agreement was more explicit in the other of Isaacs' letters to the Prime Minister. It detailed his vision of a lasting arrangement for the provision of a direct wireless service between Australia and Britain. He estimated that, with the cooperation of the authorities in each country, the Marconi Company could establish this in a little more than a year. Noting the message authored by Hughes that had been transmitted, to great publicity, by the company in the final weeks of the war, he claimed "there is now no reason why wireless stations should not be erected in this country and in Australia for the purpose of a direct continuous commercial and press service".[4] Consequently, he sought permission to erect a long-distance station in Australia "subject to our obtaining a

---

[1] See, for example, "Delay in Cable Traffic" in *The Argus*, 5th December 1918; "Cable Messages Delayed" in *The Argus*, 11th December 1918.
[2] Shorter letter to Hughes from Isaacs, 16th December 1918. NAA: MP341/1, 1920/9144, Establishment of Long distance Wireless service, 1919-1920.
[3] Shorter letter to Hughes from Isaacs, 16th December 1918. NAA: MP341/1, 1920/9144.
[4] Longer letter to Hughes from Isaacs, 16th December 1918. NAA: MP341/1, 1920/9144.

license to erect a similar station in this country".[5] Should permission be forthcoming from the two governments, Isaacs declared that his company was willing to proceed without any financial cost to the Commonwealth: "my Company would defray the whole cost of the erection of these stations and would propose in times of peace, to conduct the service for their own account and if required hand the station over to the Australian Government during any period of war".[6] The prospective Australian-based station he suggested to "place under the control of Amalgamated Wireless (Australasia) Limited, of which Mr Fisk, who I think is known to you, is Managing Director".[7]

Isaacs' entrepreneurship, tying a policy 'solution' to a problem that had caught the attention of policymakers – framing the problem of cable congestion as one that his company could address by commencing direct wireless services – opened a policy window. However, he was unsuccessful in attaining permission from the Commonwealth government because of unusual political circumstances. A fortnight after receiving Isaacs' proposition, Hughes cabled its details to his Cabinet colleagues in Australia. He wrote that "Marconi Wireless Telegraph Company desire erect station in Australia subject to their obtaining licence to erect similar station here for transmission of Commercial and Government cables by long distance wireless. Company would defray whole of cost of erection such stations", and concluded by noting that the Australian station would be placed under the control of AWA.[8]

Having received this cable from Hughes, Acting Prime Minister Watt soon brought the subject before Cabinet. In early January 1919, Cabinet passed a resolution to "cable Prime Minister giving views of Navy and Postmaster-General's Departments".[9] This represented a willingness on behalf of Cabinet members to defer to the opinion of departmental officials on the subject, thus subjecting the Marconi Company's proposal to the scrutiny of the domestic policy community.

---

[5] Longer letter to Hughes from Isaacs, 16th December 1918. NAA: MP341/1, 1920/9144.
[6] Longer letter to Hughes from Isaacs, 16th December 1918. NAA: MP341/1, 1920/9144.
[7] Longer letter to Hughes from Isaacs, 16th December 1918. NAA: MP341/1, 1920/9144.
[8] Cable to Watt from Hughes, 31st December 1918. National Archives of Australia: Prime Minister's Department; A3932, Correspondence files, SC (Secret and Confidential) series – second system, 10 Jan 1909 – 31 Dec 1926; SC457 PART 1, Long Distance Wireless Scheme – First section of file, 1918-1920.
[9] 'Cabinet Decision – 9th January 1919'. NAA: A3932, SC457 PART 1.

Both the Navy and Postmaster-General's departments opposed the Marconi Company's proposal, though for different reasons. The Navy Department claimed that wartime experience had demonstrated the advantages of governmental control of wireless, and that ceding it to civilian – let alone commercial – control would simply create confusion and inefficiency in any future conflict, which would require the reassertion of military control. Moreover, the Naval Board, with hyperbolic flourish, expressed concerns about the threat that permitting private enterprise to operate long-distance wireless would pose to national security:

> In the opinion of the Board a conclusive reason for declining to consider this proposal is that a H.P. [high-power] Station such as the Marconi Company propose to instal would have the power of ordering or directing any fleet or vessel of ours in the Pacific and Indian oceans and even in the Atlantic. Considering Australia's island conditions, her position relative to the Centres of Strength of the Empire, her complete dependence on Sea control for security, and misuse of this powerful means of communication with sea forces however distant may endanger her existence.[10]

The Postmaster-General's Department, in contrast, framed its opposition in terms of the negative financial impact direct wireless would have upon the Pacific Cable, in which the Commonwealth government owned a stake; a view endorsed by the Postmaster-General, William Webster.[11] As further justification for opposing the Marconi plan, Webster also highlighted a resolution passed by the Imperial War Conference in July 1918. This resolution had endorsed the principle of state-ownership of cable communications, with Webster adding that this principle "will, of course, apply equally to Wireless, although Wireless was not included in the resolution".[12] Shortly thereafter, the departmental views were cabled to Hughes to express Cabinet's opposition to the Marconi Company's offer.[13]

---

[10] 'Minute Paper: Proposed Erection of Super High Power W/T Station at Lake Eyre, South Australia', 8th January 1919. NAA: A3932, SC457 PART 1.
[11] See letter to Secretary of the Prime Minister's Department from Secretary of the Postmaster-General's Department, 7th January 1919. NAA: MP341/1, 1920/9144.
[12] Letter to Secretary of the Prime Minister's Department from Secretary of the Postmaster-General's Department, 13th January 1919. NAA: MP341/1, 1920/9144.
[13] See cable to Hughes from Watt, 17th January 1919. NAA: A3932, SC457 PART 1.

Hughes' reply echoed Isaacs' framing of direct wireless as a temporary measure to alleviate the ongoing problems with the cable network. It referred to "very strong representations being made to me by Australian business men in London who would greatly benefit by using wireless system to relieve cable congestion, which has reached intolerable point", and added that the measure "would be temporary expedient and so will not prejudice any permanent scheme".[14] Hughes' cable also dismissed the objections offered by the bureaucracy, concluding with "I abstain from official criticism of Navy Department's remarks re permanent scheme, but personally think it is beneath contempt".[15] However, this last sentence was deleted prior to the cable's dissemination beyond the Prime Minister's Department. This cable provides further evidence of the gap between Hughes' and Watt's inclinations to defer to departmental advice. Once received, Watt sought Webster's opinion of its contents – another difference between his and Hughes' approach to consultation with colleagues.

The Postmaster-General remained sceptical of any arrangement offered by the Marconi Company. In response to Hughes' claim about the Marconi proposal representing a temporary measure, he warned that "experience shows that temporary arrangements do have a prejudicial effect when the question of permanent arrangements comes up for consideration".[16] In his view, granting permission to the Marconi Company to undertake the service "as a temporary expedient would give them a very strong lever in any attempt to force the Government to allow them to work their system permanently".[17] Webster also attacked the rationale of the Marconi plan, describing the problem of cable congestion as overblown and nothing but a temporary annoyance owing to conditions created by the end of the war. Watt cabled these views of Webster's to Hughes shortly afterwards. In addition, Watt challenged the Prime Minister's dismissive attitude towards departmental advice, writing "do not understand your expression of contempt for Navy Department views", and suggesting that the Prime Minister "cable me your full opinion as well as your criticisms of PMG's ideas as above".[18] There is no evidence of any further reply on the subject from Hughes, but a division between him and the domestic Cabinet on the subject was clear.

---

[14] Cable to Watt from Hughes, 12th February 1919. NAA: A3932, SC457 PART 1.
[15] Cable to Watt from Hughes, 12th February 1919. NAA: A3932, SC457 PART 1.
[16] Letter to the Secretary of the Prime Minister's Department from the Secretary of the Postmaster-General's Department, 19th February 1919. NAA: A3932, SC457 PART 1.
[17] Letter to the Secretary of the Prime Minister's Department from the Secretary of the Postmaster-General's Department, 19th February 1919. NAA: A3932, SC457 PART 1.
[18] Cable to Hughes from Watt, 3rd March 1919. NAA: A3932, SC457 PART 1.

With no political appetite in Australia to accept the Marconi Company's offer, and Hughes unable to exert his will over his Cabinet because of his attendance at the Paris Peace Conference, the policy window closed without any decision made on international wireless. This marked the beginning of a new phase of activity in the policy stream, with domestic actors beginning to focus attention on the subject.

With Hughes engaged in Europe, AWA and other interests aligned with the company began contacting senior politicians in Australia to advocate for the establishment of a direct wireless service with Britain. In late February 1919, Fisk, "acting upon the suggestion of the Managing Director of the Marconi Company", forwarded Watt copies of the proposals that Isaacs had made to Hughes the previous December.[19] Fisk's covering letter framed the proposal for a direct wireless scheme in a different way to Isaacs' original communication, however. Instead of depicting it as a way to alleviate cable congestion, he advertised the benefits it would bring in relation to the speed and cost of communication with Britain, and as an initial step towards establishing future wireless services with other parts of the world. Because of the benefits it offered, and "since the establishment of these stations would involve no expense on the part of your Government and since they will be subject to control in war times", he urged that "the proposals merit careful consideration".[20] Having been forwarded copies of these letters by Watt, Webster re-expressed his reservations about the proposal, stating that "I cannot see any reason to alter previous advice".[21]

AWA also mobilised other private groups to assist its advocacy on the issue. One internal document from the Postmaster-General's Department refers to recent "inquiries that have been made by the Press" on the subject of international wireless as "evidently…prompted by persons interested in the Company in Sydney".[22] Similarly, in April Webster received a letter from the Sydney Chamber of Commerce extolling the potential "commercial and social" benefits from direct wireless connection with Britain.[23] This was followed by similar appeals

---

[19] Letter to Watt from Fisk, 27th February 1919. NAA: MP341/1, 1920/9144.
[20] Letter to Watt from Fisk, 27th February 1919. NAA: MP341/1, 1920/9144.
[21] Handwritten note underneath letter to Secretary of the Postmaster-General's Department from the Secretary of the Prime Minister's Department, 6th March 1919. NAA: MP341/1, 1920/9144.
[22] Memorandum to Webster from Secretary of the Postmaster-General's Department, 7th March 1919. NAA: MP341/1, 1920/9144.
[23] Letter to Webster from President of the Sydney Chamber of Commerce, 3rd April 1919. NAA: MP341/1, 1920/9144.

from the Melbourne, Brisbane and various regional Queensland Chambers of Commerce, along with persistent follow-ups from the Sydney body.[24] The campaign appears to have had little impact upon Webster, however, who wrote to a colleague "that the Marconi Company, through the Amalgamated Wireless Ltd. in Sydney, is really at the bottom of this ostensibly Chamber of Commerce movement".[25] As the Secretary of the Postmaster-General's Department noted, "the recommendation of the Postmaster General was that the offer of the Marconi Company be refused, and so far as I am aware he has not changed his views".[26] AWA's efforts to generate political momentum for the scheme were making no headway; its attempts to 'soften up' politicians and the bureaucracy to the idea of a direct wireless scheme under its control were unsuccessful.

Wary of AWA's campaign, groups within the Commonwealth bureaucracy sought to develop an alternative policy that would pre-empt any private involvement in the field of international wireless. With the encouragement of the Acting Prime Minister, this marked the first time in which the domestic policy community had considered the subject since the pre-war years. The Naval Board was the first body to devise an alternative to the proposal of the Marconi Company, submitting a proposal to the Council of Defence "for the erection at a probable cost of from £150,000 to £180,000 of a super-high-power wireless station at Lake Eyre", primarily for naval communication, and to supplement the existing cable services.[27] In April 1919 the Council of Defence, though not endorsing the idea of constructing a station at Lake Eyre, "unanimously resolved that rights within the Commonwealth and its dependencies should not be given to private individuals or companies for long-distance wireless" and that the matter should be given consideration by the government.[28] In May 1919, Cabinet endorsed the Defence Council's resolution affirming the principle of government ownership, and recommending the furnishing of reports on the question, with a cable sent to Hughes informing him of the decision.[29] This action was taken with full knowledge of the Prime

---

[24] See 'Marconi Company's Proposal to Establish a Long-Distance Wireless Service Between Great Britain and Australia – Summary of Resolutions Transmitted to this Department' and other documents in NAA: A3932, SC457 PART 1.

[25] Letter to MHR Groom from Webster, 9th July 1919. NAA: MP341/1, 1920/9144.

[26] Memorandum to the Secretary of the Prime Minister's Department from the Secretary of the Postmaster-General's Department, 2nd July 1919. NAA: A3932, SC457 PART 1.

[27] 'Planned Establishment of Super-High-Power Wireless Station at Lake Eyre', 22nd December 1919. NAA: A3932, SC457 PART 1.

[28] 'Planned Establishment of Super-High-Power Wireless Station at Lake Eyre', 22nd December 1919. NAA: A3932, SC457 PART 1.

[29] 'Cabinet Decision – 8th May 1919'. NAA: A3932, SC457 PART 1.

Minister's likely antipathy towards the idea, with Cabinet records describing "Mr Hughes'
intervention in the matter" as characterised by being "not very much impressed with the Navy
Department objections" to the Marconi Company's proposal.[30] With the Prime Minister
absent, the remainder of the Cabinet – in line with departmental preferences – sought to
defend the principle of government primacy against the potential intrusion of private
enterprise.

Following Cabinet's endorsement of government enterprise in the field of international
wireless, Watt re-enlisted the services of John Graeme Balsillie. While Balsillie had exercised
considerable influence over wireless policy in the pre-war years, his role had effectively ceased
in 1915 with the transfer of responsibility over wireless to the Navy Department. In late May
1919, Balsillie received a letter from the Acting Prime Minister asking for recommendations on
future wireless policy. The letter referred to the request as following from a "conversation last
week" between the two men.[31] To aid Balsillie in this task, Watt instructed his department that
"all available official information is to be submitted to him".[32] Although the letter to Balsillie
was couched in hypothetical language, the clear implication was that he should design a
scheme of overseas wireless communication that would exclude participation by AWA or any
other private interest. The Acting Prime Minister asked Balsillie to report on the following
questions, and anticipate the potential repercussions of such:

> In the event of the Government determining not to grant wireless telegraph station
> rights to any private company, what difficulties would the Government be faced with?
> If interchange with privately owned wireless telegraph stations in Britain, Europe or
> America would be difficult, what steps would be necessary to surmount the
> difficulties?[33]

After acknowledging the terms of reference, Balsillie withdrew for several months to compile
his report.

---

[30] 'Marconi Company's Proposal to Establish a Wireless Service Between Great Britain and Australia', 7th
May 1919. NAA: A3932, SC457 PART 1.
[31] Letter to Balsillie from Watt, 24th May 1919. NAA: A3932, SC457 PART 1.
[32] Unaddressed memorandum from Watt, 13th May 1919. NAA: A3932, SC457 PART 1.
[33] Letter to Balsillie from Watt, 24th May 1919. NAA: A3932, SC457 PART 1.

In the meantime, a July letter to Acting Navy Minister Poynton from the Chairman of the Naval Board expressed the Navy Department's awareness of the division within the government on the question of international wireless, and a recognition of which side was inclined to support its preferences for government monopoly. The letter attached a press cutting describing a statement made by Hughes in Britain. Under the headline 'Commonwealth May Adopt Marconi Wireless System', the article claimed that "Mr Hughes…says he has not abandoned the idea of using the Marconi wireless system".[34] In response, the Naval Member recommended that "as this is in direct opposition to Government policy, it should be brought to the notice of the Acting Prime Minister. A statement of the Government's determination on this point will prevent future misunderstanding".[35] This is further evidence of bureaucratic officials wanting to entrench the principle of government monopoly before Hughes' return to the country. By describing the government's policy as one embracing government enterprise, and seeking a public affirmation of this from Watt, the goal was to obstruct Hughes' ability to alter the course of future policy.

Despite the agitation and preparation for such, no definite action on the question of international wireless was ever undertaken in Hughes' absence. The Prime Minister returned from Europe in late August 1919 to a rapturous public reception.[36] Watt, for his part, resumed his position as Treasurer, although the relationship between the two had been irreparably strained during Hughes' extended absence, and Watt would resign from the ministry the following year.[37] While the domestic political environment appears to have been amenable to a decision to exclude private enterprise from participation in international wireless while Hughes was overseas, there was no ready-made alternative policy. The policy and political streams were, in this instance, inharmonious.

In an illustration of the crucial importance of timing to the policymaking process, Hughes' return to Australia came just days before Balsillie submitted his report on wireless policy

---

[34] Memorandum to the Acting Navy Minister from the First Naval Member, 2nd July 1919. NAA: A3932, SC457 PART 1.
[35] Memorandum to the Acting Navy Minister from the First Naval Member, 2nd July 1919. NAA: A3932, SC457 PART 1.
[36] L.F. Fitzhardinge, *The Little Digger*, pp. 420-421.
[37] See J. Anderson, *W.A. Watt: A Political Biography*, M.A. Thesis, University of New South Wales, 1972, pp. 301-324.

commissioned by Watt. This meant that when Balsillie delivered his report, it was to someone predisposed to reject its recommendations. The report's main recommendation was to return wireless to the pre-war status quo of direct Commonwealth control, suggesting "that no permit for the erection maintenance or operation by individuals or corporations of radiotelegraph stations…within or from the territory of the Commonwealth of Australia should be granted".[38] Instead of engaging with private enterprise, Balsillie advocated extending the model of government monopoly that had underpinned the Commonwealth's coastal network of stations since its inception, and which he had been heavily involved in constructing. Balsillie also recommended that "a radiotelegraph station of 10,000 miles range be established within the Commonwealth…when arrangements have been completed with or through the governments" of other countries with which the Australian station would communicate.[39] If constructed, this station would be capable of direct communication with Britain, and, he claimed, would be capable of generating large amounts of revenue for the Commonwealth. Furthermore, he claimed that it would be possible to construct this station without infringing any patents, thereby avoiding any controversy such as that which had marked the pre-war development of Australian wireless. Balsillie cautioned that Australia would probably be bucking the international trend if it instituted such a policy. He portrayed the most likely scenario as one in which Australia was the only country adopting such a model, with other countries having their policy in this area effectively dictated to them by voracious private interests. The irony of this assessment is that within two years Australia would be the lone advocate for a leading role for private enterprise, and against government monopoly, in the debate over the Imperial scheme.

Balsillie's report marked a significant development in the policy stream, being the first detailed proposal for a scheme of international wireless prepared in Australia in the post-war years, and because it advocated a station capable of direct communication with Britain owned and operated by the Commonwealth. However, in isolation, without any pressing problem or political support, there was no prospect of its adoption. While a couple of internal documents from the Prime Minister's Department in December 1919 contained gentle reminders that "Mr Balsillie's report still awaits the consideration of the Government", none was forthcoming.[40]

---

[38] Report to the Prime Minister from Balsillie, 6th September 1919. NAA: A3932, SC457 PART 1.
[39] Report to the Prime Minister from Balsillie, 6th September 1919. NAA: A3932, SC457 PART 1.
[40] 'Planned Establishment of Super-High-Power Wireless Station at Lake Eyre', 22nd December 1919; 'Wireless Question – Matters awaiting attention', 24th December 1919. NAA: A3932, SC457 PART 1.

Hughes' return to day-to-day leadership in Australia marked a substantial shift in the political stream. The Prime Minister, clearly impressed by the "very strong representations" made to him by Australian businessmen while he was abroad, was more willing than any of his Cabinet colleagues to entertain the Marconi Company's offer to construct a direct wireless link between Australia and Britain, and less inclined to defer to departmental advice.[41] In November 1919, a major international development arose that would delay any further consideration of the subject. The British government established the Imperial Wireless Telegraphy Committee, headed by Sir Henry Norman, to re-examine the question of a wireless project to link the British Empire.[42] As a result, any decision in Australia was postponed until after the Norman Committee had delivered its report.

The Marconi Company's effort to gain permission to establish a direct commercial wireless service between Australia and Britain, and the Australian response to this offer, conforms with MSA's model of policymaking and the importance it assigns to synchronicity. The Marconi Company, in partnership with AWA, had proven its capability to achieve direct messaging in September 1918, and desired to establish a regular service for the companies' commercial benefit. Then, in a case of 'solutions chasing problems', Isaacs had leveraged his skill as a policy entrepreneur to attach his preferred 'solution' to the problem of the demonstrated inability of the existing cable network to handle the volume of traffic placed upon it in the immediate post-war period, and gain the support of the Prime Minister. However, the unusual circumstances in the political stream – with Hughes several weeks' voyage from Australia and unable to exert his customary authority over the Acting Prime Minister and Cabinet – meant that this policy window closed without any decision made. Of considerable importance here was the fact that Hughes was the only figure within the executive that was willing to consider the Marconi proposal – his Cabinet in Australia, led by the Acting Prime Minister and supported by the advice of the Commonwealth bureaucracy, rejected the proposal unanimously. Though Hughes was the dominant figure in Australian politics at the time, his absence from Australia prevented him from exerting his will to secure the enactment of the proposal.

---

[41] Cable to Watt from Hughes, 12th February 1919. NAA: A3932, SC457 PART 1.
[42] D. Headrick, *The Invisible Weapon*, p. 183.

The subject's appearance on the agenda had important flow-on effects in Australia. Following Isaacs' lead, Fisk began to advocate for direct wireless, though the campaign made little headway against political and bureaucratic opposition to the idea. The flurry of attention given to the matter, and the fact that the only ready-made policy proposal was a product of the Marconi Company – designed to expand the commercial prospects of that company and its affiliates – prompted the domestic policy community to begin examining the matter with an eye towards blocking private penetration of the field. The most notable result of this was Watt commissioning Balsillie to prepare an alternative policy for international wireless based on the principle of government enterprise in order to preclude private participation. However, the problem for those actors in Australia who opposed the idea of private participation – the Acting Prime Minister and Cabinet, and the bureaucracy – was that although the political circumstances, in Hughes' absence, were amenable to a decision along those lines, there was no ready-made alternative policy to implement.

Timing, in this case, was crucial. By the time that Balsillie's report was ready, Hughes had returned to Australia, meaning that the political stream was no longer favourable to its adoption as policy. Following Hughes' return, the agenda shifted towards other subjects such as the peace settlement. The British government's decision in November 1919 to establish the Norman Committee then ensured that no decision would be made on the subject in Australia until after its findings were announced.

Although a consensus had emerged on the desirability of establishing a wireless link with Britain, political divisions regarding the terms under which such a service should be constituted had emerged. At the centre of this dispute was the role of private enterprise. Watt, the remainder of the domestic Cabinet, and the bureaucracy were in unanimous opposition to the idea of opening the field to commercial enterprise. Though there was no agreement on the other details, this bloc sought to affirm the primacy of the government in any future scheme. On the other side, AWA – in coordination with its British parent company – represented the principal advocates for discarding the principle of government enterprise. In this goal, they had identified Prime Minister Hughes as a crucial ally.

Interregnum

Two developments between August and November 1919 – the shift in the political stream marked by Hughes' return to Australia, and a major event in the policy stream in the appointment of the Norman Committee – meant that the subject of international wireless dropped off the decision-making agenda until the winter of 1920. Nevertheless, these intervening months saw a number of changes that would prove to be of crucial importance when the subject next rose to prominence. Further changes in the policy stream saw responsibility over wireless transferred back to the Postmaster-General's Department from the RAN, and AWA intensify its direct appeals to senior politicians, particularly Hughes. This period also saw the growing relevance of the structural developments outlined in Chapter Two. Not only did the company identify the Prime Minister's support as crucial to its chances of achieving its policy aims, its executives also began to frame those aims in terms compatible with the 'national mood' of increasing economic nationalism.

With the return of peace there was no longer a clear case for the RAN to maintain the responsibility for wireless it had exercised since 1915. Nevertheless, there was no immediate consensus regarding which organisation should administer the medium in the post-war years. As a result, the policy community within the Commonwealth government experienced a period of disruption and uncertainty.

Cresswell, for his part, aspired to make naval control of wireless permanent. He justified this ambition on two grounds. The first was with reference to a cable from the British Admiralty, which "indicates Admiralty approval of the policy of absolute Naval Board control of the W/T organisation of the Commonwealth" and suggested that the Admiralty sought the same degree of control over wireless in Britain.[43] The second was with a view to a future conflict, which would again necessitate military control of the medium. Because of this, he claimed that Australian wireless should be "organised in peace in order that there should be practically no change from a peace to a war organisation".[44] This, he claimed, necessitated the continuance of naval administration. Men of the RAN could be trained to undertake the commercial aspects

---

[43] Letter to the Secretary for the Navy from Cresswell, 22nd March 1919. NAA: MP341/1, 1916/1066.
[44] Letter to the Secretary for the Navy from Cresswell, 22nd March 1919. NAA: MP341/1, 1916/1066.

of wireless usage in times of peace, but he considered it impossible for civilian operators to undertake military operations in the event of war. These reasons, Cresswell argued, were "sufficient to justify the necessity for the retention of the W/T Organisation of the Shore Stations under Naval Board control in times of peace as also in war".[45]

However, two developments militated against the Navy Department's retention of control over the medium. The first was a report on the subject of the future naval defence of Australia authored by Admiral Jellicoe, the commander of the British fleet at the Battle of Jutland.[46] Jellicoe's report, focused on the need to prepare for a future confrontation with Japan, was a major event for the RAN and would prove to be a strong influence on Australian naval policy in the post-war years.[47] In relation to the state of Australian wireless, the report declared that "the present position of affairs cannot be considered satisfactory".[48] In particular, Australia required a high-power station capable of transmission as far afield as Japan and Ceylon, for the purpose of communicating with naval forces and, eventually, "to work in co-operation with the Imperial wireless chain".[49] At the same time, Jellicoe recommended a downscaling of the RAN's involvement in the field, and for the medium to be transferred to another government department to be expanded and run along commercial lines.[50] As a result, any attempt from within the naval bureaucracy to retain administrative control of wireless would be in conflict with the preferences of the Royal Navy's hierarchy.

The second was a campaign led by AWA against the RAN's continued control of wireless. Commencing shortly before Hughes' return from Europe, this campaign had both covert and overt components. In July 1919, Fisk wrote to Acting Prime Minister Watt on the subject of the future regulation of Australian wireless. In it, he expressed frustration about the Navy Department's continued control of the sector, portraying it as a retardant on the medium's future development:

---

[45] Letter to the Secretary for the Navy from Cresswell, 22nd March 1919. NAA: MP341/1, 1916/1066.
[46] *Report of Admiral of the Fleet Viscount Jellicoe of Scapa G.C.B., O.M., G.C.V.O. on Naval Mission to the Commonwealth of Australia (May-August, 1919)*, 12th August 1919.
[47] N. Meaney, *Australia and World Crisis, 1914-1923*, p. 430.
[48] *Report of Admiral of the Fleet Viscount Jellicoe of Scapa*, Vol. III, p. 209.
[49] *Report of Admiral of the Fleet Viscount Jellicoe of Scapa*, Vol. III, p. 209.
[50] *Report of Admiral of the Fleet Viscount Jellicoe of Scapa*, Vol. III, pp. 211-212.

> We have decided to write fully now, because we have reason to believe that the
> Wireless Department of the Royal Australian Navy is putting forward an effort to
> restrict the use of wireless apparatus by private citizens, and virtually to render it
> impossible for anyone to make or sell wireless apparatus other than the Navy…we
> submit with all deference that the most important function of any department
> administering the Wireless Telegraphy Act is to direct the operation of that act for the
> benefit of all who wish to use wireless apparatus, to give the broadest possible
> encouragement for development.[51]

Fisk also sent an identical letter to Hughes and Navy Minister Cook, following their return to Australia in September.

After reading a copy of the letter sent to Cook, Cresswell composed a lengthy response. He criticised AWA for seeking to expand its business beyond shipping, despite the company "knowing that the policy of the Government was to make Wireless Telegraphy a Commonwealth Government Monopoly".[52] He cautioned that AWA was merely a proxy for the Marconi Company, "one of the largest (if not the largest) monopolies in the world", and should therefore be prevented from increasing its foothold in Australia as a matter of "public interest".[53] For this reason, he urged the government to make an explicit statement affirming what had hitherto been the government's policy of "making Wireless Telephony and Telegraphy a Government Monopoly".[54] Cresswell's report was forwarded to the Naval Board for the information of Cook. Cresswell also recommended to the Naval Board that an additional copy be sent to the Prime Minister.[55] There is no evidence that the report was provided to either minister, however. Nor did the Naval Board take any action urging the government to assert its prerogative over the sector. In light of the fact that the Naval Board's

---

[51] Letter to Watt from Fisk, 1st July 1919. NAA: A3932, SC457 PART 1.
[52] Memorandum to the First Naval Member from Cresswell, 10th September 1919. NAA: MP472/1, 1/19/8391, Future Policy of wireless in Australia, 1919.
[53] Memorandum to the First Naval Member from Cresswell, 10th September 1919. NAA: MP472/1, 1/19/8391.
[54] Memorandum to the First Naval Member from Cresswell, 10th September 1919. NAA: MP472/1, 1/19/8391.
[55] See Memorandum to the First Naval Member from Cresswell, 1st October 1919. NAA: MP472/1, 1/19/8391.

members had urged the same action two months earlier, this represented a recognition of the changed political circumstances since the Prime Minister's return and the publication of the Jellicoe report.

AWA's criticisms of the Navy in correspondence to senior ministers were accompanied by a public campaign of disparagement. In late August 1919, in an address to a half-yearly meeting, company executive Sir Thomas Hughes spoke against "the ideas of a few people who argue that [wireless] stations should be worked by the Navy in preparedness for war".[56] A number of newspapers subsequently published the details of Thomas Hughes' speech.[57] The First Naval Member later complained about the campaign to Cook:

> There appears to be a press agitation in full swing on the subject of the Control of
> Wireless, in fact hardly a day passes in which there is not an article in some paper
> pressing for a decision and upbraiding the Navy Board for their supineness in the
> matter. I understand that the campaign is inspired by certain people interested in
> commercial concerns.[58]

There was a strong hostility within AWA towards the RAN. In addition to the press campaign, a number of anecdotes related by AWA staff reveal sentiments that were prevalent within the company at the time. For instance, a 1925 article in *Wireless Weekly* written by an AWA operator contained passages that reminisced about Navy control of wireless with contempt, writing that the medium had been:

> Administered by a Department rejoicing in the vain glorious title of the Royal
> Australian Naval Radio Service, under the control of Commander Cresswell, who upon
> the establishment of this Department, had succeeded in elevating himself above the
> privileges covered by the somewhat meaningless designation of Fleet Wireless Officer,
> carrying the rank of Engineer Lieutenant. Rumour had it that the R.A.N.R.S…was

---

[56] 'Chairman's Address', AWA Twelfth Half-Yearly Meeting, 29th August 1919. NAA: MP472/1, 1/19/8391.

[57] See the cutting from the *Evening News*, 30th August 1919. NAA: MP341/1, 1920/9144; "Wireless Telegraphy – Waiting for a Licence" in *Sydney Morning Herald*, 2nd September 1919.

[58] Letter to Cook from First Naval Member, 17th September 1919. NAA: MP472/1, 1/19/8391.

regarded as somewhat of a joke by the rest of the Naval Service, and whether or not this was so, it is certain that by the sea going operators, it was considered the most Gilbertian affair ever staged in the history of Australia.[59]

Other AWA staff expressed similar sentiments, with Cresswell a preferred target of derision. One, who had served in the RANRS prior to transferring to AWA, later claimed in an interview that "Cresswell wasn't popular, so nobody had much sympathy for him...'He wasn't a man's man, only an imitation naval officer, as you might say. He had never been to sea and was merely an instrument fitter in the Post Office'".[60]

Given claims that "after the war, the Navy and the Post Office jostled for control" of wireless, but it would be more accurate to say that senior officials in the two departments jostled to avoid responsibility for the medium.[61] Despite Cresswell's best efforts to maintain his control over wireless, senior officials of the Navy Department coordinated to transfer responsibility for the medium elsewhere.[62] The decisive factor in this was not AWA's campaign, but deference to the Admiralty and the recommendations of Jellicoe's report. In the autumn of 1920 the Naval Board wrote to Cook, citing Jellicoe's report and urging that "in view of the probable future expansion for all commercial purposes and the growing demands for wireless...the commercial side of wireless should be turned over at once...to the Postmaster-General or other Department of the Government which is more clearly concerned with the commercial affairs of the Nation".[63]

There were mixed opinions on the subject within the Postmaster-General's Department. Its Chief Electrical Engineer, Frederick Golding, also proposed to remove the bulk of responsibility from the Navy and return it to his department. In effect, he advocated a return to the pre-war status quo, proposing that "Wireless Telegraphy for commercial purposes in Australia should

---

[59] Tim Watt, "Briny Reminiscences", extract from *Wireless Weekly*, 30th January 1925. ML: MSS 2954/Add-On 1910, Box 29, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.
[60] 'Transcript of Interview with C.B. Cutler – Melbourne, Nov. 1974'. ML: MSS 2954/Add-On 1910, Box 28, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.
[61] J. Given, *Transit of Empires*, p. 130.
[62] See 'RAN Radio Service: Future Policy and Organisation of Wireless Telegraphy in Australia', 4th February 1920. NAA: MP472/1, 1/20/2524, Transfer of RAN Radio Service to PMGs dept., 1919-1920.
[63] 'Wireless Stations in the Commonwealth. Proposals of Viscount Jellicoe.', unspecified date. NAA: MP472/1, 1/20/2524.

be under the sole control of the Postmaster-General in a similar manner to the present land telegraph service and telephone service".[64] However, the measures advocated by Golding contrasted with a proposal from the head of his department written in the same week, which recommended that the Navy retain its responsibility for wireless. This proposal stated that with "defence being the paramount consideration, it seems to me that the general control of wireless should be exercised by the Navy", while the Postmaster-General's Department's involvement with wireless should only be "so far as it relates…to its use as an adjunct to or substitute for land line telegraphy and telephony".[65] Echoing many of the points previously raised by Cresswell, it provided a host of justifications for continued naval control. These were the complications that would result from a reorganisation, the necessity of the Navy retaking control in the event of another conflict, and the fact that many wireless stations in the hands of the Commonwealth "while useful for naval purposes…and useful for ship to shore work, would not be justified as purely commercial stations".[66] Attached as proof of the final point were statistics demonstrating the annual losses to the Postmaster-General's Department, in the tens of thousands of pounds, incurred from operating its coastal wireless service prior to its transfer to the RAN.

The expense associated with operating the Commonwealth's wireless stations explains the unwillingness of senior officials in both the Navy and Postmaster-General's departments to have the medium under their responsibility during a period of post-war budget cuts.[67] However, in June 1920 Cabinet resolved to transfer responsibility over wireless back to the Postmaster-General's Department, nominally from the beginning of the following month.[68] Although records do not reveal the motivation for this decision, it is likely that the main reason was that offered by both AWA and RAN officials: to facilitate the further commercial development of wireless. This was suggested by a report on the impending transfer in *The Age*. The journalist hoped the transfer would spur the further commercial development of the medium, something which had effectively ceased under RAN administration although "it has

---

[64] 'Proposal that control of Wireless Telegraphy by transferred from Navy to Postmaster-General's Dept', 1st April 1920. NAA: MP341/1, 1920/9144.
[65] 'Wireless' memorandum authored by the Secretary of the Postmaster-General's Department, 12th April 1920. NAA: MP341/1, 1920/9144.
[66] 'Wireless' memorandum authored by the Secretary of the Postmaster-General's Department, 12th April 1920. NAA: MP341/1, 1920/9144.
[67] See N.G. Butlin, A. Barnard and J.J. Pincus, *Government and Capitalism*, pp. 301-302.
[68] See letter to the Secretary of the Postmaster-General's Department from the Secretary for the Navy, 30th June 1920. NAA: MP341/1, 1921/2863, Wireless transfer to PMG Department, 1920-1921.

the excuse, of course, that the war practically put a stop to the use of wireless for commercial purposes".[69]

This episode illustrates the degree to which contextual factors came to influence policymaking in this area. The available records illustrate that the transfer of responsibility over the *Wireless Telegraphy Act* from the RAN to the Postmaster-General's Department was motivated by a combination of international factors – the recommendations of the Admiralty and "following the lead of the Mother Country" – and the post-war fiscal environment.[70] Yet, because this decision marked a major change in the policy community, it would prove to have weighty implications for policymaking in the near future. The Postmaster-General's Department, which had had its responsibility for wireless stripped away five years prior, with Balsillie no longer in its ranks and the Wireless Telegraphy Branch no longer extant, did not have an experienced cadre of officials interested in the medium. This would prove to be a retardant on the development of policy proposals for the field that maintained the primacy of government enterprise. As a result, AWA was able to spearhead developments in the domestic policy stream.

Although the Postmaster-General's Department was no more accommodating to private wireless concerns than the RAN had been, it was immediately forced into a defensive posture. Now that the department had had the responsibility for wireless foisted back upon it, its officials turned their attention towards preventing any further penetration of private interests into the sector. These efforts, revealed in inter-departmental correspondence from September 1920, rested on the invocation of Australia's tradition of government enterprise in communications:

> The policy of Australia, both as separate states and as a Commonwealth, has been for telegraphic and telephonic services to be in the hands of the Government, and Parliament has provided that these services, both line and wireless, shall be so worked and controlled throughout the Commonwealth. [It would be] reversal of policy, and of legislation…to allow private enterprise to enter into competition with Government

---

[69] "Control of Wireless – Another Government Muddle" in *The Age*, 9th July 1920.
[70] *Report of Admiral of the Fleet Viscount Jellicoe of Scapa*, Vol. III, p. 212.

telegraphic and telephonic lines. The tendency is to nationalise all such means of communication where this has not already been done.[71]

AWA's executives, in the meantime, were working to achieve the overthrow of this tradition – their success in doing so was, in large part, a result of aligning the company's goals with two major structural developments of the post-war years: Hughes' power as Prime Minister and the rise of economic nationalism. The centrality of these factors to AWA's efforts to open the field of wireless to private enterprise became apparent over the course of a year between mid-1919 and mid-1920.

AWA's use of economic nationalism to frame its desire to open Australian wireless to commercial exploitation first manifested in July 1919. Citing the company's accomplishments to date, including the creation of advanced manufacturing facilities, the development of maritime wireless services, and the training of hundreds of operators, Fisk declared in a letter to Watt "that we have successfully established an industry which is beneficial to the country in many directions, and which will be increasingly beneficial if it enjoys a reasonable opportunity for expansion".[72] Noting the wide range of interests – including newspapers, farmers, railroads, and aircraft – that stood to gain from its adoption, he linked the private development of wireless with numerous dimensions of national development: "[it] will assist commerce, improve social conditions, relieve isolation, and render the inland districts more attractive and productive".[73] Furthermore, with specific regard to international communication, Fisk emphasised the desirability of private control:

> We have quite recently conducted, in conjunction with the Marconi Company, some very important experiments which indicate the possibility of wide development and considerable value to Australia, but those developments can only be realised if the use of Wireless Apparatus by private individuals for business and social purposes will be permitted.[74]

---

[71] Letter to Secretary of the Prime Minister's Department from the Acting Secretary of the Postmaster-General's Department, 23rd September 1920. NAA: MP341/1, 1920/9144.
[72] Letter to Watt from Fisk, 1st July 1919. NAA: A3932, SC457 PART 1.
[73] Letter to Watt from Fisk, 1st July 1919. NAA: A3932, SC457 PART 1.
[74] Letter to Watt from Fisk, 1st July 1919. NAA: A3932, SC457 PART 1.

Fisk's letter portrayed the opening of wireless to private enterprise as the best means to leverage the medium as a means of promoting national development. In contrast, he claimed, the retention of government control would stymie the sector's development:

> If persisted in will greatly restrict the development of this valuable art in Australia, that individual enterprise and initiative will be destroyed and that a great and unnecessary hardship will be enforced on those who have done so much to bring this art to its present stage and to build up a useful industry in Australia.[75]

Though these themes were not persuasive to Watt – a handwritten comment in the margins of the letter makes a snide referral to AWA's "pecuniary interest in the matter" – they resonated with Hughes.[76] Following the Prime Minister's return to Australia, the company focused most of its advocacy on him. This advocacy was also of a different character to that which had previously characterised its engagements with Commonwealth departments. Supplication replaced confrontation. Through its concentration on Hughes, and the fawning tone it sometimes adopted, AWA recognised his primacy in the political system, and his potential usefulness to the company's agenda.

Following Hughes' return from Europe in August 1919, he received numerous letters from AWA outlining the company's aspirations and policy recommendations. Furthermore, Given describes that Fisk "had the ear of" Hughes and took part in a short meeting with him during the 1919 election campaign, in which "the Prime Minister said there was a lot of opposition from the cable interests [to Marconi's direct wireless proposal] and he needed a better offer on wireless".[77] This demonstrates that the company's officials engaged in discreet lobbying efforts in addition to those efforts that are traceable through the Commonwealth government's records.

---

[75] Letter to Watt from Fisk, 1st July 1919. NAA: A3932, SC457 PART 1.
[76] Letter to Watt from Fisk, 1st July 1919. NAA: A3932, SC457 PART 1.
[77] J. Given, *Transit of Empires*, p. 133.

A letter sent by Thomas Hughes to the Prime Minister in February 1920 framed AWA's quest for access to the field as another area in which Hughes' direct intervention was required. As a prelude to outlining the company's preferences, it began with a deferential tone: "appreciating the practical interest you have shown in the development of the resources and industries of Australia, we desire to seek your interest and assistance in connection with the Wireless industry".[78] The form of 'assistance' that Thomas Hughes requested from the Prime Minister was "a slight amendment of the Wireless Telegraphy Act" to "permit private individuals or companies to own and use wireless apparatus for commercial or social purposes" – an opening of Australian wireless to private development.[79] The consequences that would flow from this change of policy, he claimed, would benefit Australia as a whole: an increase in the number of people employed by the company, the expansion of domestic manufacturing, and a blow against Australia's isolation. Thomas Hughes also invoked his company's support for the war effort, and its aspirations to build a strong national industry that would again be "available to serve the country in war time".[80] While AWA retained its connections with the Marconi Company, through which it gained "the right to draw upon all their latest scientific knowledge and manufacturing experience", he nevertheless depicted his firm as one of national importance whose interests were synonymous with Australia's.[81] The letter concluded with a gentle reminder of the company's earlier offers to construct a station capable of direct communication with Britain, in terms unaltered from those offered over a year earlier. This letter confirms a shift in the company's approach during this period: to cast itself as a national enterprise, and to link its own development with the broader concept of national development. The response to Thomas Hughes' letter from the Prime Minister's Department was brief and opaque, stating that "the whole question of wireless communication is at present receiving the attention of the Government, and consideration will be given, in this connection, to the representations made by you".[82]

An exchange between Hughes' office and Fisk, taking place over March and April 1920, provides an indication of the efforts that AWA's Managing Director was making to maintain a good relationship with the Prime Minister – a recognition of Hughes' vital importance to the

---

[78] Letter to Hughes from Thomas Hughes, 27th February 1920. NAA: MP341/1, 1921/9144.
[79] Letter to Hughes from Thomas Hughes, 27th February 1920. NAA: MP341/1, 1920/9144.
[80] Letter to Hughes from Thomas Hughes, 27th February 1920. NAA: MP341/1, 1920/9144.
[81] Letter to Hughes from Thomas Hughes, 27th February 1920. NAA: MP341/1, 1920/9144.
[82] Letter to Thomas Hughes from the Secretary of the Prime Minister's Department, 26th March 1920. NAA: MP341/1, 1920/9144.

company's policy goals. The exchange also illustrates the power relationship between the two men at the time. It began with a letter to the editor of *The Argus* from Fisk. This letter, detailing the recent opening of a direct trans-Atlantic wireless service, described his company's desire to construct a similar service linking Australia with Britain. It lamented that "we offered to do this in December 1918, and the service would have been in full operation by now, but the scheme has been delayed all this time, while we have to sit on the doorstep of the Federal Government awaiting the necessary permission".[83] This comment must have drawn Hughes' ire, as two days later the Prime Minister received an obsequious handwritten note from Fisk. The note claimed that "Sir Thomas Hughes has told me that you have made complaints about a letter published recently in the Argus over my signature", that "absolutely no personal reference to you and no reflection on your government was intended", and concluded that "if, through lack of care on my part, any portion of my letter was so construed I hasten to offer my personal apology and regrets".[84] The Prime Minister's response, written by his departmental secretary, was to thank Fisk for his note and demand "that, in order to put the matter right, you should write a further letter for publication in the 'Argus' stating that [the Prime Minister] has taken the keenest interest in the question and that you feel every confidence the Government will recognise its great importance and go on with it".[85]

Fisk was quick to respond to this request, asking the department's secretary "to assure the Prime Minister that I shall be only too happy to do so".[86] Furthermore, in order to avoid upsetting Hughes further, he forwarded a draft of his follow-up letter to *The Argus* to the Prime Minister's office before sending it to the newspaper for publication. This letter, framed as a response to "some of your readers appear[ing] to have misunderstood my remarks", stressed that the Prime Minister had not wilfully delayed acting on the question of wireless, and that the Prime Minister recognised the importance of wireless to Australia's future development:

---

[83] "High Speed 'Wireless'" in *The Argus*, 8th March 1920.

[84] Handwritten note from Fisk to Hughes, attached to letter to Thomas Hughes from the Secretary of the Prime Minister's Department, 26th March 1920. NAA: A3932, SC457 PART 2, Long Distance Wireless Scheme – Second section of file, 1920-1921.

[85] Letter to Fisk from the Secretary of the Prime Minister's Department, 27th March 1920. NAA: A3932, SC457 PART 2.

[86] Letter to the Secretary of the Prime Minister's Department from Fisk, 1st April 1920. NAA: A3932, SC457 PART 2.

In fact, Mr. Hughes has shown the keenest personal interest in the question from its inception, realising, as he does, that wireless communication is destined to provide very great benefits for Australia both externally and internally. Although Mr. Hughes is a very busy man, I have every confidence that the present Government will recognise the great importance of wireless communication and will do everything within its power and authority to assist the development of this industry in Australia.[87]

Following its reception by the Prime Minister's office, Fisk's letter was personally approved by Hughes and subsequently sent to *The Argus* for publication. The AWA chief executive's behaviour in this episode – not mentioned in Given's study – demonstrates Fisk's recognition that the Prime Minister's openness to his company's goal of establishing a direct wireless service was not a widely-held sentiment in the government, and that it would be foolish to alienate Hughes with overheated rhetoric.

Another episode with relevance to the relationship between Hughes and AWA took place towards in November 1920. At a public ceremony in Sydney, the Prime Minister was recognised for his contribution to "services to the country during the war and at the Peace Conference" to "a storm of applause".[88] As part of the ceremony, Hughes was presented with a cheque for £25,000. As Horne describes, this came "at a particularly convenient time", as Hughes was nearly bankrupt.[89] According to Fitzhardinge,

£12,000 was subscribed in England and the balance in Australia. The fund had been organized quietly for some time, but was made public only in the last three weeks. Subscriptions, large and small, came from many quarters, but the list was not published nor were the names revealed to Hughes, to avoid any suggestion of corruption.[90]

---

[87] Draft letter to the Editor of *The Argus* from Fisk, 1st April 1920. NAA: A3932, SC457 PART 2.
[88] "People's Tribute – To Prime Minister – His Services to Empire" in *Sydney Morning Herald*, 25th November 1920.
[89] D. Horne, *Billy Hughes*, p. 168.
[90] L.F. Fitzhardinge, *The Little Digger*, p. 456.

Horne similarly declares that the list of donors was never revealed, although both he and Fitzhardinge conclude that most of the sum came from business interests. Given documents that AWA was one of these interests, contributing £250 along with the same amount from the Marconi Company.[91] Furthermore, contemporary newspaper coverage notes that Thomas Hughes was one of the major participants, including a speaking role, in the ceremony.[92]

Regardless of whether Hughes was aware of AWA's contribution to his gift – it is impossible to demonstrate that he did – he was involved with the company in other ways beyond receiving their lobbying efforts. Most noteworthy was his collaboration with Fisk to provide a public demonstration of wireless telephony in October 1920. Organised at the request of Hughes himself, it featured the transmission of music to the assembled members of both houses of Parliament in Melbourne.[93] This reveals that the Prime Minister was willing to provide the company with a platform in full recognition of the publicity and legitimacy that would result from it.

Though this period did not see wireless appear on the formal agenda, developments that took place during it would prove decisive when the subject of international wireless rose to prominence again in 1921. These were concentrated in the policy stream. The transfer of responsibility over wireless from the Navy Department to the Postmaster-General's Department, now without a wireless expert in its employ, was a considerable disruption to the development of policy proposals within the Commonwealth government – there is little evidence of the subject receiving attention from bureaucratic officials during this crucial time. In contrast, AWA was active in the policy stream. Both Fisk and Thomas Hughes were busy playing the role of policy entrepreneurs during this period. They had been nurturing support for their company's goals, and their campaign of 'softening up' had identified the Prime Minister as supportive. Though it had not been without tension, AWA's efforts to cultivate Hughes as an ally would yield results in the near future. Fisk and Thomas Hughes had also refined the terms in which they were advocating for permission for their company to access the field – portraying AWA as a national asset in response to the prevailing 'national mood' of

---

[91] J. Given, *Transit of Empires*, p. 150.
[92] "People's Tribute – To Prime Minister – His Services to Empire" in *Sydney Morning Herald*, 25th November 1920.
[93] P. Geeves, *The Dawn of Australia's Radio Broadcasting*, p. 10.

economic nationalism. Their capitalisation upon these structural factors would be instrumental to AWA securing permission to participate in Australia's international wireless service.

The Emergence of Rival Schemes

Within the space of days in mid-1920, the Commonwealth government received two new proposals for international wireless schemes. The first of these was the report, presented at the end of May, of the Norman Committee. The second, in early June, was the initiative of Fisk and AWA. These represented major developments in the policy stream. The rival proposals presented a stark contrast in policy choices for those who would decide the terms under which Australia's international wireless service was to be constituted.

The Norman Committee's report proposed a new Imperial scheme of wireless with two salient features: government enterprise and a chain of relay stations. It signalled a resurrection of the basic design of the pre-war scheme, construction of which had been abandoned in early 1915. The Norman scheme would see construction of a series of relay stations based 2000 miles apart, owned and operated by governments, to connect the territories of the Empire. This would be comprised of two axes extending from the British Isles, with one running south to a terminus in South Africa, and the other east with its last station in Australia. The design of the Norman scheme was justified in terms of a single scheme that could meet both strategic and commercial needs.[94] It was to be funded by governments, with the British government covering the bulk of its costs, supplemented by contributions from the Dominions. The report estimated that Australia would pay £60,000 annually towards its upkeep, while receiving £40,000 in annual revenue.[95] Overall, the committee concluded that its scheme was likely to lose £100,000 each year at the beginning but would eventually become a profitable venture. Despite the prospect of an immediate financial loss, the report concluded that there were non-financial benefits that would result from its scheme: "we have had evidence that the overseas communities are eager and impatient for those Imperial links to be forged. It would be a false

---

[94] *Imperial Wireless Telegraphy Committee. 1919-1920. Report*., p. 4. NAA: MP341/1, 1922/5649, Report of Wireless Telegraphy Commission, 1921-1922.
[95] *Imperial Wireless Telegraphy Committee. 1919-1920. Report*., p. 21. NAA: MP341/1, 1922/5649.

economy at this moment, in our opinion, to think more of a few thousand pounds than of many nations".[96]

Unlike the Imperial scheme of the pre-war years, that proposed by the Norman Committee did not contain any scope for the Marconi Company's participation. The company had submitted its own proposal for the committee's consideration in February 1920. Its proposal was grand in scale, consisting of hundreds of stations of varying ranges throughout the entire British Empire. If approved, the company proposed "entirely at its own cost to construct, maintain, and operate" these stations, and to "pay yearly into the Treasury of each Government, in whose territory one or more stations may be situated, a sum equal to 25% of the net profits earned by the said station or stations".[97] However, the Norman Committee rejected the Marconi proposal for being too ambitious. Furthermore, the committee deemed that the high projected cost of the Marconi scheme was likely to prompt the company to charge high prices for the service, which would be possible because the scheme would effectively grant the company a monopoly in the area.[98] Another reason for this rejection, unstated in the committee's report but no less important, was the poor relationship between Norman and Isaacs, and the unwillingness of the latter to give evidence before the committee.[99] Thus, the Norman scheme eschewed any arrangements with the Marconi Company whatsoever – it would instead utilise equipment of the kind already in use by the British government, thereby avoiding the need for royalty payments to the company.

Isaacs' submission to the Norman Committee did not only fail to win the support of that body, but also alienated Fisk by changing the thrust of their efforts to penetrate the sector. Unlike the proposals that had been made in late 1918 and early 1919, it abandoned the idea of creating direct wireless connections and instead reverted to a relay system featuring several "trunk routes", one of which would link Australia to Britain via connecting stations in Singapore and India.[100] This move by the British company is described by Given as representing "a decisive moment" in the relationship between AWA and the Marconi Company, from which

---

[96] *Imperial Wireless Telegraphy Committee. 1919-1920. Report*., p. 23. NAA: MP341/1, 1922/5649.
[97] Letter to Fisher from Isaacs, 26th February 1920. NAA: MP341/1, 1920/9144.
[98] *Imperial Wireless Telegraphy Committee. 1919-1920. Report*., pp. 16-18. NAA: MP341/1, 1922/5649.
[99] D. Headrick, *The Invisible Weapon*, p. 183.
[100] "Linking the Empire – Wireless Scheme Explained" in *The Argus*, 23rd April 1920.

point AWA would begin to exercise a greater degree of autonomy from its parent company.[101] Fisk's disappointment over the new Marconi Company proposal came from a feeling that it had undercut the progress that AWA had made in its domestic advocacy for direct wireless. In a letter to Isaacs from March 1920, Fisk noted that he was witnessing a shift wherein there was an increasing "tendency on the part of the government to abandon its previously fixed ideas about absolute government monopoly in wireless communication and in fact to give very wide freedom to individuals and companies".[102]

In light of the disagreement with its British parent company, AWA formulated its own proposal. This would prove to be important for two interrelated reasons. It demonstrated the company's emergence as an actor in the Australian policy community, being the first proposal for the private provision of international wireless services originating in the Australian company, rather than its British parent, and also furthered AWA's claim to be a national enterprise rather than a mere appendage of an international firm.

Just days after the report of the Norman Committee was published, Hughes received two letters from his namesake in AWA outlining a new proposal from the company to establish a direct wireless service. AWA's new scheme offered to "construct, maintain and operate in Australia the necessary stations and equipment for a direct commercial Wireless Service between Australia and England".[103] This direct service would be incorporated with a domestic network consisting of the existing coastal stations, along with stations connecting all of the capital cities. In exchange, and on the condition that the British government would grant permission for the erection of a station capable of direct communication in that country, the company pledged to offer rates lower than those charged by the cable network, and "to pay yearly into the Treasury of the Commonwealth a sum equal to 25 per cent of the net profits earned by the Australian stations".[104]

---

[101] J. Given, *Transit of Empires*, p. 133.
[102] Quoted in J. Given, *Transit of Empires*, p. 134.
[103] Shorter letter to Hughes from Thomas Hughes, 4th June 1920. NAA: A3932, SC457 PART 2.
[104] Shorter letter to Hughes from Thomas Hughes, 4th June 1920. NAA: A3932, SC457 PART 2.

The accompanying letter offered the Prime Minister "a guide for your consideration of the scheme" which reinforced the theme of national development prevalent in the company's previous advocacy, and introduced the language of strategic necessity.[105] It described the chief advantage of a direct connection as guaranteeing Australia a means of communication "entirely independent of all ocean cables, foreign landlines, [and] intermediate Wireless links", the securing of which "has been proved to be vitally necessary in war time by the almost complete severance of our two main cables by the enemy".[106] The letter also emphasised that the direct link would be "an unsurpassed monument to British enterprise and scientific progress" that would benefit the Australian population at large by reducing the cost, speed, and hassle of communication with Britain, along with providing jobs through its construction and operation.[107] However, it advantages would not be simply economic: "the country will be provided with an asset of incalculable strategic value".[108] This new emphasis on strategic factors was an effective way for the company to contrast its proposal for direct wireless with the relay scheme, by framing the direct scheme as more secure. Fisk later wrote a letter to the Prime Minister's departmental secretary in August expressing thanks for a copy of the Norman Committee's report provided by the Prime Minister's office. In it, he wrote that the report "makes interesting reading but Australia needs a 'direct' service, not one dependent on the maintenance of relay stations in countries over which she has no control".[109] These were the terms in which Hughes would advocate for direct wireless in the near future.

The Prime Minister appears to have been receptive to AWA's offer from the beginning. A letter to AWA from the Secretary of the Prime Minister's Department sent on behalf of Hughes at the end of July stated that "the Commonwealth Government is quite prepared to give favourable consideration to the proposals".[110] However, "in view of the decision reported to have been arrived at by the British Government" – referring to the recommendations of the Norman Committee – any firm decision would have to be postponed: "this, the Prime Minister wishes me to say, he very much regrets, as he has the greatest faith in the possibilities of

---

[105] Longer letter to Hughes from Thomas Hughes, 4th June 1920. NAA: A3932, SC457 PART 2.
[106] Longer letter to Hughes from Thomas Hughes, 4th June 1920. NAA: A3932, SC457 PART 2.
[107] Longer letter to Hughes from Thomas Hughes, 4th June 1920. NAA: A3932, SC457 PART 2.
[108] Longer letter to Hughes from Thomas Hughes, 4th June 1920. NAA: A3932, SC457 PART 2.
[109] Handwritten note to the Secretary of the Prime Minister's Department from Fisk, 31st August 1920. NAA: A3932, SC457 PART 2.
[110] Letter to Thomas Hughes from the Secretary of the Prime Minister's Department, 27th July 1920. NAA: A3932, SC457 PART 2.

wireless".[111] It concluded by asking for details of any discussion the company had conducted on the question with the British government. Notwithstanding the Prime Minister's enthusiasm for the proposal, the Commonwealth was not going to immediately and unilaterally commit itself to the company's scheme. It would be necessary to make the decision in light of international circumstances, and discuss the matter with the other governments of the Empire.

Thomas Hughes' response to the Prime Minister's enquiry regarding AWA's discussion of the matter with the British government revealed the company's intention to first secure a deal with the Australian government and then use that deal as leverage against the British:

> We have not approached the British Government on this subject because we considered that our proper procedure would be to submit our offer to you in the first instance, and if your Government approves of our proposal to ask you to enter into a preliminary agreement with the Company. When that stage is reached a Director of the Company will immediately proceed to England to arrange for the corresponding station in that country. We do not anticipate any difficulty in obtaining a licence for our station in England, particularly as our request would be supported by your government.[112]

Another important detail regarding AWA's proposal of June 1920 is that it was kept secret from the remainder of the policy community. Neither the RAN nor the Postmaster-General's Department were aware of its existence, shielding it from critical scrutiny. While AWA's offer was being considered at the political level, the bureaucracy was instead focused on the Norman scheme. Extra impetus came following an August communication from the British Colonial Secretary, informing Australia and the other Dominions of the British government's intention to implement the measures recommended by the Norman Committee and asking for the views of the Commonwealth.[113]

---

[111] Letter to Thomas Hughes from the Secretary of the Prime Minister's Department, 27th July 1920. NAA: A3932, SC457 PART 2.
[112] Letter to Hughes from Thomas Hughes, 29th July 1920. NAA: A3932, SC457 PART 2.
[113] Cable to the Governor-General from the Secretary of State for the Colonies, 11th August 1920. NAA: MP341/1, 1922/5649.

Later in August, Golding, the Chief Electrical Engineer, responded to the Colonial Secretary's request. He endorsed the decision to adopt the Norman scheme, writing that the "the Engineering Branch of the Australian Post Office" would take responsibility for the proposed Australian station.[114] Golding justified this by reference to the Norman Committee's dismissal of the notion of private involvement in international wireless: "The proposals of the Marconi Company for an Imperial chain of wireless stations was dealt with by the Committee and reported on unfavourably. Further comment is therefore unnecessary".[115] Golding's report was endorsed by the Postmaster-General, George Wise, and forwarded to the Prime Minister's Department. Several weeks later, a cable was sent to the British Colonial Secretary stating "Commonwealth Government prepared to adopt Imperial Wireless Committee's recommendation for creation of Imperial Wireless system".[116]

This reflected an effort from the bureaucracy, with ministerial support, to commit Australia to the Norman scheme and thereby shut out AWA. There was also a public dimension to this strategy. Several days later, a brief piece in *The Argus* proclaimed that "within the next few days…it is expected that the Commonwealth will give its approval to the Imperial Government's scheme for the establishment of a wireless chain".[117] It is likely that Wise was complicit in this effort. One internal memorandum from the time describes his approval of the Norman scheme, while also demonstrating unease at the notion of any private involvement in international wireless communication.[118] Several months later, the Postmaster-General's Department submitted a piece for publication in the major metropolitan newspapers and *Commerce* – the journal of the Sydney Chamber of Commerce – calculated to ward off any private wireless interests. This stated that work had already commenced on the first stations of the imperial scheme in Britain and Egypt, and that "preliminary action" was also underway in Australia.[119]

---

[114] 'Imperial Wireless Scheme' Minute Paper, 26th August 1920. NAA: MP341/1, 1922/5649.
[115] 'Imperial Wireless Scheme' Minute Paper, 26th August 1920. NAA: MP341/1, 1922/5649.
[116] See letter to Secretary to the Governor-General from the Secretary of the Prime Minister's Department, 15th September 1920. NAA: MP341/1, 1922/5649.
[117] Unidentified clipping from *The Argus*. NAA: A3932, SC457 PART 2.
[118] 'Wireless – Overseas' Minute Paper, 16th September 1920. NAA: MP341/1, 1920/9144.
[119] 'Draft Notice for Insertion in Daily Press, Melbourne and Sydney and "Commerce"' Minute Paper, 3rd February 1921. NAA: MP341/1, 1922/5649.

The department's claim of 'preliminary action' was overstated. As a result of several factors – the disruption in the policy community with the transfer of responsibility from the Navy to the Postmaster-General's Department, deference to the British – detailed bureaucratic consideration of policy only began after the publication of the Norman report. Further delays came from a desire to consult with the British, along with the RAN and other Defence officials, with regard to basic details. It would be necessary to select the site of the proposed Australian station in consultation with the other departments. The design of the station, meanwhile, would be decided by the British "as explained in the Imperial Wireless Committee's report".[120] In October 1920, it was decided to hold a conference between officials from the Postmaster-General's, Navy and Defence departments on the subject of the station's location, "but action in this regard can wait until further information is received from London".[121] The Postmaster-General's Department was still waiting for British input in January 1921.[122]

While the Commonwealth government's policy community was bogged down, AWA continued to drive developments in the policy stream. A record from December 1920 demonstrates that a dramatic shift in the form of AWA's proposal had taken place in the latter months of that year. It remained an offer to construct a direct wireless link with Britain and a domestic network of feeder stations, but many of the other details had changed. For the first time, it contained the idea of substantial Commonwealth investment in AWA. Under this new proposal, the company would increase its capital subscription by £800,000 to take its total capital to £1 million. The Commonwealth would acquire a majority stake, buying 500,001 of the company's £1 shares. The deal would also establish a seven-member Board of Directors to oversee the company's operations. The Commonwealth would appoint three of these directors, with the remaining four "elected by the other shareholders in general meeting", though Commonwealth shares would not confer voting rights for these positions.[123] This updated version of the proposal also called for AWA to establish a national monopoly over wireless communication:

---

[120] Memorandum to the Secretary of the Postmaster-General's Department from Golding, 3rd September 1920. NAA: MP341/1, 1922/5649.

[121] Memorandum to the Acting Secretary of the Postmaster-General's Department from Golding, 5th October 1920. NAA: MP341/1, 1922/5649.

[122] See letter to Secretary of the Navy from the Acting Secretary of the Postmaster-General's Department, 12th January 1921. NAA: MP341/1, 1922/5649.

[123] 'Wireless Proposals', 22nd December 1920. NAA: A3932, SC457 PART 3, Imperial Wireless Scheme – Third section of file February to October 1921, 1919-1921.

> The Amalgamated Company will forthwith proceed with the development
> manufacture sale and use of apparatus for wireless communication…within the
> Commonwealth and its territories and in marine and air craft owned registered or
> trading within the Commonwealth or its territories and for communication with
> countries overseas and *the Commonwealth shall at all times grant to the Company all*
> *permits and licences and assistance necessary for the full realisation of these objects*
> *and for the full development of the industry together with the right for the Company to*
> *grant sub-permits or sub-licences to its clients and customers.*[124]

Furthermore, it declared that "during the existence of the Amalgamated Company the
Commonwealth shall not revoke any licence or licences granted to the Company *nor impose*
any condition or do any thing which might render the Company's services or stations
unprofitable".[125]

AWA's new proposal portended a dramatic restructuring of the Australian wireless industry
and a very favourable deal for the company. In addition to providing AWA with a large infusion
of capital, and a virtual guarantee of profitability, it would effectively grant the company free
reign over the entirety of Australian wireless. Further, while the Commonwealth would own a
majority of the shares, the company would maintain a majority on the Board of Directors that
the Commonwealth would be unable to alter. As a result, the Commonwealth's majority stake
in the company would not be sufficient to exert control over its operations.

The updated proposal justified the scale of government investment in AWA through a contrast
with the poor financial performance of the Commonwealth's coastal network, which was
losing between £40,000 and £50,000 every year. In the years since its construction, the
amount of money put in to the coastal network was already in excess of the £500,000
investment that AWA's offer would entail. AWA's proposal offered the Commonwealth the
possibility of turning wireless into a money-making venture, allowing it to "eliminate the loss"

---

[124] 'Wireless Proposals', 22nd December 1920. NAA: A3932, SC457 PART 3. Emphasis added.
[125] 'Wireless Proposals', 22nd December 1920. NAA: A3932, SC457 PART 3. Emphasis added.

of the coastal scheme and instead turn wireless into "a profitable investment".[126] In addition, partnership with the company to establish a direct connection with Britain was presented as a means to reduce the cost of communication with that country, and, in line with the established theme of economic nationalism, a means to stimulate the development of "the Wireless Industry on lines commensurate with its importance to Australia".[127]

There was precedent for an agreement of this kind: a deal brokered between the Commonwealth and the Anglo-Persian Oil Company in mid-1920 to create a refining company. Fitzhardinge suggests that this earlier agreement was an initiative of the Prime Minister, "distinctive of Hughes, both in its imaginative vision of future developments and in its bold marriage of government and private enterprise".[128] On the other hand Ferrier, the principal historian of the Anglo-Persian Oil Company (the forerunner of British Petroleum), suggests that it was the management of that company that had proposed the form of the agreement made in 1920, and that was itself based upon an earlier agreement made between that company and the British government in 1914.[129] Regardless of its origins, the oil agreement was the model for that proposed by AWA. It was a joint venture to form a new company wherein the Commonwealth would take ownership of 250,001 of 500,000 shares, and that would be overseen by a seven member Board of Directors, of which three would represent the Commonwealth and the remaining four the oil company.[130] As with the AWA proposal, the oil agreement was also put forward as a means to promote the development of a national industry.

Given, discussing this matter, writes that "there is no evidence of any serious analysis…within government" of the parallels between the AWA deal and oil deal, and that "it appears the whole arrangement with AWA was not even considered by Cabinet before Hughes took it to Parliament".[131] The first part of this statement is true, although the similarity between the

---

[126] 'Wireless Proposals', 22nd December 1920. NAA: A3932, SC457 PART 3.
[127] 'Wireless Proposals', 22nd December 1920. NAA: A3932, SC457 PART 3.
[128] L.F. Fitzhardinge, *The Little Digger*, p. 438.
[129] R. W. Ferrier, *The History of the British Petroleum Company*, pp. 202-210, 522.
[130] See NAA: MP472/1, 8/20/2556, Agreement between Commonwealth of Australia and the Anglo-Persian Oil Co Ltd relative to supply of Oil in Australia – Affect on RAN and Rear-Admiral Sir W Clarkson KBE CMG, nominated for appointment as Naval representative on the Directorate of the Commonwealth Oil Refineries, 1920.
[131] J. Given, *Transit of Empires*, p. 136.

details of the two proposals make it impossible to consider that the latter was drafted without reference to the former. However, the proposal *was* considered by the Cabinet. In July 1920, following AWA's initial proposal, Cabinet resolved to form a sub-committee to consider the subject of international wireless.[132]

Weeks after the establishment of the Cabinet sub-committee, another international development intervened as British Prime Minister Lloyd George contacted his Dominion counterparts announcing a conference in London in June 1921. The 1921 Imperial Conference, the first of three convened in the 1920s, represented a continuation of Imperial War Conferences held in Britain in 1917 and 1918 to discuss matters of interest to the Empire as a whole in the fields of defence and foreign policy. At Hughes' prompting, the subject of communications was also added to its agenda.[133] This portended the Prime Minister's desire to resolve the subject after years of consideration.

The Cabinet sub-committee – comprised of the Treasurer, Cook, the Navy Minister, Bruce Laird Smith, and the Postmaster-General, Wise – issued its report on wireless in April 1921, just weeks before the Imperial Conference. The report offered brief comments upon both AWA's proposal and the Norman scheme, and made three recommendations with regard to wireless. The first was to consult with other governments on the subject at the Imperial Conference. The second, following from the first, was that "the fundamental principle of Imperial partnership and co-operation be observed" in this matter.[134] Finally, it cautioned against abandoning the Australian communications tradition, recommending that "any proposals for local and Australian development be examined sympathetically, but with due regard to the Government's monopoly in telegraphic and telephonic communication, as now existing, and the question of Defence".[135] However, the sub-committee's recommendations were not unanimous. A dissenting note from Laird Smith was also included in the report, warning that

---

[132] Handwritten note, dated 16th July 1920, attached to Letter to Hughes from Thomas Hughes, 13th July 1920. NAA: A3932, SC457 PART 2.

[133] L.F. Fitzhardinge, *The Little Digger*, pp. 459-462.

[134] 'Report of Sub-Committee of Cabinet on – (a) Wireless Communication; and (b) Duplication of the Pacific Cable', 7th April 1921. NAA: A3932, SC457 PART 3.

[135] 'Report of Sub-Committee of Cabinet on – (a) Wireless Communication; and (b) Duplication of the Pacific Cable', 7th April 1921. NAA: A3932, SC457 PART 3.

fealty to the principle of government enterprise threatened to increase the costs and delays of the international service, and alluding to the terms of AWA's proposal:

> I naturally would like the Empire Radio-telegraphy owned and controlled by the Governments concerned, but that seems impossible to bring about without great delay and expense owing to the patent rights being solely in possession of a private company. Hence…I suggest that negotiations might be established with any wireless company with the view of getting a concrete proposal to place before the [Imperial] Conference. But, under any conditions, the Governments concerned should have a controlling interest if the work is done by a company – and whole control in time of war.[136]

Laird Smith's comments introduced another consideration that was to prove decisive: an emphasis on a swift resolution of the subject. Later in 1921, when Hughes placed the subject before Parliament, the need for a speedy decision was one of the major elements of his framing of the issue. This frame would prove powerful enough to attain a quick decision, and entrain the agreement with AWA that was formalised in the following year.

Cabinet approved the recommendations of the sub-committee's report in May, and an accompanying comment from the Secretary of the Prime Minister's Department noted that "the P.M. is to deal with this question while in Great Britain".[137] What transpired while Hughes was in Britain at the Imperial Conference, though, showed a selective adherence to the contents of the sub-committee's report. This is an indication of the relative weakness of Cabinet at the time, and the willingness of Hughes to override the preferences of his colleagues and their departmental advisors. It also suggests that, absent Hughes, there was no audience for AWA's proposal amongst senior politicians, further emphasising his importance for the outcome of the 1922 agreement.

---

[136] 'Report of Sub-Committee of Cabinet on – (a) Wireless Communication; and (b) Duplication of the Pacific Cable', 7th April 1921. NAA: A3932, SC457 PART 3.
[137] Handwritten note from the Secretary of the Prime Minister's Department, 10th May 1921. NAA: A3932, SC457 PART 3.

The Settling of Alternatives, 1918-1921

Though the original Imperial scheme was shelved following the outbreak of war, the subject of international wireless communication soon reappeared on the agenda after the Armistice. Almost three years later, in mid-1921, the matter was still under consideration and awaiting a formal decision. However, the lack of a formal decision belied an ongoing subterranean struggle to shape the terms under which Australia would participate in an international scheme of wireless. The most important development during this period was the emergence of the two alternative policies, between which Parliament would choose as the basis for Australia's international service. There were great contrasts between these rival proposals with regard to their origins, designs, and bases of support. The Norman scheme, an initiative of the British government, was based on the principle of government enterprise, planned for a relay service connecting the territories of the British Empire, and was supported by the Commonwealth bureaucracy and most of the Cabinet. The alternative was a scheme of domestic origin, designed by AWA and supported by the Prime Minister, which planned for the company, with financial support from the Commonwealth, to establish a direct wireless connection between Australia and Britain.

The stark differences between the schemes obscured the fact that there was a firm consensus on the desirability of establishing a wireless link between Australia and Britain. The debate surrounding the subject centred on the form that the service should take, rather than whether to create in the first place. This consensus reflected the strong geopolitical imperatives compelling Australia to upgrade its international communications through the adoption of trans-oceanic wireless. Though these imperatives existed prior to 1914, they had attained a new sense of urgency during the Great War. The war years saw considerable improvements in long-distance wireless signalling by other great powers, particularly Germany and the United States. This revealed the potential for the British Empire to fall behind its rivals in the control of international communications, despite its continued dominance in the field of cables. For Australian policymakers, the perils of relying on cables had been underscored by the German raids against the cables that provided its communications with the outside world in the conflict's first weeks.

Another problem with cables – congestion and delays in the immediate post-war period – provided a focusing event that drew attention to the underlying problem and, in combination with Isaacs' efforts as a policy entrepreneur, led to the opening of a policy window. Highlighting the considerable delays in messaging between Australia and Britain, and with reference to the direct wireless demonstration that he had conducted with Fisk in September 1918, Isaacs suggested that granting permission for his company, in conjunction with AWA, to establish a direct wireless service between Australia and Britain would relieve pressure from the cable network. In this case, there was an alignment between the problem and policy streams, but unfavourable conditions in the politics stream prevented any action. Though Hughes was willing to consider the offer, it met with strong resistance from the Acting Prime Minister and Cabinet, supported by departmental advice, in Australia. Because of this deadlock, with Hughes in Europe and unable to exert his will over his colleagues on the subject, the policy window closed without any decision made on the subject of international wireless. It would take until after the conclusion of the 1921 Imperial Conference for another to open, by which time circumstances had changed considerably.

Most of the consequential changes during the remainder of the period covered in this chapter took place in the policy stream, which saw a divided, and disrupted, policy community develop a range of different proposals for a scheme of international wireless. The principal axis of division within the community was between government and private enterprise. Regardless of the specific design of different schemes, the crucial question of control always related to the origin of the proposal. Bureaucratic officials, when commissioned to develop their own proposals, invariably proposed schemes of international wireless with no scope for the participation of private enterprise. Similarly, the schemes developed by the Marconi Company, and then AWA, always advocated a leading role for private enterprise. This is a strong indication that the rival policy proposals concerning international wireless were emanations of a struggle of interests. In the case of AWA and its parent, the interest was commercial; to secure control over a lucrative communications route. With regard to the bureaucratic actors in the policy community, their interest lay in defending the Commonwealth's primacy over a field that it had customarily controlled, and, following the report of the Norman Committee, staying aligned with the British preference for government control. An additional division emerged from 1920, when the Marconi Company abandoned the principle of direct wireless in its submission to the Norman Committee. This prompted Fisk to break from the British

company and develop the policy proposal, still based on a direct connection, which would later become the bedrock of the 1922 agreement.

As noted in Chapter One, a fragmented policy community is more likely to produce divergent policy proposals that radically reshape policy in a field. The division within the policy community explains why, beyond the mutual desire to establish a wireless connection between Australia and Britain, there were no common elements between the rival proposals that had emerged by 1921. The Norman scheme was British in origin, based on a chain of relay stations under the control of governments, and anticipated losing money for its participants for its first decade of operation. In contrast, the Fisk scheme was Australian in origin, based upon the provision of a direct service in collaboration with private enterprise, and, though calling for a larger up-front capital expenditure, promised to be a profitable investment for the Commonwealth. In addition to the aforementioned struggle of interests, the contrasts between these schemes reflected the fact that the different segments of the policy community did not communicate with each other on the matter, as indicated by the fact that the Postmaster-General's and Navy departments were not informed of AWA's proposal, which had been delivered to the Prime Minister in mid-1920. Similarly, in Britain, Isaacs had refused to appear before the Norman Committee.

The disruption within the bureaucratic segment of the policy community in Australia, largely a product of external influences, would also prove vital to the course of events. This disruption related to the uncertainty surrounding wireless after the return of peace. Much as the coming of war had shaken up the administration of the sector by removing Balsillie from the role of wireless expert for the Commonwealth government and the transfer of the medium to the Navy Department, the return of peace foreshadowed another adjustment. Despite Cresswell's best efforts to justify continued naval control of wireless in the post-war years, responsibility for the *Wireless Telegraphy Act* returned to the Postmaster-General's Department in mid-1920. This was not because AWA had orchestrated a campaign against the continued naval control of wireless, which made little impression on those in and around the government, but because of Admiral Jellicoe's report on the naval defence of Australia, which included recommendations for wireless to be developed along commercial lines. Removing wireless from naval control also allowed the RAN to offload the expensive upkeep of the coastal network elsewhere at a time of post-war budget cuts.

With regard to policy development, the critical effects of this disruption were delay and uncertainty. Though discussions regarding the future place of wireless commenced shortly after the Armistice, the uncertainty regarding its future administration was not resolved until Cabinet's decided to return responsibility for wireless to the Postmaster-General's Department from July 1920. During this time, there was little development of policy proposals from within the Navy Department. When responsibility for the *Wireless Telegraphy Act* was transferred back to the Postmaster-General's Department, the department was ill-prepared to commence detailed policy work. Having not been in charge of wireless for five years, during which time there had been considerable technological advances, and having lost its chief technical expert, Balsillie, it lacked the technical and administrative acclimatisation necessary. In addition, the timing of this transfer was awkward, coming at around the same time as the reception of the Norman Committee's report. As a result, the involvement of departmental officials was essentially limited to endorsing the Norman scheme and making preliminary plans to conform to the plans of the British government.

The policy stream was thus divided into two eddies. The bureaucracy, which had played a substantial role in policy development in the pre-war years, was hampered by uncertainty, disruption, and deference to the Imperial government. This resulted in a lack of initiative from bureaucratic officials in formulating policy options for international wireless, as they looked to the British for guidance. In contrast, AWA's executives were very active in the area. On the eve of the Imperial Conference, AWA had formulated a detailed scheme for a direct service with Britain and commenced a campaign of 'softening up' to gain support of its proposal.

This relates to another important development from this period: the policy entrepreneurship of Fisk and Thomas Hughes. The period covered in this chapter saw considerable efforts on behalf of AWA to 'soften up' senior politicians for the adoption of a scheme of direct wireless service with Britain under its control; to lay the foundations for its acceptance. These efforts began prior to the end of the war with the enlistment of Hughes and Cook to participate in the September 1918 demonstration of direct wireless transmission between Britain and Australia. The campaign of 'softening up' the Prime Minister, which was initially spearheaded by the Marconi Company, continued after the Armistice, with evidence of a number of overtures to

establish a direct wireless link made to him while in Britain. In early 1919, AWA executives in Australia commenced a similar campaign targeting senior politicians in Australia, such as Acting Prime Minister Watt. In the case of Watt and the remainder of the domestic Cabinet, however, the company's overtures did not receive a sympathetic hearing. In an attempt to strengthen the case for direct wireless, a number of Chambers of Commerce were enlisted to extol its potential benefits to members of the Cabinet, although these third-party exhortations were perceived as directed by the Marconi Company and not well received.

Though the Cabinet led by Watt during his tenure as Acting Prime Minister was unmoved by AWA's 'softening up' campaign, both AWA and its parent company had identified Hughes as open to the notion of direct wireless. Hughes was the only prominent figure within the Commonwealth government willing to consider proposals for a direct wireless service under private control. His openness to the approaches of the Marconi Company in the immediate post-war period contrasted with the other members of his Cabinet that remained in Australia. The remainder of the Cabinet, and the departments advising them, were opposed to any private involvement in international wireless. This was not simply a case of a fleeting sentiment while Hughes was overseas. The formation of a Cabinet sub-committee to report of the subject in mid-1920, which delivered its report in early 1921, reveals that attitudes of wariness towards private involvement in international wireless – along with a desire to cooperate with the British – remained strong with members of Cabinet other than Hughes. Similarly, documentation from this period demonstrates a complete aversion within the bureaucracy to any deviation from the hitherto-established principle of government control of communications. While there remained a degree of tension in the relationship between Hughes and AWA, the Prime Minister was the only figure open to the notion of private involvement in a scheme of international wireless.

Following the Prime Minister's return to Australia in August 1919, the company dedicated great effort to gain Hughes' support for its proposals. This consisted of formal pleas, in the form of letters, as well as advocacy that was less overt. The company's efforts to 'soften up' Hughes to its preferred policy of establishing a direct wireless link under its control would prove of vital importance to the eventual shape of the international scheme. It was only because of the company's efforts to court Hughes' support that its scheme for a direct service with Britain came to receive consideration. This, and the fact that the Prime Minister's

openness to the scheme was sufficient to overcome the widespread resistance elsewhere in the political system, demonstrates his commanding influence within Australian politics at the time. It also reveals the wisdom of AWA's executives in identifying this fact, and tailoring their campaign to accommodate for it.

Fisk and Thomas Hughes were also attuned to the spirit of the times in the manner in which they framed their proposals. These men presented the case for the adoption of their scheme in terms of strategic benefits, national development, and financial advantage. These would all become prominent themes when the proposal went before Parliament in late 1921, speaking to the power of their framing. With reference to wartime experience, AWA's proposals repeatedly referred to a direct connection with Britain as a military and strategic asset that would contribute to Australia's defence, and allow communication with RAN vessels anywhere in the world. Another prominent theme was national development. Using the language of economic nationalism, and with copious references to AWA as an Australian firm, the company's executives presented the case for opening the field of wireless to private enterprise as supporting the larger goal of development, promising to increase employment and develop an industry that would prove a national asset. The weight carried by these points speak to the importance of the surrounding structural context outlined in Chapter Two. The arguments for a direct wireless system versus a relay system hinged on the strategic superiority of the former. Furthermore, the presentation of AWA as a national firm would prove instrumental for the legitimacy of a large-scale government investment in it. The arguments made by Hughes when he came to advocate for AWA's scheme in Parliament had been crafted and refined by the company's executives in their advocacy efforts over the course of years, prior to being deployed in the open sphere of formal decision-making.

Timing was another important consideration in this period. One instance of this was in the case of the scheme for an international wireless scheme that Watt commissioned Balsillie to design while Hughes was at the Paris Peace Conference. Had the scheme been prepared earlier, prior to Hughes' return, it may have received consideration within an amenable political environment. However, the fact that the Prime Minister returned just days before Balsillie's proposal was finalised meant that it was unlikely to receive favourable consideration in the political system.

Ultimately, though, timing would prove more important in relation to the Imperial Conference. This was because of the prominence given to the question of international wireless at the conference, which provided a focusing event that led to the opening of a policy window. In this case, what mattered were the specific proposals that were available for the consideration of policymakers *at that point in time*. As this chapter has shown, there were two principal lines of division concerning what the design of the scheme would be, and who would control it. The two axes of division between the AWA and Norman proposals – relay/direct and government/private enterprise – had been bundled so as to connect a preference for direct wireless with private enterprise, and a preference for government control with a relay system. These were not the only conceivable ways of configuring Australia's participation in international wireless, but the fact that they were the available alternatives at the time a policy window opened ensured that the issue was framed as a choice between a relay system under government control *or* a direct service provided by private enterprise.

Between the Armistice and the 1921 Imperial Conference, AWA's executives – principally Fisk and Thomas Hughes – and the Prime Minister had emerged as pivotal figures. The company's representatives had devised an ambitious plan to recast Australian wireless policy. Their proposal, in effect, called for the inversion of government monopoly. It was not simply a plan to allow private enterprise a foothold in international wireless, such as it already had in the field of maritime wireless. Instead, the AWA proposal sought a mandate for the company to exploit every area of wireless communications for its own commercial benefit. The proposal called for a massive Commonwealth investment in the company, but without the ability for the government to exercise control through the Board of Directors. It also contained a provision for the company to usurp the government's licencing function, by guaranteeing the provision of licences to itself and control over the distribution of licences to others. Finally, it contained an ambiguous provision preventing the Commonwealth from 'doing any thing' that may obstruct the firm's profitability. The company's proposal was, in effect, a bid for private monopoly over the entirety of Australian wireless communication. Hughes, customary of his style, was more concerned with the larger concept of establishing a direct wireless connection with Britain than he was with the finer details. From the efforts that he undertook to promote the idea, it appears that he was willing to acquiesce to AWA's designs.

Yet, as Chapter Six will demonstrate, these men were unable to dictate the outcome of the policymaking process at will. Conditions in the political stream at the time of the open policy window necessitated significant compromises in the company's demands. Serendipity and the influence of structural considerations would also play a key role. Nevertheless, the groundwork that AWA's leadership had done during this period – devising a concrete proposal, framing it in terms of strategic, developmental, and financial benefits, and 'softening up' the Prime Minister – would prove instrumental to the company securing the key role in Australia's international wireless service. So too would the actions of the Prime Minister.

Chapter 6 – Constituting International Wireless, 1921-1922

Between late 1918 and mid 1921 two alternative propositions for Australia's participation in a scheme of international wireless had emerged. One of these was the Norman scheme for a relay system of stations, to be owned and operated by governments, linking the territories of the British Empire. The other was Fisk's proposal to establish a direct wireless connection between Australia and Britain, with his company – backed by Commonwealth investment – controlling the service. It was between these two options that Australian policymakers were compelled to choose in late 1921.

Though the subject of international wireless had been on the agenda since late 1918, insofar as people in and around the Commonwealth government were discussing it and crafting policies, the intervening years had not seen any formal decisions made on the subject. This chapter is concerned with the time between the 1921 Imperial Conference, held between June and August, and the implementation of a revised form of Fisk's proposal for a partnership between AWA and the Commonwealth for the purpose of creating a direct wireless link with Britain in 1922. It is focused on the way in which this formal decision, which constituted a paradigmatic shift in policy, was brought into effect.

The formal decision came from an open policy window. The 1921 Imperial Conference represented a focusing event that drew attention to the underlying problem of a lack of progress in international communications. Through the efforts of AWA's executives and the Prime Minister, acting as policy entrepreneurs, this problem was linked with an available policy proposal – AWA's scheme – to produce a dramatic departure from Australia's established tradition of government enterprise in communications. Nevertheless, the formal enactment of the proposal was not guaranteed, but subject to conditions within the political stream. This chapter demonstrates the importance of the prevailing political conditions to the final outcome. The Commonwealth's rejection of the Norman scheme and embrace of direct wireless was dependent upon developments in Parliament. As the previous chapter

documents, Hughes was the only figure of significance within the Commonwealth government who did not oppose AWA's plans for direct wireless. He therefore represented the company's only hope to steer its preferred policy through the political system. His political support was vital to the outcome, but it was not simply a case of Hughes imposing his will on the area. The formal decision which was enacted in March 1922 was the outcome of a dynamic process, and the influence of political conditions resulted in a number of important revisions being made to the proposal. These revisions promised that the Commonwealth could retain a degree of control over the new enterprise, rather than simply handing the field over to private interests.

Whereas the previous chapter was principally focused on developments in the policy stream, this one is centred on the passage of the Commonwealth/AWA agreement through the opportunity presented by an open policy window. The short-lived opportunity presented by an open policy window increased the importance of an available policy, which AWA had already provided, and the political conditions at that point in time. However, the enactment of AWA's proposal was also aided by the shortcomings of the alternative policy – the Norman scheme – and the strong geopolitical imperatives surrounding international communications. In other words, the adoption of AWA's proposal was not solely due to the strength of its case, nor the hard work of its advocates, but also the specific circumstances under which it was considered.

During this period the most salient features of the political stream were the delicate balance in Parliament and the deteriorating relationship between Hughes and the remainder of the Nationalist Party. The 1919 election had produced one of the most unusual parliaments in Australian political history. The Labor Party, struggling to recover from the 1916 conscription split, won 25 of the 75 seats in the House of Representatives. The Nationalist government saw its position reduced to a bare majority, retaining 38 seats.[1] The remainder of the seats, notwithstanding one independent, were captured by a grouping that would soon unite to form a new force in federal politics: the Country Party. Though it would later join the long-standing Coalition, during the 1919-1922 parliamentary term the Country Party was autonomous, and not simply a wing of a unified non-Labor grouping. Its parliamentarians paid little attention to Labor and instead focused on extracting concessions from the Nationalist government,

---

[1] C.A. Hughes and B.D. Graham, *A Handbook of Australian Government and Politics*, p. 320.

particularly after the ascent of Earle Page to the party leadership in April 1921.[2] Thus, Hughes' government faced two separate opposition blocs while commanding only the narrowest of majorities.

Nor was this majority steadfast. Though Hughes remained the dominant figure in the Parliament, by 1921 his position as leader of the Nationalist Party was perilous. With the war's conclusion the Nationalist Party, cobbled together under wartime exigencies, found itself lacking a raison d'être. Stripped of its unifying goal of prosecuting the war, old divisions between the rival blocs from which it had been comprised began to re-emerge. Hughes found himself "disliked and distrusted by many of the ex-Liberals" and he was likewise suspicious of them.[3] The political environment into which the wireless agreement was introduced was therefore finely-balanced and potentially unstable. The final outcome reflected a degree of compromise that was necessary to secure its passage under these conditions.

The 1921 Imperial Conference

The 1921 Imperial Conference, held in London between June and August, was a decisive episode for the constitution of the international wireless service. It saw Hughes undermine the Norman scheme as a blueprint for a unified Imperial wireless policy, creating room for Australia's adoption of a scheme of direct wireless soon after. The conference functioned as a focusing event for the ongoing problem of inter-Empire communication. The heavy attention dedicated to the subject by the Prime Minister at the conference was instrumental in the subject being placed on the agenda after his return to Australia and the resumption of Parliament: the opening of a policy window. The conference was therefore an important preliminary development to the decision-making process.

---

[2] M. Booker, *The Great Professional*, p. 226.

[3] J. Hirst, "Labor and the Great War" in R. Manne (ed.), *The Australian Century: Political Struggle in the Building of a Nation*, Text Publishing, Melbourne, 1999, p. 79; M. Booker, *The Great Professional*, p. 226. Ideological divisions are a prominent theme in the analysis presented in C.J. Morgan, *The First Minister in Australia: Studies in the office in crisis situations, 1920-1941*, Ph.D. Thesis, Australian National University, 1968, pp. 253-288.

Though the proceedings of the Imperial Conference were of central importance to the future trajectory of wireless development, the subject was one of the conference's subsidiary themes. Nevertheless, it dovetailed with the conference's principal focus on defence and foreign policy, with a particular emphasis on the fate of the Anglo-Japanese alliance. As outlined in Chapter Two, this was of monumental importance to Australia. With the likely withdrawal of the Royal Navy from the Pacific in the post-war years, Australia faced the potential of a confrontation with an expansionist Japan.[4] According to Fitzhardinge, it was Hughes himself that was responsible for the addition of "inter-Imperial communications" to the conference's agenda, thereby assuring that the issue of wireless would receive consideration in the first place.[5] It is of vital significance that discussions of wireless policy took place in this context. It demonstrates that, above any considerations related to commerce or doctrine, Hughes' interest in wireless was geopolitical; as an asset with great implications for the future defence of Australia.

In early July Hughes spoke before the conference on the subject of communications, portraying wireless as an important strategic asset. He began by addressing the subject from the perspective of the entire British Empire, emphasising the importance of improving communications for the Empire's security in the post-war world. Adopting an advanced system of international wireless would enable communication with the combined navies of the Empire, regardless of their location, and avoid the proven vulnerability of submarine cables to the interdiction of rival powers. In addition, wireless would promote further trade and economic development throughout the Empire, and, consequently, "the expansion of every primary and secondary industry in every part of the Empire".[6]

In another theme that would prove to be of crucial importance when the subject was put before the Australian Parliament, Hughes' speech also pressed for a quick resolution of the wireless question. As he later described, "I said that I was not wedded to any particular scheme, but that we could not afford to leave things as they were. I cared not how we

---

[4] P. Spartalis, *The Diplomatic Battles of Billy Hughes*, Hale and Iremonger, Sydney, 1983, pp. 219-229; M. Booker, *The Great Professional*, pp. 269-275.
[5] L.F. Fitzhardinge, *The Little Digger*, p. 462.
[6] "Links of Empire – All-Red Wireless Chain" in *The Argus*, 8th July 1921.

achieved a better system so long as we did achieve one soon".[7] While Britain had made steps towards developing an international wireless network in the pre-war years, the interruptions of the intervening years had seen it fall behind rival powers such as Germany and the United States in the endeavour. Because of this, and the potential for the British Empire to lose its lead in international communications, he declared that "wireless development should be immediately the active policy of every part of the Empire".[8] This emphasis on speed, stemming from geopolitical imperatives, would prove to be a decisive element in Australia's subsequent adoption of AWA's scheme for a direct wireless connection with Britain. The importance of a rapid decision on the matter, combined with dissatisfaction with the Norman scheme, left policymakers facing AWA's scheme as the only policy ready for immediate adoption.

On the following day Hughes used his earlier comments on the importance of trans-oceanic wireless to the Empire to outline his rejection of the Norman scheme as unsuited to Australia. Echoing the terms in which AWA had been framing the issue since the Armistice, he described wireless as essential to Australia's national development and defence. "The entire future prosperity of the Commonwealth depends upon the expansion of her industries and her overseas trade", he claimed, and wireless would be an instrumental element in such expansion.[9] Furthermore, wireless was important for security purposes because in the coming years "the defence of Australia will depend very largely upon the maintenance of communication with the heart of the Empire".[10] This could no longer be guaranteed by submarine cables. Hughes also added another criterion which had first been floated by AWA: the importance of a wireless scheme being financially viable. Because of the Commonwealth's financial strain, he claimed it was necessary that an Australian international wireless service "be instituted and conducted along such lines as to be commercially profitable".[11] He then attacked the Norman scheme's embrace of a relay system as threatening Australia's interests:

---

[7] W.M. Hughes, *The Splendid Adventure: A Review of Empire Relations Within and Without the Commonwealth of Britannic Nations*, Ernest Benn, London, 1929, p. 134.

[8] "Links of Empire – All-Red Wireless Chain" in *The Argus*, 8th July 1921.

[9] 'Australia's Position in Relation to the British Empire's Wireless', unspecified date. NAA: A3932, SC457 PART 3.

[10] 'Australia's Position in Relation to the British Empire's Wireless', unspecified date. NAA: A3932, SC457 PART 3.

[11] 'Australia's Position in Relation to the British Empire's Wireless', unspecified date. NAA: A3932, SC457 PART 3.

> Although Australia must and will be linked by wireless with all parts of the Empire, this object can only be achieved by working out a scheme along our own lines, designed to suit our local conditions and circumstances. One thing is quite certain, Australia dare not, either commercially or strategically, leave its overseas communication dependent upon relay stations in other countries. We cannot entertain any system which will be dependent for its commercial success and for its vital communication in the case of attack, upon political or even meteorological and atmospheric conditions in some other country. Australia's position and her circumstances demand that she shall have at least one high power station capable of communicating with any part of the world, and that there shall be a corresponding station in the United Kingdom capable of communicating with Australia…we cannot afford to be dependent upon relays either for commercial operations or for our defence.[12]

In keeping with the conference's themes of defence and foreign policy, Hughes' speech placed his support for direct wireless and opposition to a relay system in a security context, portraying Australia as vulnerable if a relay scheme was adopted. Soon after, a subcommittee of the conference was established under the chairmanship of Winston Churchill to discuss the subject further. It appears that this body was established in response to a suggestion from Hughes "that a concrete scheme [regarding wireless] be put before the conference".[13] This is further evidence of Hughes being instrumental in the subject appearing on the conference's agenda in the first place.

The subcommittee deliberated over several weeks through July and early August, dominated by a dispute between Hughes and all of its other members. The other participants, led by Churchill, pushed for the adoption of the Norman scheme. To strengthen the case, Henry Norman himself appeared before the subcommittee. He claimed, contra Hughes, that direct wireless was not technically feasible, or at best would only be practicable under certain atmospheric conditions. Given that work had already commenced on stations in Britain and Egypt that would form links in the relay scheme, the British sought to attain Dominion cooperation in seeing the scheme through to completion.[14]

---

[12] 'Australia's Position in Relation to the British Empire's Wireless', unspecified date. NAA: A3932, SC457 PART 3.
[13] "Links of Empire – All-Red Wireless Chain" in *The Argus*, 8th July 1921.
[14] L.F. Fitzhardinge, *The Little Digger*, p. 477.

Hughes remained unimpressed by the Norman scheme. Having been assured by AWA of direct wireless' reliability, and having himself participated in a demonstration of its capabilities in 1918, he refused to accept a relay system. Such a design, he claimed, would not only see a delay in the transmission of messages both to and from Australia and Britain, it would also be less reliable as it would only take one station to be out of action to disrupt the entire scheme; a liability in the case of any future conflict. He also compared the Norman scheme unfavourably to the undertakings of other countries, writing in a cable to Acting Prime Minister Cook that "French station at Lyons can communicate direct Australia…America and Berlin have long-distance stations capable of covering the whole distance without relays…in my opinion British Empire cannot afford to be behind other nations in this vitally important matter".[15] As he summarised in a later account, "the [Norman] scheme bitterly disappointed me. We who expected to fly on the wings of light were offered a limping camel…I made up my mind that Australia would have nothing to do with it."[16]

As the subcommittee continued its deliberations, Hughes remained steadfast on this point. Unlike the leaders of the other Dominions, who were willing to acquiesce to the Norman scheme, he was unpersuaded by "the solemn and didactic assurances" of its advocates, later writing that "I passed through the hail of words and polite invective with unruffled plumage".[17] The Prime Minister's obstinacy was eventually rewarded with Australia being granted a concession. On 2nd August the subcommittee adopted the following resolution:

> It is agreed that His Majesty's Government should take steps for the erection of the remaining stations for which they are responsible, as soon as the stations are designed; that the Governments of Australia, the Union of South Africa, and India, should take similar action so far as necessary, and that the Governments of Canada and New Zealand should also cooperate.[18]

---

[15] Cable to Cook from Hughes, 19th July 1921. NAA: A3932, SC457 PART 3.
[16] W.M. Hughes, *The Splendid Adventure*, p. 136.
[17] W.M. Hughes, *The Splendid Adventure*, p. 137.
[18] 'Resolution on Imperial Wireless Scheme Adopted on 2nd August, 1921', unspecified date. NAA: A3932, SC457 PART 3.

However, a disclaimer noted that "the above scheme was accepted by the Prime Minister of the Commonwealth subject to giving full freedom of action to Australia to decide the method in which Australia will cooperate".[19] As Hughes gloated in a cable to Cook, "here I have managed to get for Australia an absolutely free hand. She can accept the Norman scheme, which means a certain annual loss of £20,000 and a limited service, or any other she pleases. Parliament can decide. The other Dominions have no such choice".[20]

Following this resolution, a report was published in *The Argus* explaining the concessions awarded to the Prime Minister and forecasting the next moves with respect to Australian wireless:

> Mr Hughes intends to bring home with him full information of all the schemes, with every possible variation. While personally he strongly supports direct communication, the responsibility will be thrown on the Federal Parliament of establishing wireless connection with Britain by whatever means it approves. Private enterprise will probably be invited to undertake the approved scheme, with Government backing, financial support being sought at each end. This, it is understood, has already been promised.[21]

Hinted at by the newspaper, although conspicuously left unmentioned by Hughes at the Imperial Conference, was the proposal for a direct wireless scheme that the government had received from AWA. This is likely because he was aware of the antipathy towards Marconi and its associates held by other participants. It would, therefore, have been impolitic to advocate for it at the conference. Instead, he simply sought leeway for Australia to reject the Norman scheme and consider other options.

While these debates were taking place before the subcommittee there appears to have been a flurry of activity behind the scenes. Hughes' account of the Imperial Conference mentions,

---

[19] 'Resolution on Imperial Wireless Scheme Adopted on 2nd August, 1921', unspecified date. NAA: A3932, SC457 PART 3.
[20] Cable to Cook from Hughes, 6th August 1921. NAA: A3932, SC457 PART 3.
[21] "Empire Communications – Wireless and Airships" in *The Argus*, 4th August 1921.

albeit only in passing, the presence of Marconi's Managing Director at discussions.[22] This is an oblique reference to the lobbying efforts that were being conducted in private and parallel to the subcommittee's formal proceedings. The evidence with regard to this is, however, scanty. While Hughes later told Parliament that "the Amalgamated Wireless interests had their representatives present" at the conference, he offered no more details.[23] As Given reveals, Fisk was one of those who was present in London at the time.[24]

Within the Commonwealth government's archives, the only surviving record of the covert lobbying taking place is a letter to Hughes from the vice president of the Canadian Marconi subsidiary, who was also in London at the time. This letter told the Prime Minister that the company had just been granted permission from the Canadian government to construct a long-distance station on the country's west coast "for the purpose of conducting a commercial wireless service between Canada and Japan".[25] The letter asked whether Hughes' government could grant permission "for the erection of a corresponding station in the Eastern states of Australia".[26] Though there is no evidence of a written response to this letter, its contents would have added further weight to Hughes' view of the obsolescence of a relay scheme of wireless. In addition, the combined presence of representatives from the Marconi Company, along with its Australian and Canadian affiliates, suggests a coordinated effort on behalf of the various Marconi concerns to undermine the Norman scheme. Ultimately, however, Hughes seems to have been the only Dominion representative willing to consider these overtures.

Following the conference's conclusion, Hughes returned to Australia. With regard to international wireless, he had won scope for Australia to consider alternatives to the Norman scheme. He had also laid a rhetorical platform for direct wireless through enunciating the weaknesses associated with a relay scheme. With this accomplished, he was able to publically unveil the proposal for partnership with AWA that had been received months earlier.

---

[22] W.M. Hughes, *The Splendid Adventure*, pp. 137-138.
[23] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13981.
[24] J. Given, *Transit of Empires*, p. 140.
[25] Letter to Hughes from the Vice President, Marconi Wireless Telegraph Co. of Canada, 19th July 1921. NAA: A3932, SC457 PART 3.
[26] Letter to Hughes from the Vice President, Marconi Wireless Telegraph Co. of Canada, 19th July 1921. NAA: A3932, SC457 PART 3.

Translating AWA's proposal into policy would be the Prime Minister's next step with regard to wireless following his return to Australia.

The manner in which the subject of international wireless was considered by the 1921 Imperial Conference emphasises the pivotal importance of Hughes to Australia's rejection of the Norman scheme and embrace of AWA's proposal for a direct wireless connection with Britain. Though it appears that representatives of AWA and other Marconi-aligned interests provided criticisms of the Norman scheme that Hughes could deploy in argument, it took a bloody-minded political actor to resist the consensus of all other participants in favour of a relay system of Imperial wireless communication. Hughes had previously deployed his obstinacy on the world stage to attain concessions for Australia, such as through his single-handed defiance of Woodrow Wilson during the Paris Peace Conference, gaining an Australian mandate over New Guinea and Nauru and the rejection of a racial equality clause in the League of Nations charter.[27] This indicates a persistent and particular aspect of Hughes' leadership. Absent this individual trait, it is difficult to envisage how Australia would otherwise have secured the latitude to depart from the consensus that had emerged amongst the British and other Dominion governments. This is in addition to the fact that Hughes was the only actor of any significance within the Commonwealth government who had indicated any willingness to consider proposals for a direct wireless service constructed by private enterprise.

Hughes had gained British acquiescence for Australia to reject the Norman scheme, but other hurdles on the path to adopting a direct wireless service remained. Legislation enabling its adoption required Parliamentary approval, and the domestic political situation meant that its passage was not guaranteed. The Prime Minister still faced a potentially large range of opposition to AWA's proposal.

---

[27] See M. Booker, *The Great Professional*, pp. 259-268.

Parliamentary Manoeuvres, late 1921

The debate surrounding wireless at the Imperial Conference had focused attention on the subject back in Australia, presenting a window of opportunity for the resolution of a long-standing issue. A problem had moved to a position of prominence on the agenda, a ready-made policy to address the problem was available, and the Prime Minister was willing to provide his political support. In the closing months of 1921 Hughes took the opportunity to push the AWA agreement through Parliament. However, while Hughes remained the pre-eminent actor in the political system, his support did not make the passage of AWA's proposal through Parliament a fait accompli. The circumstances under which an amended version of the proposal were approved provide further evidence that its adoption was contingent upon the ability of Hughes' leadership and political skills to outweigh his deteriorating domestic political position and razor-thin House majority. Though the sweeping changes encapsulated in the policy, along with the fraught situation in Parliament, led to resistance, two dimensions of Hughes' framing of the matter – the inadequacy of a relay system for Australia and the need for a quick decision – proved sufficient to gain the vital first stage of Parliamentary approval for the agreement. Although he was not able to completely control the outcome, his framing of the issue as of crucial importance to Australia and demanding a quick resolution was durable enough to see the passage of a slightly modified bill through Parliament.

On 5th October, Hughes spoke before Parliament on the subject of wireless and, for the first time, revealed the proposal for a partnership between AWA and the Commonwealth. The major thrust of his speech was to portray the Norman scheme as unacceptable by drawing unfavourable comparisons between it and AWA's offer. These were focused on its relay design, and its poor financial prospects. In relation to the former, Hughes criticised the relay system as vulnerable, noting that "if one link in the chain were broken" the scheme would effectively become useless.[28] Furthermore, he portrayed the relay chain as particularly disadvantageous to Australia. Situated as the opposite terminus to Britain, its messages to that country would be stuck behind those messages from those stations in between. This meant

---

[28] *Commonwealth Parliamentary Debates*, House of Representatives, 5th October 1921, p. 11673.

that in the case of interruption "that station which is the furthest outpost of the scheme will fare the worst".[29]

Hughes also criticised the Norman proposal in financial terms – highlighting the £185,000 initial investment and "estimated annual loss of £20,000" that it adoption would entail.[30] He drew a connection between this estimate and the "most unsatisfactory" financial state of the Commonwealth's existing network of coastal stations, lamenting that "we have had wireless telegraphy in the Commonwealth for some time, yet the scheme is still carried on at a loss".[31] To emphasise the latter point he cited a document from the Postmaster-General's Department detailing a loss of over £57,000 in the previous financial year. He claimed that the projected cost of the Norman scheme was a major motivation in his opposition to it at the Imperial Conference:

> We are asked now to incur a loss of a further £20,000 under the Norman scheme. It is because of these facts that I was not amongst the most cordial supporters of the Norman Committee's suggestion, and I asked the Prime Minister of Great Britain to give this House an opportunity of putting itself in touch with Britain in the best way it sought fit.[32]

This section of the speech did not just undermine the Norman scheme, but also, through identifying the poor financial performance of the Commonwealth's stations, the entire paradigm of government enterprise in wireless.

By framing these two dimensions of wireless – the need for direct communication with Britain and the need for financial viability – as the most critical, Hughes was building the case for the proposed agreement with AWA through contrast. He portrayed the Norman scheme as a bad deal for Australia because it would be costly and leave the country's communications vulnerable to interruption. AWA's scheme, in comparison, did not only promise a direct link,

---

[29] *Commonwealth Parliamentary Debates*, House of Representatives, 5th October 1921, p. 11673.
[30] *Commonwealth Parliamentary Debates*, House of Representatives, 5th October 1921, p. 11673.
[31] *Commonwealth Parliamentary Debates*, House of Representatives, 5th October 1921, p. 11674.
[32] *Commonwealth Parliamentary Debates*, House of Representatives, 5th October 1921, p. 11674.

but also the prospect of wireless becoming a money-making investment for the Commonwealth:

> [The scheme] would involve the Commonwealth in a capital expenditure of £500,000, but we should have the controlling interest, as under the Anglo-Persian Oil Company's agreement, and we should get an assured return of 10 per cent, namely £50,000 per annum. The private company promoting this scheme would take over the existing service, on which we now lose approximately £60,000 per annum. This proposal has been made by Amalgamated Wireless of Australasia…The House has to choose between these two schemes. I do not expect it to do so now. We shall have to discuss these matters as definite proposals, and honourable members must have time to consider them…Parliament may do what it pleases, but I think it should certainly do something to place Australia in touch with the world by wireless telegraphy. Our present position, I repeat, is most unsatisfactory.[33]

Hughes concluded his oration with a caution that in relation to international communications the British Empire was in danger of falling behind other powers such as the United States, Germany and France – a warning against further delay.

Hughes' had insisted that Parliament should be given time to consider the subject, but his actions conveyed the opposite intention. On 7th October, two days after his announcement of the AWA proposal, he moved a motion "that the Ministerial statement re Imperial Conference made on 30th September and certain resolutions notified on 5th October be printed".[34] This motion, which passed, was introduced as the final item prior to the House's adjournment for the week. Its intention was to bundle all of the Prime Minister's commentary on the Imperial Conference, which had comprised large portions of two sitting days and covered a wide range of subjects, into one document to become a Parliamentary Paper; moving towards a formal deliberation on the subject. The logic behind this was to prevent an itemised consideration of the different subjects contained within the Prime Minister's statements.

---

[33] *Commonwealth Parliamentary Debates*, House of Representatives, 5th October 1921, pp. 11674-11675.
[34] *Commonwealth Parliamentary Debates*, House of Representatives, 7th October 1921, p. 11793.

This manoeuvre, and its implications for the ability of the House to debate different aspects of Hughes' report on the Imperial Conference, was highlighted on the next sitting day by a discontented government backbencher. Noting his surprise at "the sudden cessation of the debate on the Imperial Conference, and the way in which it petered out on Friday last", the Member for Perth objected to the Speaker that the Prime Minister's motion was out of order and pleaded that the Speaker consider "that the matter of the Imperial Conference is still before the House".[35] The Speaker's response was unsympathetic, noting that it was too late to raise such an objection given that the motion to print the Prime Minister's statement had passed, adding that "although the Prime Minister made two separate statements, he desired that they should be covered by the one motion…and that is how the business was set down on the notice paper as printed".[36]

An article appeared in *The Argus* a few days later that provided a justification for Hughes' manoeuvre. While noting that when the motion to print was put before the House "there was not a full attendance of members [and] few realised what they were voting for", the article claimed that "it was evidently not the intention of the Prime Minister…that the motion moved by him in the House of Representatives that his reports on the Imperial Conference be printed should be agreed to without debate".[37] Rather, it continued, Hughes had indicated "with regard to wireless development and communication with Great Britain he would present a definite proposal…[and] intended that the House should give full consideration to these matters, and members generally expected to be able to speak on it", although because of "the position that had arisen" – a notable use of the passive voice – this would not be possible for a number of weeks.[38] The impression conveyed by this article was one of an accidental development; unlikely given Hughes' twenty years' experience in Parliament and the intimate knowledge of procedure resulting from such experience. The Prime Minister's actions appear calculated to progress the agreement through Parliament with a minimum of debate, owing to the widening fissures within the Nationalist Party and typical of his autocratic style.

---

[35] *Commonwealth Parliamentary Debates*, House of Representatives, 12th October 1921, p. 11867.
[36] *Commonwealth Parliamentary Debates*, House of Representatives, 12th October 1921, p. 11867.
[37] "Wireless Communication – Proposals by Mr. Hughes" in *The Argus*, 18th October 1921.
[38] "Wireless Communication – Proposals by Mr. Hughes" in *The Argus*, 18th October 1921.

The matter was next raised in Parliament on 24th November, when the proposed agreement with AWA was tabled by the Prime Minister with a minimum of fanfare.[39] By this stage there had been another revision of the proposal, diluting a number of its terms that were overly-favourable to AWA. While it still allowed for the provision of necessary licences to the company to realise its goals, there was no more reference to the empowerment of the company to itself control the distribution of licences. Also excised was the open-ended prohibition on the Commonwealth 'doing any thing' to inhibit the company's profitability. This was replaced with a milder statement that "the Commonwealth will not impose any condition or restriction of any kind…calculated to obstruct the business of the company".[40] It is unclear who authored these revisions, but they were clearly calculated to make the proposal more palatable – a recognition of the potential for controversy that lay ahead.

In support of the effort to pass the agreement through Parliament, AWA circulated a professionally-printed booklet to Members of Parliament as part of a broader lobbying campaign. George Wise, who was serving as Postmaster-General at the time, later described the "enormous amount of propaganda, both by printed matter and button-holing, that had been carried on by agents of the Wireless Company amongst honourable members", and claimed that AWA's efforts had been instrumental in attaining Parliament's acquiescence to its proposal.[41] A letter attached to the booklet outlined the proposal as one that would promote the further development of the industry, and be a profitable investment for the Commonwealth:

> Since you are interested in the provision of facilities for improving Australia's communication with countries overseas, and for the establishment of the wireless industry in Australia on a basis which will enable this country to enjoy the fullest possible benefits of this new science, and on a sound commercial basis so that it will not involve an additional drain on the Treasury, I am submitting to you the enclosed notes.[42]

---

[39] *Commonwealth Parliamentary Debates*, House of Representatives, 24th November 1921, p. 13202.

[40] 'Wireless' booklet, 28th November 1921. ML: MSS 2954/Add-On 1910, Box 1, Legal Documents, 1921-1982, Agreements, with Related Material; List of Agreements, 1921-1982.

[41] *Commonwealth Parliamentary Debates*, House of Representatives, 19th July 1922, p. 601.

[42] 'Wireless' booklet, 28th November 1921. ML: MSS 2954/Add-On 1910, Box 1, Legal Documents, 1921-1982, Agreements, with Related Material; List of Agreements, 1921-1982.

The booklet reiterated many of the arguments Fisk and other AWA representatives had been making to senior members of the government since 1918, spruiking the commercial, social, and defence gains that would be made from developing Australian wireless. Most significantly, however, the claims were a word-for-word repeat of Hughes' comments from the Imperial Conference.[43] Though it is unclear who the original wordsmith was, this demonstrates the coalescence of a cluster of arguments in favour of developing wireless which had been adopted by the proponents of AWA's scheme; the development of a consistent frame.

AWA's lobbying campaign also included the reception of experimental direct transmissions from the Marconi Company. On 6th December, the day before the matter was again raised in Parliament, newspapers had carried reports of messages sent directly from Britain being received by an AWA experimental station in Australia.[44] The timing and nature of these messages, being the first dispatched by the Australian Press Association's London bureau to its headquarters in Australia, were calculated to draw the attention of the press prior to the impending debate in the House, and as a further demonstration of the feasibility of direct communication.

The company was unable to control the fate of the agreement when put before Parliament. Nevertheless, it was doing all in its power to influence the votes of MPs. It tried to sway them both directly, through personal engagement and the distribution of literature, and indirectly, through enlisting the support of the press to create an atmosphere of inevitability for direct wireless.

On 7th December the Prime Minister made his final case for Parliament to approve the AWA agreement, tying together a wide range of justifications in a long speech in support of a motion approving its execution. By this time another rival scheme had emerged from an unlikely source. A new firm called the Radio Communications Company had presented a scheme of strikingly similar detail to AWA's, calling for a £350,001 investment from the Commonwealth for the purpose of establishing a direct wireless link with Britain. Though the

---

[43] Compare 'Wireless' booklet, 28th November 1921. ML: MSS 2954/Add-On 1910, Box 1 with 'Australia's Position in Relation to the British Empire's Wireless', unspecified date. NAA: A3932, SC457 PART 3.
[44] See "Direct Wireless – England to Australia" in *The Argus*, 6th December 1921.

company offered the same service for a smaller investment, its offer was summarily dismissed by Hughes, who declared that it "must be ignored…for many reasons" – testament to the importance of AWA's years-long campaign of 'softening up' prior to the moment of decision.[45] Having excluded the proposal of the Radio Communications Company, Hughes announced that the Parliament faced a binary choice – either the Norman scheme or AWA's.

Reiterating his earlier criticisms of the Norman scheme, Hughes dismissed it as unsuitable for Australia's future security needs:

> The Norman scheme, then, is useless for the purposes for which we require it…We wish, above all things, to have direct communication with Great Britain. Australia is a country geographically remote, but happily, owing to Britain's command of the sea, the cables were not cut during the war. But little imagination is necessary to understand what the severing of the cables would have meant to Australia, cut off, as it was, from Europe, and without an effective system of wireless.[46]

The other major plank of the Prime Minister's criticism was that the Norman scheme would lose money. As before, he tied this to the unprofitable history of Commonwealth involvement in domestic wireless to date. However, on this occasion he widened his attack to focus on the entire paradigm of government enterprise in wireless, claiming that there were "grave doubts" about the wisdom of the Postmaster-General's Department continuing to control the medium.[47] As an alternative, "if we want an efficient system of wireless, we must look for it in quarters where we shall have at our disposal men with scientific training and business capacity, and above all those in quarters that have control of those patents and apparati without which it is impossible for wireless to be successful".[48]

The Prime Minister's reference to patents was a new element of justification for AWA's scheme. Although its access to the global patent pool had been a constant selling point for the company, the Norman Committee's report had expressed confidence that it would be possible

---

[45] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13981.
[46] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13976.
[47] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13977.
[48] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, pp. 13977-13978.

to proceed without the need to use any of the Marconi Company's technology: the "important patents" involved in the scheme were "already the property of the British Government".[49] However, Hughes' invocation of patents carried an important implication. Because the Marconi Company, in conjunction with AWA, had been the only organisation to demonstrate its capability to provide direct communication between the countries, it would be necessary to cooperate with it to work towards that end.

After critiquing the Norman scheme, Hughes shifted towards praising AWA's proposal for its promise of financial profitability and benefits for national development. Gesturing towards the company's record of profitability, and the scheme's provision for it to absorb the unprofitable coastal stations, he declared that partnership with the company would not merely "prevent the continuation of the present loss, but [also] give the Commonwealth a return of 10 per cent" on its investment.[50] The promise of profitability was connected with economic nationalism, and the fact that AWA was a national enterprise:

> I have here a list of the principal shareholders of the Amalgamated Wireless
> (Australasia) Ltd. I cannot say what is the total number, but they are all Australian
> citizens, and domiciled for the most part in the various State capitals of the
> Commonwealth. *It is an Australian concern with which we are dealing*. It is under the
> control of the Australian law. It is a business concern which is run at a profit, and
> contrasts very favourably with our own wireless scheme, which is not a business
> concern run at a profit, but, on the contrary, shows a loss.[51]

Hughes' speech also warned of the need for a speedy resolution, pointing out that other great powers had overtaken Britain in developing wireless:

> The people of other countries are not fools. France is in great financial straits, yet she
> has spent over £1,000,000 on the Bordeaux station, and is erecting a still more

---

[49] *Imperial Wireless Telegraphy Committee. 1919-1920. Report*., p. 16. NAA: MP341/1, 1922/5649.
[50] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13978.
[51] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13979, emphasis added.

powerful one. In the United States of America there has been erected one of the most, if not the most, powerful stations in the world…Britain alone is doing nothing in this regard.[52]

The implication was clear. Australia, and the British Empire at large, had to take swift action to remain competitive in the field of international communication. Because of the need for speed, Parliament had to choose between the two schemes that were available – additional delays would only mean falling further behind other great powers.

Hughes' motion did not escape criticism on the floor of the House, but, importantly, this took place within the frame that the Prime Minister had placed around the issue. One Country Party MP quibbled with the specific form of AWA's agreement, noting that the agreement's provision for granting the Commonwealth only three positions upon the company's seven member Board of Directors meant that, despite its majority ownership, the Commonwealth would not be assured of "the measure of control that it would secure by means of the same number of shares in an ordinary company".[53] However, this line of criticism suggests that the Country Party was not opposed to the central feature of the proposal – that Australia's international wireless service would be constructed by private enterprise – but instead sought to moderate some of its excesses.

Labor's criticisms, though stronger, also largely acceded to the Prime Minister's frame. Deputy leader Matthew Charlton, speaking in response to Hughes, echoed the importance of constructing an international wireless service and, importantly, the unsuitability of the Norman scheme for Australia.[54] He did, however, express concern regarding the speed at which the Prime Minister was looking to secure the agreement's passage through Parliament. Noting the importance of giving "the fullest consideration to an important proposition of this character", he claimed that the matter "should have been brought before Parliament some time ago, in order that ample opportunity might be afforded…to test and consider in detail the

---

[52] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13980.
[53] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13978.
[54] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, pp. 13982-13983.

various offers".[55] Despite Hughes' insistence that the Parliament had had two months to do so, Charlton – correctly – described the detailed proposal the House was being asked to agree to as an altogether different matter to the statement made by Hughes after returning from the Imperial Conference. Charlton also concurred with the criticism made by the Country Party regarding the clause in the agreement giving the Commonwealth only three of seven seats on AWA's Board of Directors, expressing strong reservations at the thought of effectively granting a monopoly to a private company while being unable to steer its direction. As a result, he moved an amendment to Hughes' motion wherein "the whole question of wireless" was to "be referred to a Committee of this House for investigation and report".[56]

Earle Page, speaking after Charlton, also agreed with major elements of Hughes' characterisation of the issue. Declaring that "the Post Office should not be called upon to handle this matter" because of its poor financial record in relation to the coastal network, he indicated his party's preference for the medium to be left to private enterprise operating "under proper guarantees and safeguards", which he was convinced would secure better results than government control.[57] Whereas "the Norman proposition is not worth considering" because of its cost, he stated that AWA's proposal "deserves favourable consideration from this House", given the company's record of successful management and profitability.[58] Decisively, Page also signalled his intention to move towards a speedy resolution of the subject, as long as some changes were made to the terms of the agreement. In opposition to Charlton's urging for a postponement, and for the issue to be re-examined in its entirety, he declared that the Labor spokesman was suggesting "rather a long delay. Australia is remote from other parts of the world, and it is essential that we should take action…I think the arrangement [with AWA] is one that can be indorsed".[59] Debate on the matter then adjourned for the day.

Though no formal decision was made on the day, the Parliamentary debate surrounding international wireless on 7th December contained several important dimensions. The Prime Minister, commanding the narrowest of Parliamentary majorities and with a restive

[55] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13982.
[56] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13985.
[57] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13985.
[58] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13986.
[59] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13986.

backbench, could not be certain of the agreement's passage through the House. Unified opposition from both the Country and Labor parties would only need to pull away a single renegade vote from the Nationalist members to sink the deal. Because of this, he did all he could to promote its passage. By allowing Parliament a minimum of time to consider the details of the proposal, and emphasising the importance of speed in light of the international situation, he sought to secure a quick approval. In this effort, he framed the issue as bound to fundamental concerns of national security. Because of this security imperative, it was necessary for Australia to determine its policy as quickly as possible. By implication, it was necessary to choose between those two schemes that were ready for quick implementation – the Norman scheme and the partnership with AWA. He then emphasised the inadequacy of the relay model, upon which the Norman scheme was based, for Australian security – a point upon which all parties came to agree. Hughes' other main point of contrast between the two alternatives – that of cost – was calculated to appeal to the two non-Labor parties in the chamber. Ultimately, though Hughes could not predict the fate of his motion once introduced to the House, his framing of the issue would prove to be of decisive importance. Page's accession in relation to the importance of speed, and all parties' rejection of the Norman scheme, increased the likelihood that AWA's scheme would be adopted.

A printer's error on the Order of the Day prevented debate from resuming on the following day, meaning that the matter was pushed back to 9th December – the final sitting day for the year.[60] Debate resumed with a lengthy speech in favour of partnership with AWA from Charles Marr, the Nationalist Member for Parkes. Marr was a natural fit to speak on matters relating to wireless, having overseen the erection of the Commonwealth's first wireless station at Sydney in 1912 and served as an officer for the Army's Wireless Signal Squadron in the Middle East prior to being endorsed as a candidate for the 1919 election.[61] Marr's speech was focused on delegitimising the paradigm of government enterprise in the field of wireless. It presented a narrative of maladministration on behalf of both the Postmaster-General's and Navy departments, bemoaning the "public money…poured into the gutters" under their control and claiming that "both the Department of the Navy and the Postal Department have mishandled wireless ever since its inception in Australia".[62] He urged Australia to adopt "an up-to-date

---

[60] See *Commonwealth Parliamentary Debates*, House of Representatives, 8th December 1921, p. 14099.
[61] See C.J. Lloyd, "Marr, Sir Charles William Clanan (1880-1960)" in *Australian Dictionary of Biography*, Vol. 10, Melbourne University Press, 1986.
[62] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, pp. 14220-14221.

wireless service" because "it is essential for us to advance in wireless work…and keep abreast of other nations".[63] To move towards this end, "after weighing all the facts and the statements made most carefully", he concluded that the proposal "of the Amalgamated Wireless (Australasia) Limited is the best".[64]

Labor's John West spoke in response to Marr, defending the paradigm of government monopoly and attacking the Marconi Company. He registered his strong opposition to any involvement of private interests in Australian wireless and objected to Hughes' attempt to rush the AWA proposal through the House with a minimum of scrutiny:

> I object to the Prime Minister being given a free hand. There should be the closest scrutiny by a Committee of the Federal Parliament. There is no Commonwealth Treasurer to-day, and we know that the Prime Minister is absolutely reckless in his handling of public funds. The people interested in the wireless scheme have got on the right side of the right honourable gentleman. He has lost his cautious balance, largely due, no doubt, to insidious propaganda carried on by friends of the Marconi system…while the Prime Minister was in England. It would be fatal to the best interests of the Commonwealth if the right honourable gentleman were permitted to go ahead without check.[65]

The Country Party Member for Robertson similarly criticised the Prime Minister's conduct, noting that the timing of his motion to approve of the deal with AWA meant "we can say practically nothing about the matter, as the House has its mind set on getting into recess as quickly as possible".[66] Nevertheless, he conceded the validity of the Prime Minister's characterisation of the subject:

> He told us that wireless communication was necessary. I agree with him, and concur also in his view that Australia cannot afford to be left out of the stream of events. The

---

[63] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14222.
[64] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14222.
[65] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14224.
[66] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14226.

right honourable gentleman told us further that a relay service would be unsatisfactory. With that the House, I believe, will also agree; but the fact that such a service would be unsatisfactory does not necessarily mean that we should approve of the agreement. On the scientific side, of which I know nothing, it may be satisfactory; but on the business side it is certainly open to criticism.[67]

The major obstacle remained the composition of the company's Board of Directors, which was seen as an obstacle to the Commonwealth exercising the degree of control that its acquisition of a majority stake in the company would suggest. Because of this detail, the Member for Robertson pledged his continued opposition "unless the Prime Minister gives the House a definite promise that he will have the whole matter inquired into by a Select Committee".[68] Nevertheless, the terms in which the Country Party members were criticising the proposal left open the possibility of a compromise solution. Unlike Labor, whose members had coalesced into blanket opposition and sought a wide-ranging re-examination of the issue, the Country Party parliamentarians were opposed on a comparatively narrow detail.

When Charlton's amendment from two days prior – to refer the whole question of wireless to a Parliamentary Committee – was put to a vote it was defeated, with enough members of the Country Party siding with the government to reject it. Immediately afterwards, the Prime Minister moved another amendment to his original motion, calling for the House to assent to the partnership with AWA "subject to investigation and approval, with such alterations as they may deem necessary, by a Committee" made up of two members of each of the three parties as well as three senators.[69] Speaking in support of his amendment, Hughes admitted that "the form is unusual, but the circumstances are unusual" and restated the importance of a quick decision, claiming that "if the Commonwealth do not take action now it will probably be eight months before this Parliament will be in a position to even consider the question" given that upon resumption the following year "it will have to concern itself with financial and other matters of the first importance".[70] To mollify criticism, he assured that he would not be a member of the Parliamentary Committee and that in its composition "the Government will be

---

[67] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14226.
[68] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14226.
[69] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14228.
[70] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14228.

in a hopeless minority", promising that "the matter to be considered must stand on its merits".[71]

Speaking in response, Charlton repeated his displeasure at the timing of Hughes' measure, coming at the very end of the year, and further suggested that the Prime Minister, through shifting responsibility for approval of the partnership on to the Parliamentary Committee, was trying to shield his government from responsibility. Crucially, however, Earle Page signalled his intent to support Hughes' amendment: "although I am opposed, on general principles, to the procedure which has been adopted, I will support it on this occasion, because each party in the House will have equal representation…and because it will also have on it members of the Senate who will not necessarily, the Prime Minister assures me, be Government supporters".[72] Page also affirmed the importance of a swift resolution: "in view of the urgent importance of the matter, I feel that it should be dealt with at the earliest possible moment, and for that reason I intend to support the amendment".[73] Though Page's Country Party colleagues did not uniformly side with him in the division, enough did to ensure that the amendment, and subsequently the motion, passed the House by 34 votes to 28. On the following day the Parliamentary Committee's members were appointed. Despite Hughes' assurances to Page, the three representatives of the Senate were all Nationalists, giving that party a majority of five of the committee's nine members.[74]

Hughes had been compelled to make concessions, but this episode was a crucial step towards the adoption of AWA's proposal for a direct wireless link. The Prime Minister had framed the issue in two ways that were critical to the outcome. One was through his insistence of the importance of a speedy decision on the question of wireless, a point consistently made by AWA in its overtures – both public and private – at the time. Unlike the Labor leadership, Page concurred with the importance of speediness, and his support brought enough Country Party votes with it to enable the Prime Minister's amended motion to pass. Hughes had also framed the matter as a choice between the Norman scheme – rejected even by Labor – and direct wireless, while presenting AWA's proposal as the only realistic prospect of achieving the latter.

---

[71] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14228.
[72] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14229.
[73] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14229.
[74] "Wireless Schemes – Committee Appointed" in *The Argus*, 12th December 1921.

Thus the opposition, having rejected what Hughes portrayed as the only alternative, the Norman scheme, could be portrayed as procrastinating on the matter of wireless – a matter requiring urgent action. The Prime Minister's advocacy created a rhetorical consensus on these two important points: that direct wireless, rather than a relay scheme, was the best option for Australia, and that speed was vital in its creation, lest Australia be left behind the rest of the world. Even those who opposed Hughes' proposal, and the specifics of the deal with AWA, were in agreement with these points. Accepting these points, however, virtually necessitated an arrangement of some kind with AWA because of the ready availability of its proposal.

Though the proposal still required the assent of the Parliamentary Committee, Hughes had managed to get the partnership with AWA over the greatest political hurdle in its path: his government's bare majority in the House of Representatives. The wording of his amended motion meant that once the proposal had received approval from the committee it would be enacted, and therefore it would not be subject to any further scrutiny in Parliament. The circumstances under which his motion was passed – on the final sitting day of the year and with a minimum of discussion for a consequential policy measure – demonstrate an implicit acknowledgement on behalf of Hughes that the proposal was unlikely to prove popular enough to stand on its own merits. Its passage, though conditional upon further approval, was therefore dependant on Hughes' skill at manipulating Parliamentary procedure. Subjecting the agreement with AWA to the analysis of a committee was a minor compromise to achieve its passage through the House of Representatives.

This episode demonstrates the inability of any single actor, or group of actors, to completely control the policymaking process. With the opening of a policy window, and the introduction of the AWA proposal into the formal decision-making body of the Parliament, the proposal's fate rested on the vagaries of conditions in the political stream. The government's bare majority in the House, combined with a fickle backbench, meant that it was not possible to ram the measure through Parliament without alteration. Instead, it was necessary to find common ground with the Country Party in order to secure sufficient support. The cost of this was to refer the matter to a Parliamentary Committee for referral. To an even greater degree than Hughes, AWA's executives were unable to direct the fate of their proposal once it had been introduced to the political system. The best they could do was to lobby MPs as a means to cultivate support, and to arrange a demonstration of direct wireless in conjunction with the

Marconi Company as a means of applying indirect pressure. These measures aside, the company was dependent upon their strongest supporter – the Prime Minister – when it came to the fate of their proposal in the political system.

Once introduced into the political system, the policy proposal became the subject of that system and dependent upon the prevailing conditions within it, principally the balance of power in Parliament. This affirms several aspects of MSA. One is the relative autonomy of the three streams that flow through the system, only to be coupled at key moments with the opening of a policy window. In this case, the political circumstances which would come to bear on the fate of Australia's international wireless service were the product of the 1919 federal election – through which the composition of the Parliament was determined – and other dimensions of the country's political life at the time, such as the relationships between and within the three parties in the Parliament. Related to this is the importance that MSA attributes to timing. Because a policy window opens infrequently, and seldom stays open for long, the conditions in the three streams at that specific point in time are of great importance. In this case, the conditions in the political stream in late 1921 would prove decisive to the eventual outcome. The Country Party, upon which Hughes was dependent because of his narrow majority and backbench dissent on the scheme, was willing to countenance the idea of partnering with private enterprise for the provision of an international wireless service. However, this support was conditional on a closer inspection of the agreement's details. This would lead to further moderation of some of its terms perceived as excessively favourable to AWA.

Given the lasting consequences of these events, and the controversy that would come to be associated with it the following year, it is remarkable that the only overt resistance to it during this critical period was on the floor of Parliament and largely confined to the Labor Party. Officials of the Postmaster-General's and Navy departments had long opposed any deals with AWA, but their records present no evidence of misgivings – or any commentary at all – regarding these political developments. Similarly, despite the fact that Hughes was at odds with his Cabinet colleagues on the subject, none had the temerity to challenge his actions. They had not been presented with a structured opportunity to do so, as the subject of international wireless had not been brought before the Cabinet since before Hughes' departure for the Imperial Conference. Nevertheless, there appears to have been a simmering

discontent in relation to the subject. A wide-ranging Cabinet reshuffle on 21st December saw George Wise removed from the Postmaster-General's portfolio. By all accounts, Wise, who had been a consistent advocate for government control of wireless, was displaced due to disagreement with Hughes regarding the impending partnership with AWA.[75] As Wise later remarked in a speech on the House floor in the following year, "it [was] well known to every honourable member who spoke to me on the subject that I was strongly opposed to the Commonwealth having any relations with the Amalgamated Wireless Company".[76] Even though the decision to partner with AWA was contrary to his preferences and unambiguously related to his portfolio responsibilities, Wise had been unwilling to openly resist the Prime Minister on the matter. This reveals that although Hughes' position within the Nationalist Party had been reduced in the post-war years, he still possessed enough personal authority over his Cabinet to forestall any overt challenge.

Approval and Implementation

The committee established by Parliament in December 1921 to investigate international wireless held sixteen sittings between January and March 1922 under the chairmanship of the new Treasurer, Stanley Bruce.[77] The British government, having only discovered Parliament's decision to refer the question to a committee through press coverage, had urged the Commonwealth not to proceed with this unilateral course of action, hoping instead to collaborate and find a mutually-acceptable policy.[78] This plea was ignored by Australian decision-makers. The committee met in relative secrecy and, with the exception of the final report issued in March, few records of its proceedings are available. A letter accompanying the report notes that over the course of its proceedings the committee's members "examined

---

[75] See C.A. Hughes and B.D. Graham, *A Handbook of Australian Government and Politics*, p. 13; G. Sawer, *Australian Federal Politics and Law*, p. 189. Both of these claim it was Wise's decision to resign. L.F. Fitzhardinge, *The Little Digger*, p. 502 is less clear on this point.

[76] *Commonwealth Parliamentary Debates*, House of Representatives, 19th July 1922, p. 602.

[77] Letter to Hughes from Members of Parliamentary Committee on Wireless, 17th March 1922. NAA: A3932, SC457 PART 6, Wireless Agreement and Report – Preliminary Negotiations after signing of Agreement, 1922.

[78] See cable to the Governor-General from the Secretary of State for the Colonies, 19th December 1921. NAA: MP341/1, 1924/7815, Wireless Imperial Scheme – Part 1, 1923-1924.

many witnesses and documents, and in addition inspected Radio Stations operated by the
Commonwealth and the Amalgamated Wireless Company".[79]

The documents examined by the committee included the brief report of the Cabinet sub-
committee presented prior to Hughes' travel to the Imperial Conference in 1921,[80] as well as
the earlier proposal for a scheme of international wireless prepared by Balsillie under
instruction by Watt during the latter's tenure as Acting Prime Minister.[81] Both of these
recommended maintaining a government monopoly in wireless. The committee's members
were also informed of a new, January 1922, report from Frederick Golding, the Postmaster-
General's Department's Chief Electrical Engineer, who was in Europe investigating the latest
advances in wireless. Golding's observations led him to an important conclusion: recent
innovations made the prospect of direct communication between Britain and Australia via
high-power transmission stations feasible, but the patent rights to the innovations in question
were exclusively held by the Marconi Company.[82] By implication, the adoption of direct
communication would necessitate some arrangement whereby the British firm's patents could
be accessed; another factor in favour of partnership with AWA.

The bulk of the committee's deliberations were dedicated to technical questions, principally
focused on the practicability of maintaining a continuous direct link with Britain. To speak on
such matters, "witnesses were called, who would be able, by their experience or technical
position, to assist in deciding this vital point".[83] The witnesses who appeared before the
committee included nearly every major figure that had influenced Australian wireless policy up
until that point: the Prime Minister, Fisk, Cresswell, Balsillie and several other officials of the

---

[79] Letter to Hughes from Members of Parliamentary Committee on Wireless, 17th March 1922. NAA:
A3932, SC457 PART 6.

[80] See 'Report of Sub-Committee of Cabinet on Wireless Communication', 7th April 1921. NAA: A3932,
SC457 PART 6.

[81] See handwritten note from Bruce, 27th January 1922. NAA: A3932, SC457 PART 1.

[82] Memorandum to the Secretary of the Prime Minister's Department from the Secretary of the
Postmaster-General's Department, 11th January 1922. NAA: A3932, SC457 PART 8, Wireless spares,
1919-1922. See also "New Wireless Device – Relays May Be Abolished" in *The Argus*, 13th January 1922.

[83] Commonwealth Parliamentary Papers, "Wireless Communication – Report of Parliamentary
Committee Appointed to Inquire into Proposed Agreement with Amalgamated Wireless (Australasia)
Limited; Together with Draft Agreement Recommended by Committee; Minority Report by Mr F.
Brennan, M.P.; Notes of Proceedings of Committee; and Scheme Suggested by Senator J.D. Millen",
1922, p. 16.

Postmaster-General's Department.[84] The most salient theme of these discussions was a division between Fisk and a number of committee members, with the former expressing unrestrained optimism about the prospect of securing a reliable direct wireless link with Britain, and scepticism on this point coming from his questioners and representatives of the Postmaster-General's Department. Another notable point in the committee's report was a short description of Hughes' testimony that revealed "he was not in favour of the Post Office in England or Australia controlling wireless".[85] The Prime Minister's statement also revealed that, much as Thomas Hughes had suggested earlier, he was willing to lobby the British government to grant a licence for a reciprocal station to be erected in that country, if that government proved hesitant to do so.

The committee considered the proposals to provide a direct wireless link to Britain from both AWA and the Radio Communication Company, and concluded that "after exhaustive inquiry we are unable to recommend the adoption of either of these agreements in the form presented".[86] It deemed, however, that of the two proposals AWA's represented the more "suitable basis for a final modified Agreement".[87] This decision was justified in terms of patent control. While the Radio Communication Company's access to patents was uncertain, pending litigation in Britain, AWA's membership of the global patent pool gave it uninhibited access to all of the world's major systems including Marconi, Telefunken and the newly-created Radio Corporation of America.[88] This decision to adopt AWA's proposal, rather than that of the Radio Communication Company, as the basis for a modified agreement also reflected the considerably greater political heft of the Australian company, and the extended campaign of 'softening up' it had conducted since the Armistice. Though the committee was pledged to examine both proposals, only AWA's was granted serious consideration.

---

[84] Commonwealth Parliamentary Papers, "Wireless Communication", p. 16.
[85] Commonwealth Parliamentary Papers, "Wireless Communication", p. 20.
[86] Commonwealth Parliamentary Papers, "Wireless Communication", p. 1.
[87] Commonwealth Parliamentary Papers, "Wireless Communication", p. 20.
[88] See 'Notes on Assets at June 30th, 1921: Patent Rights' in the collection of documents submitted by AWA to the Parliamentary Committee. ML: MSS 2954/Add-On 1910, Box 57, Australia. Parliament. Committee Appointed to Inquire into Proposed Agreement with AWA re Wireless Communication, 1922- Correspondence, Documents, Report, Printed Material.

The modifications to AWA's proposal were made by a sub-committee consisting of two Nationalist Senators.[89] The amended proposal was then returned to the committee proper for approval. The committee recommended the execution of the revised agreement although, notably, this endorsement was made by eight of the nine committee members, with Labor representative Frank Brennan's name absent from the recommendation.

There were a number of differences between the original proposal put before the committee and that which was subsequently recommended for execution. One of the most significant concerned the issue that had come under criticism in Parliament the previous December: the composition of the Board of Directors to oversee the operations of the joint venture. Whereas the original proposal allocated the Commonwealth three of the Board's seven seats, with the remaining four elected by the company's private shareholders, the revised version gave each of these blocs three positions, with the seventh to be "selected by a majority vote of the other six directors, and if the voting is equal shall be selected by arbitration".[90] In addition, a new clause was inserted into the agreement obliging AWA to take over the Commonwealth's coastal network of stations – along with the staff operating the network – "and to operate and re-organize the service provided by these stations in such a way as to provide a service at least equivalent to that now being supplied by the Commonwealth Radio Service".[91] The company's acquisition of the coastal stations would defray the capital invested into the venture by the Commonwealth, although the Commonwealth would continue to bear the costs associated with running the coastal stations for another three years. The revised agreement also limited the licences that would be guaranteed to the company, going from those required "for the full development of the industry" to those "necessary for the full realization of the programme" of direct wireless to Britain and establishing a network of feeder stations.[92] This represented a considerable narrowing of the licences that would be allocated under the agreement. Another clause, forbidding the Commonwealth to "impose any condition or restriction of any kind upon the operations of the Company calculated to obstruct the business of the Company", was also revised so as to only cover the services the company pledged to undertake in the agreement.[93]

---

[89] Commonwealth Parliamentary Papers, "Wireless Communication", p. 20.
[90] Commonwealth Parliamentary Papers, "Wireless Communication", p. 9.
[91] Commonwealth Parliamentary Papers, "Wireless Communication", p. 10.
[92] Commonwealth Parliamentary Papers, "Wireless Communication", p. 11. Quote from the earlier version is from 'Wireless' booklet, 28th November 1921. ML: MSS 2954/Add-On 1910, Box 1, Legal Documents, 1921-1982, Agreements, with Related Material; List of Agreements, 1921-1982.
[93] Commonwealth Parliamentary Papers, "Wireless Communication", p. 12.

Taken together, these amendments represented a reduction in the open-ended guarantees that the unaltered proposal would have extended to AWA. Rather than providing AWA with carte blanche, and government backing, to develop the sector as it saw fit, the revised agreement narrowed its focus upon the provision of a direct service to Britain. The original version was unanimously determined inappropriate by the committee's members for being too favourable to AWA at the expense of the Commonwealth. Following the committee's endorsement, the modified proposal was agreed to by AWA, and was dispatched to the Prime Minister for execution. It was signed by Fisk and Hughes on 28th March 1922.

With the agreement ratified, three major steps to implement it followed. The first of these was the transfer of the Commonwealth's wireless assets to AWA, which took effect in early May.[94] This consisted of eighteen stations around the Australian coastline and two in New Guinea, valued at £183,000.[95] The company also took control over an additional seven stations of the Island Radio Service, hitherto administered as a separate organisation, consisting of stations in the former German South Pacific colonies now under an Australian League of Nations mandate.[96] From this point, the only remaining wireless stations under control of the Commonwealth were the few retained by the RAN for its own purposes. A letter authored by the Secretary of the Postmaster-General's Department in 1924 reflected upon the cost of the coastal network, noting that "since 1912 and 1913, when the coastal radio services were commenced, the Government has borne a loss of approximately £388,000".[97] Incidentally, the same letter also mentioned that the financial health of these stations had not improved after two years of AWA control, during which time they had incurred around £63,000 in losses – losses still borne by the Commonwealth under the terms of the agreement. AWA continued to operate the coastal network of wireless stations for the next 25 years.[98]

---

[94] Memorandum to the Secretary of the Postmaster-General's Department from the Secretary of the Prime Minister's Department, 16th May 1922. NAA: A3932, SC457 PART 6.
[95] 'Assets transferred to Amalgamated Wireless Company on 8:5:22', unspecified date. NAA: MP341/1, 1924/7815. This sum was subtracted from the Commonwealth's capital contribution to the company.
[96] L. Durrant, *The Seawatchers*, pp. 33-34.
[97] Letter to the Secretary of the Prime Minister's Department from the Secretary of the Postmaster-General's Department, 14th July 1924. NAA: MP341/1, 1924/7815.
[98] L. Durrant, *The Seawatchers*, p. 33.

The next step was transferring the responsibility for the administration of wireless from the Postmaster-General's to the Prime Minister's Department, put into effect from 1st June.[99] This included the transfer of the necessary staff from the Postmaster-General's Department, whose functions were to include "advising the Prime Minister and Secretary on all wireless matters", administering the *Wireless Telegraphy Act*, and overseeing the implementation of the agreement with AWA.[100] This move was symbolic of the centrality of Hughes to the development of Australian wireless in this period, and the instrumental role he played in securing the agreement.

The final step towards executing the agreement was appointing the company's new Board of Directors. The three Commonwealth directors, eminent figures tied to the Nationalist Party, were nominated for their positions by the Prime Minister in May.[101] Each was then assigned a single share in the new enterprise so as to provide them with speaking and voting rights at company meetings.[102] The company, for its part, nominated Fisk along with two other of its employees as its directors.[103] These six positions were confirmed without incident. However, in the weeks to come the appointment of the crucial seventh director position would result in great controversy, and threaten to kill the newly-formalised agreement in its infancy.

The Seventh Director and a Failed Counterattack

The composition of the Board of Directors to oversee the joint enterprise had been a major point of contention when the issue had been before Parliament in late 1921, with the original plan for AWA to control a majority of its seats attracting criticism from the Labor and Country

---

[99] 'Transfer to Prime Minister's Department of Control of Wireless in the Commonwealth', Executive Council Minute Paper, 24th May 1922. NAA: A3932, SC457 PART 6.

[100] Letter to the Secretary of the Postmaster-General's Department from the Secretary of the Prime Minister's Department, 6th June 1922. NAA: MP341/1, 1926/5545, Wireless Control – Transfer from PM's Dept, 1923-1926.

[101] See the telegram correspondence between Hughes and the Secretary of the Prime Minister's Department, May 1922. NAA: A3932, SC457 PART 6.

[102] 'To All to Whom These Presents Shall Come the Commonwealth of Australia Sends Greeting', unspecified date. NAA: MP341/1, 1923/10637, Appointment – of Government Directors Amalgamated Wireless, 1922-1923.

[103] See 'Annual Report of the Directors of Amalgamated Wireless (Australasia) Ltd to the Shareholders for the year ended 30th June, 1922'. ML: MSS 2954/Add-On 1910, Box 1, Annual Reports, 1922-1982, 1922-1926; 1965; 1968; 1974; 1982.

parties. The Parliamentary Committee had revised this aspect of the agreement, to ensure a greater balance on the board, as part of a number of alterations to make the agreement less overtly favourable to AWA. An attempt by the company to secure itself a majority of seats on the board, in defiance of these alterations, led to a political firestorm that threatened to destroy the new paradigm in its first weeks. In the end, it was Hughes' personal intervention in the matter that saved the agreement.

With an election due by the end of 1922, the Labor opposition had identified the agreement with AWA as a potential vulnerability of the Hughes government. When Parliament resumed in June, after a lengthy recess dating from the previous December, Labor began attacking the government over its wireless policy. To coincide with the resumption of Parliament, and despite the fact that the decision had been enacted three months prior, Frank Brennan, the only member of the Parliamentary Committee who had not endorsed its final decision, published a letter to Hughes attacking the agreement with AWA. This letter provided a basis for the opposition to attack the government, and a defence of Labor policy on wireless dating back to the Fisher government.

There were several elements to Brennan's statement. One was an endorsement of the principle of direct wireless and a rejection of a relay system, demonstrating how effective Hughes' consensus-building had been on this question. Nonetheless, Brennan was scathing on the original proposed agreement with AWA, which he described as "crude and compromising" to the Commonwealth's interests.[104] While conceding that the amended version approved by the committee was "immeasurably better than that originally submitted", he still attacked it for its reliance upon private enterprise. As an alternative he put forward to desirability of a direct wireless link undertaken by "a Commonwealth enterprise unhampered by any legal nexus with any Company".[105] He framed his position in terms of Australia's national interest, declaring that "this Agreement compromises and hampers the nation by association with interests whose main objective is pecuniary gain rather than national service".[106]

---

[104] Commonwealth Parliamentary Papers, "Wireless Communication", p. 13.
[105] Commonwealth Parliamentary Papers, "Wireless Communication", pp. 13-14.
[106] Commonwealth Parliamentary Papers, "Wireless Communication", p. 14.

On 29th June Labor requested that a copy of the Parliamentary Committee's report be tabled in Parliament.[107] The following week, Opposition Leader Matthew Charlton launched a spirited attack upon the government's agreement with AWA. Charlton's speech sought to accredit his party for the changes that had been made to the agreement by the Parliamentary Committee. In it, he cited Brennan's letter as proof that even the amended agreement was unsatisfactory for the interests of the Commonwealth:

> He [Brennan] says that the project is experimental, and that there is grave doubt as to whether it can be carried out satisfactorily…He questions whether Parliament should accept the proposal, but says that if the scheme is to be carried into effect the Commonwealth should control it. There is a good deal to be said for that point of view.[108]

This was part of a broader attack upon many areas of government policy undertaken by the Opposition Leader in a wide-ranging speech – an attempt to establish himself as the leader of an alternative government in an election year. Even before AWA's attempt to secure itself a majority of seats on the Board of Directors became public knowledge, wireless was on the political agenda. In some form or another, matters concerning wireless were raised in Parliament on every subsequent sitting day leading up to the middle of July.

On 13th July the ongoing debate on the subject became a furore as AWA's machinations came to light. In early June Thomas Hughes had resigned from the company's executive and soon thereafter was nominated by the AWA-appointed directors to fill the position of seventh director. The Commonwealth-appointed directors, for their part, nominated Frank Leverrier, a prominent barrister and the serving Vice-Chancellor of Sydney University, who held an interest in wireless.[109] The three Commonwealth directors all opposed Thomas Hughes' nomination on the grounds "that the Government which they represent does not desire a member of the old Board to be elected as seventh Director".[110] Each nominee received three votes from the blocs

---

[107] See *Commonwealth Parliamentary Debates*, House of Representatives, 29th June 1922, p. 41.
[108] *Commonwealth Parliamentary Debates*, House of Representatives, 5th July 1922, pp. 174-175.
[109] See M. Rutledge, "Leverrier, Francis Hewitt (Frank) (1863-1940)" in *Australian Dictionary of Biography*, Vol. 10, Melbourne University Press, 1986.
[110] 'Seventh Director' folder. ML: MSS 2954/Add-On 1910, Box 1, Seventh Director, 1922-1924, Correspondence, Documents, Memos, etc, 1922-1924.

which had nominated them and, according to the terms of the agreement, an arbitrator was appointed to decide the matter.

In early July the arbitrator – the President of the Law Institute of New South Wales – decided that Thomas Hughes was the best candidate for the position of seventh director. Following this decision, Thomas Hughes assumed his position and, to add to the affront, was then elected to the position of Chairman of the Board of Directors. The Commonwealth directors protested "that the appointment by the Arbitrator of the seventh Director was not a proper one in the circumstances, having regard to what…were the intentions of the Commonwealth Government" in amending the agreement to deny AWA majority control over the board.[111]

On 13th July, Thomas Hughes' appointment as seventh director was first raised in Parliament. This revelation both increased the intensity of the ongoing debate around wireless, and prompted, for the first time, non-Labor MPs to add their voices to the chorus of criticism. Whereas the debate in this session of Parliament had hitherto been between the government and the Labor opposition, with no intervention from the Country Party, AWA's breach of faith in appointing Thomas Hughes to the Board of Directors saw extra impetus added to Labor's attack on the government's handling of wireless by dissident Nationalists who began openly speaking against the agreement.

The first sign of division within the Nationalist Party on the subject was a question from one government Senator who was a member of the Parliamentary Committee, John Millen, to fellow Nationalist Edward Millen, who represented the Prime Minister in the chamber. This question asked who had been appointed as directors, whether four of those had served on the previous board, and "whether such an arrangement is absolutely opposed to the intention of the Wireless Parliamentary Committee, whether such a state of control was viewed with great misgiving, and any agreement only consented to on the understanding that the seventh director should be independent of either interest?".[112] In response, Edward Millen evaded any reference to the propriety of the company's actions, merely noting that "the appointment of

---

[111] 'Seventh Director' folder. ML: MSS 2954/Add-On 1910, Box 1, Seventh Director, 1922-1924, Correspondence, Documents, Memos, etc, 1922-1924.
[112] *Commonwealth Parliamentary Debates*, Senate, 13th July 1922, p. 369.

the seventh director was in strict accord with the agreement approved by the Wireless Committee".[113]

On the following day the subject of Thomas Hughes' appointment was raised in the House by Brennan. Citing the previous day's exchange in the Senate, which had revealed a "very startling and ominous piece of information", he inveighed against AWA's actions in securing its former chairman as the seventh director, further described by another Labor MP as "the hottest thing I have ever heard".[114] Brennan claimed that AWA had intended to do so from the outset, casting doubt over the propriety of the agreement with the company:

> It explains to me, absolutely, why Amalgamated Wireless jumped at every alteration which we made in the agreement. It reveals to me most clearly why, step by step, we drove them back, and why everything they said at first that they could not accept, they did accept. It was, of course, for the simple reason that Amalgamated Wireless realised that they would have the last say. The whole business is not only open to criticism, but to suspicion.[115]

Notwithstanding the questionable veracity of these claims – the decision with relation to the seventh director had been made by an independent arbitrator – the effect was to portray the government as in thrall to the company. The seventh director controversy was the catalyst for others who had previously kept quiet to voice their misgivings about the wireless agreement, including Nationalists such as Watt, Wise – the former Postmaster-General dropped from Cabinet the previous December and now serving on the backbench – and George Maxwell, another Nationalist who had been a member of the wireless committee. The latter claimed that Thomas Hughes' appointment "constitutes a violation of the terms of the agreement".[116] Debate in the House on this day was dominated by criticism of AWA and the agreement, spearheaded by Brennan, who also took the opportunity to attack the feasibility of the company's plans for a direct wireless connection to Britain.

---

[113] *Commonwealth Parliamentary Debates*, Senate, 13th July 1922, p. 369.
[114] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 499.
[115] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 499.
[116] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 500.

In this context Brennan made an aggressive move against the agreement, moving a motion to require Parliamentary approval prior to the erection of any station for the scheme. With Hughes absent from the chamber on the day, the duty of shielding the government fell upon Bruce. Bruce's defence took the form of attacking Brennan for opportunism, claiming that the latter had been active in the committee's proceedings and instrumental in making changes to the agreement prior to its execution, meaning that "it did not occur to any one of the other eight members of the Committee that it was not to be a unanimous report".[117] Furthermore, the Treasurer claimed, Brennan had not voiced any of his scepticism regarding the feasibility of direct wireless during the committee's hearings, which would have been the appropriate time to do so. Importantly, however, Bruce was himself critical of the company's move to appoint Thomas Hughes as seventh director. While he conceded that the decision made by the arbitrator was technically in line with the agreement, "as a member of the Parliamentary Wireless Committee, I will say that it was not our intention…that a person who had been previously associated with the company should be chosen as the independent seventh director. And I feel bound to say that I was equally surprised…to learn of the decision".[118] Nevertheless, given that Thomas Hughes had accepted the position, Bruce concluded that it was probably too late for anything to be done about it. Bruce's criticism was followed by similar statements from the Defence Minister, who added that the affair was "as great a shock to the Government as it came to the House. We learned of it only quite recently. The Government, however, is giving notice to the company that in no circumstances whatever can it consent to the nomination of Sir Thomas Hughes".[119]

In response to these concessions and criticisms from the government, the Opposition Leader called for the cancellation of the agreement "if Sir Thomas Hughes is not removed from the position of chairman".[120] This was directed at members of the Country Party, which in combination with Labor and one dissident Nationalist would be sufficient to pass a motion in the House. The Country Party's members had, though, largely remained silent during the debate. Finally, shortly before the House's adjournment for the day, Page spoke on the subject. He was non-committal, voicing displeasure at the company's action while also recognising that any withdrawal from the agreement could result in "costly litigation".[121] For

[117] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 506.
[118] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 508.
[119] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 515.
[120] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 517.
[121] *Commonwealth Parliamentary Debates*, House of Representatives, 14th July 1922, p. 519.

this reason, he called for an adjournment of debate on the subject until the following week to allow time for further consideration. In an illustration of the political firestorm that had ignited over the matter, the controversy received considerable newspaper coverage on the following day.[122]

AWA's actions had resulted in a political crisis and a genuine threat to the agreement's viability. The previous December had seen the enabling motion pass the Parliament with the tacit support of much of the Nationalist Party. Even the Postmaster-General at the time, Wise, who privately opposed engaging with AWA, had voted with the government. On this occasion, following AWA's breach of faith, dissent was growing within the Nationalist ranks. Similarly, Labor's reservations from the previous December had morphed into condemnations, aimed at mobilising the support of the Country Party and Nationalist backbenchers to overthrow the agreement.

Debate resumed on the subject the following week. Page, under the circumstances the most pivotal person, was the first to speak. He expressed regret that he had given sanction to the motion passed the previous December, claiming that in hindsight he would prefer to have seen the Parliamentary Committee present a report, which would then have required the approval of Parliament. The unconventional approach followed by the Prime Minister in its passage had led to a situation in which "the interests of the public do not appear to have been preserved".[123] Crucially, however, Page declared that he was not inclined to withdraw from the agreement – his disapproval was limited to the circumstances that had arisen in relation to the Board of Directors: "I am not opposed to the agreement as it stands, provided there is a clear understanding as to the appointment of the seventh director".[124] While this was couched in criticism of the Prime Minister, it also suggested a way to salvage the agreement.

The Prime Minister was the next to speak. After attacking the motivations of both Page and Brennan for speaking against the agreement, he raised the subject of his namesake's appointment as seventh director. He spoke of opposing the appointment from the first

---

[122] See "Wireless Agreement – Sir T. Hughes' Appointment" in *The Argus*, 15th July 1922.
[123] *Commonwealth Parliamentary Debates*, House of Representatives, 19th July 1922, p. 554.
[124] *Commonwealth Parliamentary Debates*, House of Representatives, 19th July 1922, p. 557.

moment he heard about it, claiming that "I have myself written to Sir Thomas Hughes setting out the position which has arisen out of the discussion in Parliament…[and] that we took the view that it was the intention of the agreement that the seventh member should be an independent man".[125] The Prime Minister also added that he had instructed his staff to inform the three Commonwealth directors that they were not to consent to the appointment, although they had already refused to do so from the first moment. When pressed, however, he did not respond to questions regarding what response he would take to the company's actions.

The letter which was sent by the Prime Minister to Thomas Hughes on that day characterised his appointment as seventh director as a breach of the spirit of the agreement. It also emphasised that this view was held by the Prime Minister himself, and concluded that the government could not support his presence on the Board of Directors:

> The objection to your appointment is not in any sense a reflection upon yourself personally. We believe that you did not take the same view of the intention of the agreement as to the seventh director as we do, and that you were actuated in this, as in all other business transactions throughout your career, by the highest motives. But we think you will see that in all the circumstances the Government has a right to decline to accept a nomination which gives the company a preponderance on the board.[126]

The subject remained at the forefront of discussion for the remainder of the day's proceedings in Parliament. Though exhaustive in length and detail, this discussion was circular, largely consisting of Labor MPs – with occasional input from Watt and Wise – lashing out in multiple directions: at the Prime Minister; at the circumstances surrounding the establishment of the Parliamentary Committee; at the agreement's initial and modified contents; at AWA; and at the Marconi Company. Ultimately, however, this rage masked impotence. The agreement had already been executed and, with the resolution of December 1921, the Parliament had abrogated its capacity to alter it once approved by the Parliamentary Committee. This point

---

[125] *Commonwealth Parliamentary Debates*, House of Representatives, 19th July 1922, pp. 560-561.
[126] Quoted in *Commonwealth Parliamentary Debates*, House of Representatives, 21st July 1922, p. 742.

was effectively conceded by future Prime Minister James Scullin, who noted that the Commonwealth's legal position to remove Thomas Hughes from his new position was poor, while criticising the government for putting the Commonwealth in such a situation in the first place.[127] While the option remained to pass a motion in the House modifying or withdrawing from the agreement – such as that moved by Brennan in the previous week, still awaiting a vote – the chances of this winning majority support were effectively precluded by Page's unwillingness to withdraw from or otherwise alter the agreement, provided that the problem of the seventh director was resolved. The political survival of the agreement with AWA for a direct wireless service had thus become connected with the removal of Thomas Hughes from the position of seventh director.

In addition to disrupting the government's agenda in Parliament, the controversy also prompted a lot of bad press for the Prime Minister. On the following day another lengthy report was published in *The Argus* detailing the wide range of criticisms that had been directed at the government on the subject.[128] In addition, the newspaper carried an editorial condemning the haste with which the Prime Minister had committed the Commonwealth to the partnership with AWA, and attributing the subsequent controversy to the "impetuosity" of Hughes' insistence upon a quick passage of the agreement the previous December – a recognition of how important this frame had been to the agreement's passage.[129] Despite placing responsibility with the Prime Minister, the editor suggested that the appropriate next step would be for Thomas Hughes to step down from his position as seventh director in order for the company to salvage its public reputation.

The next day's proceedings in Parliament again focused almost exclusively upon wireless. While many of the speakers were different, the course of the day's discussion followed a similar pattern of non-government MPs taking turns to criticise various facets of wireless policy. As with the previous day, however, the discussions were exhaustive in length and detail but represented little more than bluster. The day's only substantive development was a division on the motion moved by Brennan almost a week earlier to refer portions of the agreement back to Parliament. This motion was soundly rejected. Though it was supported by

---

[127] *Commonwealth Parliamentary Debates*, House of Representatives, 19th July 1922, p. 564.
[128] "Wireless Agreement – Sir T. Hughes' Appointment" in *The Argus*, 20th July 1922.
[129] "Haste and its Results" in *The Argus*, 20th July 1922.

all Labor members, it only attracted three Country Party votes.[130] This marked the failure of the last ditch effort to derail the agreement through a reassertion of Parliamentary control over its implementation.

The following day's sitting saw the attention of Parliament, for the first time in days, shift to other subjects. At the end of the day, however, the Prime Minister gave notice of an end to the stand-off over AWA's seventh director. This was a letter from Thomas Hughes announcing his resignation from the position. Thomas Hughes' letter justified his appointment as safeguarding the company's interests in the face of a majority stake in the enterprise being held by the Commonwealth, and motivated by the business interests of AWA's private shareholders who "are in our opinion better entitled to control details of business management than Government nominees, who have no personal stake or interest in the company's affairs".[131] He further added that the process of his selection, by an independent arbitrator, was fully in accord with the terms of the agreement. Nevertheless, he recognised that his position had become untenable:

> There is, however, one course only open to me in the interests of the company as a whole, and that is to avoid as far as possible any cause of friction between it and the Government which may be prejudicial to the success of an enterprise we all desire to bring to a successful issue. Under these circumstances, while I feel assured that I am lawfully and properly selected both as director and chairman, and that I cannot be removed from either position without the unanimous consent of my co-directors, I am prepared to retire from the board, and I have forwarded my resignation to the secretary.[132]

While the Labor Party continued to press the issue afterwards, Thomas Hughes' resignation blunted the effectiveness of its attacks and the resumption of Parliament in the following week saw wireless superseded by other subjects. In the meantime, the position of the seventh director remained vacant.

---

[130] *Commonwealth Parliamentary Debates*, House of Representatives, 20th July 1922, p. 714.
[131] Quoted in *Commonwealth Parliamentary Debates*, House of Representatives, 21st July 1922, p. 742.
[132] Quoted in *Commonwealth Parliamentary Debates*, House of Representatives, 21st July 1922, p. 742.

The position remained unfilled for the remainder of the winter, with the other six members of the Board of Directors resolving to "consider and discuss" potential candidates on an informal basis.[133] The first indication of who would eventually take up the position was a mention by the Prime Minister in Parliament on the last day of August. In response to a question from a Labor MP regarding the vacant position of seventh director, he hinted that he might have to fill the position himself:

> Efforts have been made to secure the services of a suitable man, but the task has so far been found impossible…it is extremely difficult to get competent men willing to give up their time to the Commonwealth who have had no connexion with Amalgamated Wireless (Australasia) Limited, and yet some knowledge of wireless…I thought seriously of taking the position myself, but it would be undesirable for me to do so. I gather from the views expressed by honourable members that there is a feeling that the Commonwealth should be represented by some one whose association with this Parliament is so close and intimate that we could rely upon him to protect our interests under the agreement. I am very sorry that the Government have not been able to secure the services of any such person.[134]

Within a week, at a meeting of the AWA board, the Prime Minister himself was nominated for the position of seventh director. Though he was not present at the meeting, he was unanimously elected to the position by the other directors and informed of such by telegram.[135] Compared to the furore that had erupted upon the previous appointment to this position, the reaction in Parliament to the Prime Minister's appointment was subdued, consisting of little more than a sarcastic congratulation from the Deputy Opposition Leader.[136] Hughes attended his first meeting of the AWA Board of Directors in late September 1922, and would remain involved company's affairs in the position of seventh director until his death in 1952.[137] The appointment of Hughes to the position, and his service upon it for three decades,

---

[133] 'Seventh Director' folder. ML: MSS 2954/Add-On 1910, Box 1, Seventh Director, 1922-1924, Correspondence, Documents, Memos, etc, 1922-1924.
[134] *Commonwealth Parliamentary Debates*, House of Representatives, 31st August 1922, p. 1833.
[135] 'Seventh Director' folder. ML: MSS 2954/Add-On 1910, Box 1, Seventh Director, 1922-1924, Correspondence, Documents, Memos, etc, 1922-1924.
[136] *Commonwealth Parliamentary Debates*, House of Representatives, 7th September 1922, p. 1993.
[137] J. Given, *Transit of Empires*, pp. 155-161.

symbolise the pivotal role he played in the determination of policy towards international wireless, and the enduring legacy of his influence over this sector.

Constituting the International Wireless Service, 1921-1922

The subject of an international wireless service that would connect Australia with Britain first arose in 1910, but a concrete policy decision on the matter was not enacted until March 1922. Faced with the choice between the Norman scheme and that of AWA, Parliament opted for (a modified form of) the latter. The decision to partner with private enterprise represented a break from the established tradition of government monopoly in Australian communications. That the Parliament chose this option was a result of structural pressures operating in combination with a dynamic policymaking process responsive to immediate circumstances, with one important dimension being the conditions in the political stream at the time.

The chief structural pressure was geopolitical – the need to develop Australia's international communications by establishing a trans-oceanic wireless service. On this point, 'the need for wireless', there was a consensus among the three parties represented in Parliament. This reflected a shared goal of strengthening Australia's communicative bonds with the rest of the Empire, and escaping the country's dependence on submarine cables for its international communications. Subsidiary to this, there was also a consensus that the Norman scheme did not serve Australia's interests because of its reliance on a relay model placing Australia several links in the chain away from Britain. This model had two potential drawbacks. One, already experienced in the cable network, was the potential for substantial delays as messages were held up at relay stations. The other was potentially more serious because of its security implications – the chance for a station elsewhere in the relay chain to be interdicted, whether by enemy action in a future war, or through unrest in the territory in question. Either eventuality would render Australia unable to exchange messages with Britain. Among those in Parliament, there was an accord on these fundamental points. As Page declared, "the solution of the problem of wireless should not be regarded as a party question".[138] All parties

---

[138] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, p. 13985.

responded to the geopolitical imperatives – the importance of wireless for Australia's security in the post-war world – by endorsing the need for wireless and rejecting the Norman scheme.

The consensus on these points coupled with an important element of the Prime Minister's framing of the subject as one which required a swift resolution. Though Labor did not agree on this point, recommending that the entire matter be submitted to a Parliamentary inquiry, it was convincing enough to secure the support of Page and other members of the Country Party. As a result of this support, the motion to execute the agreement, albeit on the condition of referral to a Parliamentary Committee, passed on the final sitting day of 1921. Though Page was reluctant to agree, he elected to do so because of "the urgent importance of the matter" and a belief "that it should be dealt with at the earliest possible moment".[139] This factor, which was instrumental to the proposal gaining the assent of Parliament, demonstrates the power of the frame established around the decision by Hughes.

Members of the Country Party, including Page, also responded to the framing of the decision in financial terms. The comparison between AWA's proposal as one of investment in a firm that promised profitability, against the Norman scheme which forecast running at a loss for its first decade of operation, was another point of comparison that AWA had highlighted while refining the arguments in favour of its scheme. It was this comparison between the schemes, not the security dimension, which Page highlighted as the principal reason to reject the Norman scheme.[140] As demonstrated in the previous chapter, this was an argument that AWA had devised while 'softening up' the political system in anticipation of its scheme receiving formal consideration. It was then taken up by the Prime Minister as one of the arguments in favour of choosing the agreement with AWA over the Norman scheme. Though it was a subsidiary, and not the main, dimension of Hughes' argument in favour of the AWA scheme, it resonated with Page and the Country Party, who, under the political circumstances prevailing at the time, were of utmost importance to the agreement's approval.

---

[139] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14229.
[140] *Commonwealth Parliamentary Debates*, House of Representatives, 7th December 1921, pp. 13985-13986.

The importance of the Country Party's support to get the agreement through Parliament demonstrates the significance of the immediate political conditions under which the subject received formal consideration. This supports MSA's conceptualisation of three relatively autonomous streams that join together at certain points in time. In this case, the Country Party bloc in Parliament proved to be essential because of the delicate balance of power in the House of Representatives, with the government holding the barest of majorities and the Prime Minister being unable to depend on the unconditional support of his backbench. In this situation, the Country Party, members of which had had virtually nothing to do with the determination of wireless policy to that point, rose to a position of vital importance because of the fact that it, in effect, held the balance of power. Without Country Party support in December 1921, it is unlikely that the agreement would have been enacted in the form that it was. Had Page elected to support Labor's motion to refer the entire subject to a Parliamentary Committee, and delay any concrete decision until afterwards, it is likely that the Parliament would have ended up deciding between different policy options.

In this respect – that the outcome of the policy decision depended on the political circumstances at the point that the policy window opened for a decision – timing was crucial to the outcome. Another important influence of timing related to the policy stream. The fact that the policy window opened at a time when the two available alternatives were the AWA and Norman schemes, with the latter effectively without supporters in the political system, made it considerably more likely that the AWA proposal would form the basis of Australian policy. Timing was also of significance in relation to Hughes' introduction of a motion to approve of the agreement at the very end of the sitting year. In combination with his emphasis on a speedy resolution, and a threat that "if the Commonwealth do not take action now it will probably be eight months before this Parliament will be in a position to even consider the question", this gave strong impetus to the motion's passage with a minimum of debate in Parliament.[141] These facts demonstrate the necessity of appreciating the temporality of policymaking; understanding it as a process that unfolds in time, and in which timing is crucial to the determination of policy outcomes.

---

[141] *Commonwealth Parliamentary Debates*, House of Representatives, 9th December 1921, p. 14228.

During the period examined in this chapter, the Prime Minister came to play an important role as a policy entrepreneur. It was through Hughes' actions that that policy window opened after the Imperial Conference, and he also played an instrumental role in coupling the AWA scheme with the underlying problem of Australia's languishing international communications. It was because of Hughes' initiative that the subject was given a place on the agenda at the Imperial Conference. Though it appears that he had been quietly supportive of instituting a scheme of direct wireless, possibly since his participation in the September 1918 demonstration arranged by Fisk and Marconi, the Imperial Conference marked the first occasion on which he confronted the issue publically. Though he conspicuously did not raise the proposal for constructing a direct service in conjunction with AWA that had been put to him by Fisk months before, he did use the opportunity to speak forcefully against the only concrete alternative to it: the Norman scheme. His steadfast opposition to the relay scheme, in the face of all other participants, secured acquiescence from the British for Australia to opt out of the Norman scheme and instead determine its own policy. Having secured this concession from the British, Hughes wasted little time in placing international wireless on the Parliamentary agenda after his return to Australia. On the second sitting day after his return, he outlined his objections to the Norman scheme and, for the first time, unveiled the proposal that AWA had presented to him in the previous year. Then, several weeks later, he took the leading role in advocating for the enactment of the agreement with AWA.

However, the concessions that had to be made to secure Parliamentary assent demonstrate that the Prime Minister was unable to completely control the process once the matter entered the political system. The principal illustration of this was the controversy surrounding the composition of AWA's Board of Directors. Though Hughes framed the subject as a minor matter, and as consistent with the Commonwealth's previous agreement with the Anglo-Persian Oil Company, he lost control of the debate on this point as other Parliamentarians expressed concern that the Commonwealth would not be able to exercise the degree of control commensurate with its majority stake in the company. In response to this apprehension, he proposed an amendment to his own motion calling for the matter to be referred to a Parliamentary Committee upon which all parties would be represented. The major revision to the agreement sanctioned by the committee was on this subject, and the ferocity of the counterattack in 1922 after AWA's attempt to secure Thomas Hughes in the role of seventh director revealed the political importance that this point had assumed. This again forced the Prime Minister to intervene and defuse the situation. Once this had happened,

although this was dependent on the willingness of Thomas Hughes – who had been appointed in accordance with the terms of agreement – the political counterattack on the agreement lost its impetus, and the last chance to overturn the decision was defeated.

If Hughes was limited in his control over the decision once it entered the political system, AWA had even less. Its activities were limited to lobbying Parliamentarians through distributing literature making the case for its proposal, and arranging a demonstration of direct wireless on the eve of its introduction into Parliament. Though these activities helped to build a favourable atmosphere to encourage the passage of the agreement, ultimately they could not guarantee support on the floor of Parliament.

Nevertheless, the frame that Hughes and AWA had placed around the subject was firm enough to secure Parliament's assent. This demonstrates the importance of the years of preliminary work in policy development and 'softening up' that had been done by the company's representatives. To a large degree, it was because of these preliminary efforts that the AWA scheme was well-positioned to be adopted as the basis of future policy. In comparison, there were no other actors doing comparable work advocating for the Norman scheme and undermining the alternatives to it. As a result, the political forces inclined towards opposing the agreement with AWA – a significant portion of the House of Representatives – were unprepared to counter the arguments in favour of it. In contrast, the arguments deployed in favour of the AWA scheme and against the Norman scheme had been refined over an extended period, and the terms in which the matter was debated on the floor of Parliament echoed arguments that had been refined by AWA during its campaign of 'softening up'.

In accordance with MSA, the passage of a major policy change through an open policy window was the result of a confluence of the streams of problems, policies, and politics. The underlying problem of a lack of progress in the field of international wireless had been widely acknowledged for an extended period. From 1919, AWA's executives, chiefly Fisk and Thomas Hughes, functioned as policy entrepreneurs by attaching a proposal for the firm to take charge of constructing a wireless service with Britain with this underlying problem, and identifying the Prime Minister as a supporter. Following this, it was Hughes who functioned as a policy entrepreneur, taking the necessary steps to open a policy window after the Imperial

Conference provided a focusing event to direct attention to the subject of international wireless. The Prime Minister, using arguments honed by AWA and emphasising the importance of a quick resolution to the subject, then depicted the deal with the company as a solution to the problem of international wireless. Political circumstances, though forcing some compromises on contentious aspects of the agreement, proved favourable enough to secure the passage of the agreement in a revised form. The result was a paradigmatic shift in Australian communications history: the constitution of Australia's international wireless connection with Britain as a direct service undertaken through a mixed enterprise wherein the Commonwealth provided capital and diplomatic weight, and AWA provided technical and operational expertise.

The Origins of Australia's International Wireless Service

This study set out to examine the origins of the 1922 agreement between the Commonwealth government and AWA to establish a direct wireless communications service between Australia and Britain. It took inspiration from Starr's notion of constitutive decisions pertaining to "the material and institutional framework" placed around new forms of communications technology, and Headrick's warning that "the history of radio cannot be told simply in terms of devices, inventors, and manufacturers, but must be integrated with the history of political power".[1] Though the central focus was on technology, and the way that a new form of technology came to be used, the arrangements covering its use were not dictated by the form of the technology itself, but by political decisions made in response to its appearance.

As a result, the thesis has focused on the political determination of a major policy decision. Specifically, it has sought to explain the most distinctive feature of the 1922 agreement: the embrace of private enterprise to construct Australia's international wireless service. It was this feature that made the decision a pivotal moment in Australian communications history, marking a shift in the established paradigm of government monopoly which had been in place since the first establishment of postal services in the colonial era, and which had subsequently characterised the country's telegraphic and telephonic communications. The 1922 agreement not only marked a deviation from the tradition of government monopoly in other forms of communication, but also from the prior history of Australian wireless itself. A decade before the agreement was enacted, in 1912, Australian wireless was following a strikingly different trajectory of development to that which it later took. In that year the Commonwealth government had responded to the first iteration of the Imperial scheme of wireless by declaring that there was no scope for any arrangements with private enterprise in service of Australia's participation in the scheme, and the Wireless Telegraphy Branch of the Postmaster-General's Department had recently been created to secure the medium as a government monopoly under the stewardship of Balsillie. Yet, within ten years, the medium initially

---

[1] P. Starr, *The Creation of the Media*, p. 1; D. Headrick, *The Invisible Weapon*, p. 116.

constituted as the preserve of government – with little opportunity for private participation – had been transformed into one in which private enterprise came to function as the main driver of development.

One striking feature of the Parliamentary debate surrounding the agreement when it was introduced for adoption by Hughes in December 1921 is that its most revolutionary feature – the overthrow of the principle of government monopoly in Australian communications – was scarcely mentioned. Despite the strong consensus that had existed around this principle within the Commonwealth government since the first appearance of wireless telegraphy in Australia years earlier, the paradigm was replaced with a minimum of discussion.

Many factors feed in to a major policy decision such as the 1922 agreement. It is not merely the case that decisions are produced by a dynamic process of policymaking with many inputs, but also that the contextual environment surrounding the process, which can exert major influence over its operation and outcome, is itself "unstable and often rapidly changing".[2] Complexity and dynamism are irremovable considerations in the study of the origins of policy decisions.

For this reason it is neither possible to present a simple, nor a single, line of causation that led to the 1922 agreement. The agreement was a product of complex links between deep structural factors – Australia's position in the British Empire and the broader geopolitical environment, the impact of the Great War – and smaller-scale, proximate factors such as the interactions of individual and group actors, commercial strategies, framing, timing, and political manoeuvring. Each of these factors, which tied together in intricate, complicated, and ever-shifting ways, contributed to the policy outcome. Much as Anduaga's investigation of ionospheric research in the interwar years eschews the straightforwardness of "direct causal effects" and "simple causal relationships" in favour of "a much more intricate thread of interconnected categories", so this study has situated causation within a range of interacting spheres, all of which contributed to the outcome in its own way.[3]

---

[2] P. Cairney, *Understanding Public Policy*, p. 126.
[3] A. Anduaga, *Wireless and Empire*, pp. xvii-xix.

The analysis presented in the thesis draws out a range of large, underlying structural forces and small, immediate factors that led to the enactment of the 1922 agreement. With regard to the former category, it is not possible to understand the policy outcome without reference to the broad structures surrounding it, particularly wireless' emergence in the early twentieth century as a geopolitical asset intertwined with great power rivalries. The project of establishing an international wireless service to connect Australia with Britain, plans for which were under consideration for more than a decade before the constitutive choices were formally settled in 1922, was a product of this fundamental consideration. Though many other aspects of the international environment shifted over the years covered by this study, the imperative for Australia to establish a wireless service with Britain for geopolitical reasons was a constant pressure. Furthermore, the intensity of this pressure increased with each additional delay, as the British Empire threatened to fall behind its great power rivals in the field of trans-oceanic communication.

Basal geopolitical considerations compelled Australia to establish an international wireless service, but they did not determine the shape that it would come to take in the 1920s. As Chapter Three of the study documents, once the first contract for the Imperial scheme had been signed between the British government and the Marconi Company in 1912, Balsillie began drawing up plans for the scheme's Australian station with the goal of excluding *any* participation from private enterprise. While the geopolitical environment created the pressures for an international wireless scheme, they did not determine the details of its constitution. These details were the outcome of a process that was responsive to a range of structural and proximate influences.

Review and Findings

Using a blend of history and public policy theory, the thesis has presented a detailed examination of the many different factors that contributed to the paradigmatic shift in Australian communications policy embodied in the 1922 agreement. Though covering a subject that has been examined by other scholars, its approach has uncovered new historical evidence not previously documented, and its systematic framework has provided a richer, more complex analysis of the political causes of the AWA/Commonwealth partnership, as well as the

process by which AWA's proposal to establish a direct link between Australia and Britain was transformed from an abstract idea into the foundation of government policy.

Comparison with Earlier Research

This study has covered much of the same ground previously examined in the scholarship of Ross Curnow and Jock Given. All cover the early history of Australian wireless telegraphy, and as a consequence deal with important developments such as the passage of the 1905 *Wireless Telegraphy Act*; the creation of the coastal scheme under Balsillie; the formation of AWA; the transfer of responsibility over wireless to the Navy during the Great War; the first direct wireless messages in 1918; and the 1922 agreement. All provide a broad survey of the same historical terrain.

Beyond this point of commonality, however, this thesis differs from the other authors' works in major ways. Most fundamentally, it represents the first study with a central focus on the causes of the 1922 agreement. Though the agreement receives a prominent place in the other works, in each case it is examined in relation to a different primary focus. In the case of Curnow's monograph, this is to explain the origins of Australian broadcasting in 1923. For Curnow, the 1922 agreement represents one of many significant developments leading to the inauguration of Australian broadcasting in 1923. Given's most detailed work on the subject, on the other hand, is centred on the career of Ernest Fisk. For Given, the 1922 agreement represents one of the pivotal episodes, and greatest triumphs, of Fisk's career. Whereas this study has centred on explaining the causes of the 1922 agreement, and the resultant paradigmatic shift in Australian communications history, this is not the principal concern of either Curnow or Given. Both give prominence to the event, but in neither case is it a primary concern.

Curnow's monograph, published in 1963, represents the pioneering work on early Australian wireless. Though he covers many of the major events between 1901 and 1922, the breadth of the subject and comparative thinness of his work means that his explication of these events is often cursory and lacking detailed analysis. This is the case with his coverage of the 1922 agreement. Curnow's study does not offer in-depth analysis of the decision, and that which he

does provide is based on a pluralist framework which portrays interest groups as the major drivers of policy formation. He portrays actors within government, whether elected officials or bureaucrats, as essentially reactive to the actions of interest groups. In general terms, his approach to policy formation is one in which a proposal is put forward by an interest group and its merits are considered by the government, which then makes a choice whether or not to adopt the policy. Policy decisions made by government are therefore seen as responsive to the actions of interest groups. Curnow describes the 1922 agreement as fitting this pattern, with AWA, and Fisk in particular, as the driving force behind its enactment. The major components of his narrative are AWA submitting its proposal for direct communication with Britain in 1920, which was not acted upon because of the impending Imperial Conference. Then, because of its embrace of a relay design and its financial costs, and because of Fisk's "lobbying", which "did not pass unrewarded", Hughes rejected the Norman scheme at the conference.[4] Following that, the Prime Minister placed the AWA agreement before Parliament and, despite the objections of the Labor Party, it was passed.[5]

Given's scholarship covering the area is much richer and more detailed than Curnow's. Whereas Curnow study discusses the agreement as a preliminary to the birth of broadcasting, Given assesses its importance in relation to its impact on AWA's future activities by bringing the company into partnership with the Commonwealth and diluting the Marconi Company's influence. These would both be important as the company, under Fisk's leadership, later set about colonising the domestic wireless market and, from 1927, operating the international service. Because of his biographical focus on Fisk, the AWA Managing Director is Given's chief focus, although this part of his work does also discuss the critical importance of Hughes to the outcome. Given's narrative is of a triumphant journey from the first demonstration of direct wireless in September 1918 to the formal enactment of the Commonwealth/AWA partnership in March 1922. In this narrative, centrality is placed on Fisk's efforts to overcome many obstacles: the technical challenges; the criticism of opponents; the Marconi Company's withdrawal from advocating direct wireless in early 1920; and political unease at the shape of his proposed scheme. These obstacles were overcome largely because of Fisk's efforts and talents. He refined the technology and arguments to establish a direct wireless scheme, and cultivated a crucial partnership with the Prime Minister to support the proposal.[6] This

---

[4] R. Curnow, "The Origins of Australian Broadcasting", p. 81.
[5] R. Curnow, "The Origins of Australian Broadcasting", pp. 80-82.
[6] J. Given, *Transit of Empires*, pp. 121-163.

partnership, "decisive in Australian communications history", was one in which the two men played specialised roles:

> Fisk worked with Marconi's to create the technical capacity for a new type of communications link between Australia and the rest of the world. Hughes provided the political influence, first within the Empire, then in Australia, to establish the service, and give a recapitalised AWA a big role in providing it.[7]

Given's work is abundant in contextual detail, although his account of the origins of the 1922 agreement focuses on the roles of key individuals – a natural corollary of biographical study. He portrays Hughes' motivations for supporting Fisk's direct wireless scheme as a combination of idealism and pragmatism. In relation to the former, direct wireless "linked to the idea of progress and Australia's new standing as an independent nation. If direct wireless was the best thing available, Australia should have it".[8] Elsewhere, he describes Hughes' motivations as pragmatic, with the Prime Minister willing to partner with AWA because "he needed access to the patents of international wireless companies, and thought the project would never happen if he left it in the hands of post offices".[9]

Finally, Given also concludes that "the timing of the initiative, and the unusual political circumstances, were critical" to the enactment of the 1922 agreement.[10] The importance of these factors, in his account, came from Hughes' uneasy position as a former Labor leader at the head of a Nationalist government cobbled together in wartime, with "just enough personal authority to push the deal through before voters put an end to his coalition, his prime-ministership, and his 'half-breed' enterprises".[11] In this sense, Given portrays the agreement as a race against time – without Hughes in power there would not have been such an arrangement between the Commonwealth and AWA.

---

[7] J. Given, *Transit of Empires*, pp. 161-162.
[8] J. Given, *Transit of Empires*, p. 127.
[9] J. Given, *Transit of Empires*, p. 404.
[10] J. Given, *Transit of Empires*, p. 162.
[11] J. Given, *Transit of Empires*, p. 162.

Given grants importance to a range of factors in relation to the 1922 agreement. However, it is difficult to make side-by-side comparisons with this study because of the differences between their respective primary focuses and analytical lenses. Unlike this study, Given's analysis is broader than the field of policymaking. Whereas this study has focused on identifying the causes of a specific policy decision, Given's also includes different dimensions, such as the technical and business challenges that Fisk faced during the period.

Contribution of the Thesis

The unique blend of history and public policy contained in this study is the source of its most significant contributions. These can be separated into two broad categories. The first covers its contribution to historical knowledge through unearthing new evidence, and new episodes in this area of Australian history, that have not featured in previous works. The second relates to the analysis it presents, which emphasises the connections between the Great War and the subsequent development of policy in the sector, and, through its adoption of Multiple Streams Analysis, the first detailed analysis of *how* the 1922 agreement came to be enacted as policy. These add several new dimensions to our knowledge of the area.

The study's depth of research into the archival collections of the Commonwealth government enabled it to present a more extensive examination of policy development in relation to wireless telegraphy within the bureaucracy than any previously done. Though both Curnow and Given draw on the collections of the National Archives, this study has done so in considerably greater depth. It has uncovered new evidence, revealing some hitherto undocumented episodes in Australian wireless history. One of these was the plan devised by Balsillie in late 1914 to nationalise AWA's maritime assets under the cover of war, covered in Chapter Four. This plan never came to fruition, but, as evidenced by the fact that it received Cabinet approval, was seriously considered by policymakers.

Another cache of new evidence presented in the study covers the flurry of activity surrounding international wireless in the immediate post-war period, while Hughes was in Europe and Watt was serving as Acting Prime Minister. The study has revealed the aspirations of the Marconi Company and AWA to establish a commercial wireless link between Australia and Britain in

late 1918 and early 1919, as well as strong opposition to these plans from Watt, the remainder of Cabinet, and the bureaucracy. Furthermore, it has revealed that Watt, while Acting Prime Minister, personally commissioned Balsillie to design a scheme of international wireless in 1919 as a way to pre-empt the penetration of the field by private enterprise. This – the first example of an international wireless scheme of Australian origin – is something else which has not been documented by other scholars who have examined the area. The study has also uncovered cable correspondence between Hughes and the domestic Cabinet during this period, revealing strong disagreements in relation to the subject of future policy towards international wireless centred on the desirability of dealing with private companies to establish a service. Finally, the exchange between Hughes and Fisk in relation to the AWA Managing Director's letter to *The Argus* covered in Chapter Five adds another element to our understanding of the relationship between these two men.

The study has also presented evidence to overturn two of Given's claims surrounding this period. First, that the Postmaster-General's Department and Navy had "jostled for control" of wireless in the post-war era, when in reality the hierarchy of neither department wanted responsibility for the medium.[12] Second, that the agreement with AWA was not considered by Cabinet before its enactment – it was, but, customary of Hughes' administrative idiosyncrasies, Cabinet's recommendations to avoid collaboration with private enterprise was not an influential factor in decision-making. These are new insights into Australian wireless history that have not been revealed in the works of earlier researchers.

Another major contribution of the thesis comes from the connections it has outlined between the Great War and the 1922 agreement. Though the works of Curnow and Given cover the conflict's effects on Australian wireless,[13] this study has developed these connections to a considerably greater degree. Within the domestic industry, the impact of war swept aside the status quo that had emerged in Australian wireless prior to August 1914, wherein the Wireless Telegraphy Branch of the Postmaster-General's Department had adopted a central administrative role and relations between the Commonwealth government and the newly-formed AWA were antagonistic. The war's dissolution of established conditions created

---

[12] J. Given, *Transit of Empires*, p. 130.
[13] R. Curnow, "The Origins of Australian Broadcasting", pp. 66-70; J. Given, *Transit of Empires*, pp. 103-111; J. Given, "Born Global, Made Local", p. 9.

opportunities to reshape policy towards wireless following the return of peace. The study has also detailed the connections between other developments in Australia resulting from the war – the power of Hughes as Prime Minister and the emergence of economic nationalism – and the recasting of policy settings over wireless communications in the post-war years. Each of these would, in its own way, prove a crucial influence over the outcome. Furthermore, the study has provided additional evidence to support the claim of Rhodes, Wanna, and Weller that Prime Ministerial power in Australia reached its historical apex under Hughes,[14] by documenting his steerage of the wireless agreement through formidable international and domestic obstacles.

This study has also made another major contribution through its adoption of Multiple Streams Analysis (MSA) to examine this area of Australian communications history. There are two dimensions to this particular contribution. The first is that it represents the first in-depth analysis of policymaking centred on the 1922 agreement between AWA and the Commonwealth government. While Curnow's monograph on early Australian wireless is a public policy study, its principal focus on the birth of broadcasting, combined with its reliance on a crude pluralistic analysis, lead to an unsatisfactory explanation of the origins of the 1922 agreement. The second dimension of this contribution comes from the way in which the study has applied MSA to a case study that is radically different from those to which the framework is usually applied. Since its formulation on the basis of empirical observations from the American political system in the 1970s, MSA has proven highly adaptable in a wide range of applications to different contexts because of its 'universal' features.[15] Nevertheless, it has not hitherto been applied to any historical case study of policymaking in Australia, as has been done in this study.

The study's adoption of MSA is fruitful to its analysis. It has enabled the study to situate its explanation of *why* AWA's proposal came to be accepted as the basis of policy within the specifics of *how* this happened, by tracing the proposal's progress through the process of policy formation. Rather than concentrating on the actions of individuals and groups in explanations of outcomes, it has placed those actions within a system-level analysis that

---

[14] R.A.W. Rhodes, J. Wanna and P. Weller, *Comparing Westminster*, p. 102.
[15] P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach".

explains how policy decisions emerge from a dynamic system with a wide range of inputs. This approach is useful because it represents a way to conceptualise two important features of policymaking: dynamism and temporality. Consideration of these features has enabled the study to expand on Given's insights about the importance of timing to the outcome.

Drawing on MSA, the thesis has used the powerful analytical categories of separate streams of problems, policies, and politics, policy entrepreneurs, and policy windows to conceptualise the developments under focus in Part IV. This has allowed the study to conceptualise the two key figures highlighted by Curnow and Given – Hughes and Fisk – as playing identifiable roles within a policymaking process. In the case of Fisk, and also of Thomas Hughes, whose actions receive less attention from the other scholars, this was the role of a policy entrepreneur. By advocating for their preferred policies, crafting and framing arguments in favour of them, and 'softening up' the political system to gain support for their eventual adoption, the actions of the AWA executives bore the hallmarks of policy entrepreneurship. So too did the actions of the Prime Minister in placing the subject at the top of the agenda when, following his return to Australia after the 1921 Imperial Conference, he attached an available 'solution' – the direct wireless proposal received from AWA the previous year – to the underlying problem of a lack of progress in international communications and the inadequacy of Australia's exclusive reliance on cables to communicate with the centre of the Empire. These factors, combined with a temperament disposed to swift and decisive action, led Hughes to frame the subject as one requiring a speedy resolution.

This speaks to the importance of another key concept within MSA: the work of policy entrepreneurs in framing discussions, the importance of which stems from the pervasive ambiguity surrounding policymaking.[16] When, for the first time in years, a policy window opened to allow the possibility of a decision on international wireless, Parliamentarians were compelled to decide between those schemes that were available for adoption at that point in time. These were the Norman scheme, with its principles of relay service and government monopoly, and the AWA scheme, based upon direct wireless and a partnership between the company and the Commonwealth government. These were the two available policy options from which Parliamentarians had to choose and, as Hughes emphasised in his framing of the

---

[16] N. Zahariadis, "The Multiple Streams Framework", pp. 66-70.

matter, there was an imperative for a quick resolution to the subject. The Prime Minister's framing was crucial. His emphasis on the need for a swift resolution, combined with the unacceptability of the Norman scheme's relay design for Australian policymakers, added considerable weight to AWA's proposal, being the only one available for direct wireless.

Despite the great power he had exerted as Prime Minister since coming into the office, Hughes was not able to dictate Parliament's response to the proposal – especially because of the conditions in the political stream at the time the policy window opened, in which his government faced a restive backbench and an uncooperative Country Party. His inability to force the matter through at will is why the proposal had to pass through the approval of a Parliamentary Committee in early 1922. The power of the framing that was placed around the proposal proved vital to its passage under the prevailing political circumstances. In this case it was the work of AWA's executives who, in their extended campaign of 'softening up', had framed their company's proposal as one which would bring strategic, developmental, and financial benefits. These benefits were promoted as 'solutions' to the ways in which the existing and alternative policies had been framed as problematic: the strategic risks of the Norman scheme's relay model, and the poor financial prospects of both it and the Commonwealth's network of coastal stations.

The reasons behind the failure of the bureaucracy to influence the 1922 decision have not been systematically analysed before. As much as the adoption of the agreement was a triumph for AWA, it was also a failure for the bureaucracy, which had previously played a central role in the development of Australian wireless policy and was a strong defender of government primacy in the field. One reason for this lay in the preceding history of the medium in the years leading up to 1922. Though wireless had begun as a medium under the monopoly control of the government, a control that was solidified with the establishment of the Wireless Telegraphy Branch in the Postmaster-General's Department, this had been eroded by the experience of the Great War. The conflict had led to the rise of AWA as a national enterprise in cooperation, not confrontation, with the Commonwealth government. The war also proved greatly disruptive to the bureaucratic administration of wireless with the transfer of responsibility for the *Wireless Telegraphy Act* from the Postmaster-General's Department to the RAN in 1915, and then back again in 1920. This disruption, along with a desire to defer to British preferences, meant that there was little activity within the bureaucracy to formulate

policy alternatives in the crucial post-war years. During the same period, AWA's executives were busy refining their own proposals, framing the arguments to support them, and 'softening up' the Prime Minister to the idea. This contrast in activity within the divided policy stream prior to the formal policy decision – another insight derived from the study's adoption of MSA – was another instrumental factor in the outcome.

Overall, the study has demonstrated that a wide range of factors influenced the paradigmatic shift embodied within the 1922 agreement between AWA and the Commonwealth government. These included a number of large-scale structural developments, and the small-scale actions of individuals and groups. These factors combined with other considerations, such as framing and timing, in a dynamic process of policymaking to produce the outcome. This study has not minimised the importance of individual or group actions, but argues that in order to explain the 1922 agreement it is necessary to situate individual and group actions within a dynamic process of policymaking that was given shape by a wider context, and in which other considerations such as framing and timing were pivotal to the outcome. It is through their relationship with these other factors that individual and group actions become meaningful in relation to policy outcomes.

Consequences

The developments covered in Part IV of the study, culminating in the 1922 agreement, had far-reaching implications for the development of the domestic wireless industry in Australia, of international schemes to connect the British Empire, and of Australia's overseas communications. At the domestic level, it ensured that AWA would be central to the future of Australia's emerging electronics industry, which would "soon be unrecognisable" after the inauguration of broadcasting in 1923.[17] Though in a sense the 1922 agreement marked a recognition of the significance that AWA had already achieved since its formation in 1913, it also heralded the beginning of a new era in the company's history. By quintupling its capital and diluting the Marconi Company's stake, the 1922 agreement was transformative for the company – entrenching it as Australia's dominant wireless organisation.[18] Thus, although the

---

[17] J. Given, *Transit of Empires*, p. 165.
[18] J. Given, "Born Global, Made Local", p. 17.

1922 agreement was enacted for the purpose of creating an international wireless service, it also had important domestic implications. Because of the agreement's flow-on effects, AWA came to exert an enormous influence over the birth and subsequent growth of broadcasting from 1923, and became a major domestic "manufacturer of high-technology goods for retail customers and industry" as wireless and electronics became further integrated into Australian social and economic life throughout the interwar period.[19] This was part of a wider pattern of development in industries of strategic importance during this period, spearheaded, when commercially viable, by private enterprise.[20] With the coming of the next global conflict in 1939, AWA's domestic manufacturing capabilities were shifted towards the production of advanced electronic equipment for military requirements, such as wireless transmitters, receivers, aircraft electronics, and radar.[21]

Another weighty consequence of the events discussed in Part IV of the study related to the development of international wireless services throughout the British Empire. Hughes' opposition to the Norman scheme at the 1921 Imperial Conference, and his insistence upon establishing a direct service, was a mortal blow to British plans for a relay system linking the territories of the Empire. Australia's unwillingness to participate in the Norman scheme prompted the British government to reconsider its opposition to direct wireless as the basis for a scheme of international wireless.[22] Ultimately, Marconi's invention of shortwave in 1924 – which his company dubbed the 'beam' system – compelled the British government to negotiate with the Marconi Company for access to the new technology, which offered a veritable revolution in the medium due to the substantial advantages it offered in speed, reliability, and cost compared to established forms of long-distance wireless.[23] In July 1924 the British signed a contract with the Marconi Company to erect shortwave stations, to be owned and operated by the government, for direct communication with the territories of the Empire, including Australia. In 1926, a direct shortwave service between Britain and Canada was inaugurated, followed by other services with Australia, India, and South Africa in the following year. After more than fifteen years of sporadic action, the Imperial scheme of wireless had

---

[19] J. Given, *Transit of Empires*, p. 245; M. Counihan, *The Construction of Australian Broadcasting*.
[20] A.T. Ross, *Armed and Ready*, pp. 58-59.
[21] A.T. Ross, *Armed and Ready*, p. 193; J. Given, "Born Global, Made Local", pp. 27-29.
[22] See cable to the Governor-General from the Secretary of State for the Colonies, 19th December 1921. NAA: MP341/1, 1924/7815.
[23] A. Anduaga, *Wireless and Empire*, pp. 186-187.

finally materialised.[24] Its consequences for international communication were dramatic, halving cable receipts on those routes now serviced by shortwave in the service's first year of operation. This posed a dire threat to the viability of the cable companies, which later led to a government-mandated merger of Britain's international communications assets into a single organisation in 1929. Later known as Cable and Wireless, the new organisation was nominally a private firm but in practice run according to government strategic priorities – a unified system of Imperial communications.[25]

The arrangements struck between AWA and the Commonwealth in 1922 proved durable enough to withstand more than two decades of disruption, uncertainty, and change. The beam service between Britain and Australia was inaugurated in April 1927, five years after Hughes and Fisk signed the agreement.[26] The delay resulted from the vacillations of the British government in the intervening period, and the consequent difficulties of establishing a reciprocal station in that country, as well as the need to recalibrate plans after the invention of shortwave. Despite the delays and frustrations of the intervening period, the Bruce government, which came into office after the fall of Hughes in February 1923, continued to act as a strong backer for AWA. Through changing circumstances, it upheld the fundamental structure of the relationship between the Commonwealth and the company which had been established under Hughes – amending the terms of the 1922 agreement to allow for more time for the service to be established, lobbying the British government to permit the establishment of a long-distance station in that country for communication with Australia, and defending its arrangements with AWA from Labor criticism in Parliament.[27] There was, therefore, a strong thread of continuity with the constitutive decisions originally made under the Hughes government in 1922. Through the upheaval of the Cable and Wireless merger, the turbulence of the 1930s, and another global conflict, AWA continued to operate the service, in partnership with the Commonwealth, until 1946. In that year the international wireless service was incorporated into the Overseas Telecommunications Commission by the Chifley

---

[24] D. Headrick, *The Invisible Weapon*, pp. 202-204; J. Hills, *The Struggle for Control of Global Communication*, p. 226.

[25] Chapter 11 in D. Headrick, *The Invisible Weapon*; chapter 7 in J. Hills, *The Struggle for Control of Global Communication*.

[26] W. J. Baker, *A History of the Marconi Company*, p. 224; see also "The Beam – First Day's Work" in *Sydney Morning Herald*, 9th April 1927; "Beam Wireless – Commercial Service Opened" in *The Argus*, 9th April 1927.

[27] See E. Harcourt, *Taming the Tyrant*, pp. 202-215; many primary documents concerning this can be found in NAA: MP341/1, 1924/7815; NAA: MP341/1, 1926/2782, Wireless Imperial scheme, 1921-1926; NAA: MP341/1, 1926/2784, Imperial Wireless services, 1925-1926.

government, in the wake of a wartime decision to nationalise communications throughout the British Empire.[28]

The persistence of the arrangements put in place in 1922 to structure the international wireless service underlines Starr's focus on the importance of constitutive decisions to the subsequent course of communications development. Once put in place, the constitutive choices concerning international wireless described in the preceding chapters endured for decades, despite considerable change in the surrounding political, administrative, commercial, and technological contexts. AWA's control of Australia's overseas wireless service survived the terms of several hostile governments, the persistent opposition of the Postmaster-General's Department, the financial collapse of its British parent company, and the invention of shortwave before finally being overthrown by the Chifley government.[29] This affirms the significance of the 1922 agreement as a pivotal episode that laid the foundation for Australia's international communications services for more than two decades.

---

[28] See chapter 6 in J. Given, *Transit of Empires*; chapter 14 in D. Headrick, *The Invisible Weapon*; chapters 9 and 10 in E. Harcourt, *Taming the Tyrant*.
[29] J. Given, *Transit of Empires*, p. 321.

References

Archival Sources

Amalgamated Wireless (Australasia)

Mitchell Library: Amalgamated Wireless (Australasia) Ltd Records, 1896-1985; ML: MSS 2954/Add-On 1910;

Items:

Box 1, Annual Reports, 1922-1982, 1922-1926; 1965; 1968; 1974; 1982.

Box 1, Legal Documents, 1921-1982, Agreements, with Related Material; List of Agreements, 1921-1982.

Box 1, Seventh Director, 1922-1924, Correspondence, Documents, Memos, etc, 1922-1924.

Box 24, Fisk, Sir E.T. – Addresses, Articles, Lectures and Reports, 1921-1942 (MSS); Articles by Sir E.T. Fisk, 1921-1932 (Printed).

Box 25, Hooke, Sir L.G.A. – Articles by Sir L.G.A. Hooke, 1938-1974 (Printed).

Box 26, GEEVES, P. L. (Staff Member), 1913-1979, Correspondence, 1968-1979.

Box 28, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.

Box 29, Material created and acquired by P.L. Geeves, 1. Staff, 1913-1976.

Box 30, AWA and Its History, History Files (5) – Correspondence, Documents, MSS, Notes, Printed Material, Photos, etc, 1904-1968.

Box 34, Miscellaneous Material.

Box 37, Shareholders Reports, 1914-1921 (Printed).

Box 57, Australia. Parliament. Committee Appointed to Inquire into Proposed Agreement with AWA re Wireless Communication, 1922- Correspondence, Documents, Report, Printed Material.

Box 73, Non-AWA Published Material, Printed Material on AWA, being Journal Articles, Newscuttings, Pamphlets, etc.

Attorney-General's Department

National Archives of Australia: Attorney-General's Department, Central Office; A432, Correspondence files, annual single number series, 24 Nov 1857-;

Item:

1929/2756 Part 3, Wireless telegraphy – Fr. Shaws Patent No. 1683 of 1911 Part 3, 1915.

Prime Minister's Department

National Archives of Australia: Prime Minister's Department; A3932, Correspondence files, SC (Secret and Confidential) series – second system, 10 Jan 1909 – 31 Dec 1926;

Items:

SC457 PART 1, Long Distance Wireless Scheme – First section of file, 1918-1920.

SC457 PART 2, Long Distance Wireless Scheme – Second section of file, 1920-1921.

SC457 PART 3, Imperial Wireless Scheme – Third section of file February to October 1921, 1919-1921.

SC457 PART 6, Wireless Agreement and Report – Preliminary Negotiations after signing of Agreement, 1922.

SC457 PART 8, Wireless spares, 1919-1922.

Cabinet Papers

National Archives of Australia: Australian Archives, Central Office; A6006, Folders of copies of Cabinet papers, 01 Jan 1901 -;

Items:

1915/12/31, Transfer of Wireless Branch from PMG to Navy, 1915.

1915/12/31, Wireless – Ship Scheme, 1915.

Postmaster-General's Department

National Archives of Australia: Postmaster-General's Department, Central Administration; MP341/1, General correspondence 'G' files, annual single number series, 1872-1940;

Items:

1906/362, Confidential Dispatches from Admiralty and Defence, 1904-1906.

1906/2849, Wireless Telegraphy licence to Marconi Coy. to conduct experiments in Australia, 1906.

1906/4510, Wireless Telegraphy Demonstration at Queenscliff – Report on (June-May 1906), 1906.

1907/1472, Conference on Wireless Telegraphy, 1906-1907.

1907/2871, Wireless Telegraphy Conference – Representatives of Defence and Navy, 1907.

1907/4373, Report of Wireless Telegraphy conference, 1907.

1909/8900, Pacific Islands wireless Telegraphy scheme, 1909.

1910/1415, Wireless Telegraphy Pacific Installation conference, 1909-1910.

1910/2752, Wireless Telegraphy licence to Marconi Company to conduct experiments in Australia, 1909-1910.

1911/1503, Wireless – Fremantle & Pennant Hills – Patents Rights – Lipel, 1910-1911.

1911/2513, Wireless – Fremantle and Pennant Hills Patent Rights Marconi Co., 1911.

1911/12142, Patents Rights Marconi, 1911.

1912/112, Wireless – Sale of apparatus by companies (Re Royalties e.c.), 1911-1912.

1912/4563, Wireless Empire Scheme, 1911-1912.

1912/10512, Correspondence Relating to contract for Imperial Wireless station, 1912.

1913/1132, Unknown Title, Unknown Date Range.

1913/11258, Wireless – Marconi's Wireless Transmitting Co. Pty Ltd, 1913.

1913/12096, Wireless – General Scheme – Main file, 1912-1913.

1913/15455, Marconi ats. Commonwealth – Visit – by James Swinburne, 1913.

1914/42, Wireless Licences. Suspension of O/A of war, 1914-1919.

1914/4383, Wireless – Policy, 1911-1914.

1914/10384, Wireless – Marconi v Commonwealth, 1914.

1914/10400, Wireless regulations, 1911-1914.

1914/17830, Wireless Systems. Commonwealth. Marconi Case, 1913-1914; 1914/10384, Wireless – Marconi v Commonwealth, 1914.

1914/18660, Wireless – Ships scheme, 1914/1915.

1914/18687, Wireless. Accounts. Amalgamated Wireless Ltd, 1914-1915.

1914/19888, Patents in England, 1914.

1915/3457, Wireless Licence Generally Unauthorised Experimenters, 1914-1915.

1915/4725, Statistics Wireless General, 1914.

1915/6509, Unauthorised Experimenter's Bleeck W. A., 1915.

1915/16282, Amendment of Regns. under the Wireless Telegraphy Act 1905. to come into operation forth with, 1912-1915.

1915/19589, Amalgamated Wireless War Office, 1914-1915.

1916/1066, Organization Papers re offer made to staff and various questions arising therefrom, 1915-1919.

1917/832, Advising that 203 copies of the Radio Telegraph conference held at Melbourne in Dec. 1909 and 19 copies of the Radio telegraph conference London 1908 are on hand in the PMG Dept's and asking whether they are of use to Navy Dept., 1908-1918.

1919/489, Wireless Systems. Commonwealth, 1911-1919.

1920/968, Ships Commonwealth government line – wireless installation, 1917-1920.

1920/9144, Establishment of Long distance Wireless service, 1919-1920.

1921/2863, Wireless transfer to PMG Department, 1920-1921.

1921/4656, History of Operation of Postmaster General's Department during war – all states, 1917-1921.

1922/5649, Report of Wireless Telegraphy Commission, 1921-1922.

1923/10637, Appointment – of Government Directors Amalgamated Wireless, 1922-1923.

1924/7815, Wireless Imperial Scheme – Part 1, 1923-1924.

1926/2782, Wireless Imperial scheme, 1921-1926.

1926/2784, Imperial Wireless services, 1925-1926.

1926/5545, Wireless Control – Transfer from PM's Dept, 1923-1926.

Navy Department

National Archives of Australia: Navy Office [I], Department of Defence [I]; MP472/1, Correspondence files, annual single number series, 1901-1925;

Items:

1/14/8441, Progress Report. Wireless Telegraphy Stations Ashore, 1913-1915.

1/15/4232, Visits of HMA Ships and Establishments. Mercantile Fleet Auxiliaries and Transports employed in conveyance of Troops fitted with Wireless Transmitters, 1913-1915.

1/15/7596, Wireless Operations Certificate of Proficiency in R/T forwarded for signature, 1915-1920.

1/15/9963, Grant of licences to act as wireless operators on ships, to Brit Subjects, 1915-1916.

9/15/1982, Purchase of WT Sets from the Amalgamated Wireless Co, Sydney – Question of Patents Right – Claim by firm for extra apparatus shipped in Melbourne, 1914-1917.

1/17/2187, R/T [Radio Telegraph] Students – Signed forms respecting nationality of, 1917-1918.

1/17/8181, Amalgamated Wireless – Suggested purchase by C'wealth of enemy Shares, 1917.

1/17/8193, Installation of improved receiving apparatus on ships, 1917-1918.

18/17/247, Manager, Amalgamated Wireless Ltd, Sydney requesting permission to erect an antenna for experimental purposes at his private residence in Sydney, 1917.

18/17/7853, W/T [Wireless Telegraphy] Workshops, Sydney – Annual Report for period 18.8.1916 to 30.6.1917, 1917-1918.

1/19/4242, Endorsement by Navy of Agmt between C'wealth Line of Steamers & AWA for provision of wireless service, 1916-1919.

1/19/6333, R/T in relation to persons of foreign parentage, 1915-1919.

1/19/8391, Future Policy of wireless in Australia, 1919.

1/20/2524, Transfer of RAN Radio Service to PMGs dept., 1919-1920.

8/20/2556, Agreement between Commonwealth of Australia and the Anglo-Persian Oil Co Ltd relative to supply of Oil in Australia – Affect on RAN and Rear-Admiral Sir W Clarkson KBE CMG, nominated for appointment as Naval representative on the Directorate of the Commonwealth Oil Refineries, 1920.

15/20/10935, Transfer of Machines from Repatriation School, Randwick to Garden Island W/T [Wireless Telegraphy] Station and Electrical Workshops, 1920-1921.

Other Primary Sources

Newspapers

"The Wireless Case. Alleged Trading With The Enemy" in *The Advertiser*, 21st September 1915.

"Enemy Trading Act – Wireless Company in Court" in *The Sydney Morning Herald*, 21st September 1915.

"Enemy Trading – Small Fine Imposed" in *The Sydney Morning Herald*, 23rd September 1915.

"The Wireless Service – To Be Under Naval Control – Statement by Minister" in *The Age*, 2nd March 1916.

"Wireless – First Messages from England" in *Sydney Morning Herald*, 23rd September 1918.

"Delay in Cable Traffic" in *The Argus*, 5th December 1918.

"Cable Messages Delayed" in *The Argus*, 11th December 1918.

"Wireless Telegraphy – Waiting for a Licence" in *Sydney Morning Herald*, 2nd September 1919.

"High Speed 'Wireless'" in *The Argus*, 8th March 1920.

"Linking the Empire – Wireless Scheme Explained" in *The Argus*, 23rd April 1920.

"Control of Wireless – Another Government Muddle" in *The Age*, 9th July 1920.

"People's Tribute – To Prime Minister – His Services to Empire" in *Sydney Morning Herald*, 25th November 1920.

"Links of Empire – All-Red Wireless Chain" in *The Argus*, 8th July 1921.

"Empire Communications – Wireless and Airships" in *The Argus*, 4th August 1921.

"Wireless Communication – Proposals by Mr. Hughes" in *The Argus*, 18th October 1921.

"Direct Wireless – England to Australia" in *The Argus*, 6th December 1921.

 "Wireless Schemes – Committee Appointed" in *The Argus*, 12th December 1921.

"New Wireless Device – Relays May Be Abolished" in *The Argus*, 13th January 1922.

"Wireless Agreement – Sir T. Hughes' Appointment" in *The Argus*, 15th July 1922.

"Haste and its Results" in *The Argus*, 20th July 1922.

"The Beam – First Day's Work" in *Sydney Morning Herald*, 9th April 1927.

"Beam Wireless" in *The Telegraph*, 9th April 1927.

Hansard, Official Publications, Legislation

Commonwealth Parliamentary Debates, Senate, 2nd August 1905.

Commonwealth Parliamentary Debates, House of Representatives, 9th September 1909.

Commonwealth Parliamentary Debates, House of Representatives, 14th September 1909.

Commonwealth Parliamentary Debates, House of Representatives, 7th December 1911.

Commonwealth Parliamentary Debates, House of Representatives, 18th December 1912.

Commonwealth Parliamentary Debates, House of Representatives, 5th October 1921.

Commonwealth Parliamentary Debates, House of Representatives, 7th October 1921.

Commonwealth Parliamentary Debates, House of Representatives, 12th October 1921.

Commonwealth Parliamentary Debates, House of Representatives, 24th November 1921.

Commonwealth Parliamentary Debates, House of Representatives, 7th December 1921.

Commonwealth Parliamentary Debates, House of Representatives, 8th December 1921.

Commonwealth Parliamentary Debates, House of Representatives, 9th December 1921.

Commonwealth Parliamentary Debates, House of Representatives, 29th June 1922.

Commonwealth Parliamentary Debates, House of Representatives, 5th July 1922.

Commonwealth Parliamentary Debates, Senate, 13th July 1922.

Commonwealth Parliamentary Debates, House of Representatives, 14th July 1922.

Commonwealth Parliamentary Debates, House of Representatives, 19th July 1922.

Commonwealth Parliamentary Debates, Senate, 19th July 1922.

Commonwealth Parliamentary Debates, House of Representatives, 20th July 1922.

Commonwealth Parliamentary Debates, House of Representatives, 21st July 1922.

Commonwealth Parliamentary Debates, House of Representatives, 31st August 1922.

Commonwealth Parliamentary Debates, House of Representatives, 7th September 1922.

Commonwealth Parliamentary Papers, "Wireless Communication – Report of Parliamentary Committee Appointed to Inquire into Proposed Agreement with Amalgamated Wireless

(Australasia) Limited; Together with Draft Agreement Recommended by Committee; Minority Report by Mr F. Brennan, M.P.; Notes of Proceedings of Committee; and Scheme Suggested by Senator J.D. Millen", 1922.

Parliament of the Commonwealth of Australia, *Naval Forces – Recommendations by Admiral Sir Reginald Henderson, K.C.B.*, 1st March 1911.

Parliament of the Commonwealth of Australia, *Report of the Royal Commission on Navy and Defence Administration*, Melbourne, 2nd December 1918.

Report of Admiral of the Fleet Viscount Jellicoe of Scapa G.C.B., O.M., G.C.V.O. on Naval Mission to the Commonwealth of Australia (May-August, 1919), 12th August 1919.

Commonwealth of Australia Constitution Act 1900, s.51 (v).

Wireless Telegraphy Act 1905.

Regulations under the *Wireless Telegraphy Act 1905*, Statutory Rules 1911. No. 105.

Amendment to the *Wireless Telegraphy Act 1905*, No. 33, 1915.

Secondary Sources

H. Aitken, *Syntony and Spark: The Origins of Radio*, John Wiley and Sons, New York, 1976.

H. Aitken, *The Continuous Wave: Technology and American Radio, 1900-1932*, Princeton University Press, Princeton, 1985.

S. Alomes, *A Nation at Last? The changing character of Australian nationalism 1880-1988*, Angus and Robertson, North Ryde, NSW, 1988.

J. Anderson, *W.A. Watt: A Political Biography*, M.A. Thesis, University of New South Wales, 1972.

A. Anduaga, *Wireless and Empire: geopolitics, radio industry, and ionosphere in the British Empire, 1918-1939*, Oxford University Press, Oxford, 2009.

P. Bachrach and M. Baratz, "Two Faces of Power" in *The American Political Science Review*, Vol. 56, No. 4, 1962.

W.J. Baker, *A History of the Marconi Company*, Methuen and Co., London, 1970.

A. Barnard, "Broadcasting in the 1920s: Government and Private Interests" in *Prometheus*, Vol. 1, No. 1, June 1983.

T. Barr, "Broadband Bottleneck: History Revisited" in *Media International Australia*, No. 129, 2008.

P. Bastian, *Andrew Fisher: An underestimated man*, University of New South Wales Press, Sydney, 2009.

J. Beaumont, "The politics of a divided society" in J. Beaumont (ed.), *Australia's War, 1914-18*, Allen and Unwin, St Leonards, NSW, 1995.

J. Beaumont, *Broken Nation: Australians in the Great War*, Allen and Unwin, Sydney, 2013.

G. Blainey, *The Tyranny of Distance: How Distance Shaped Australia's History*, Sun Books, Melbourne, 1966.

G. Bolton, "William Morris Hughes" in M. Grattan (ed.), *Australian Prime Ministers*, New Holland Publishers, Sydney, 2006.

M. Booker, *The Great Professional: A Study of W.M. Hughes*, McGraw-Hill Book Company, Sydney, 1980.

J. Bray, *Innovation and the Communications Revolution: from the Victorian pioneers to broadband internet*, The Institution of Electrical Engineers, London, 2002.

P. Bridgman and G. Davis, *The Australian Policy Handbook*, Third Edition, Allen and Unwin, Crows Nest, NSW, 2004.

J.B. Brigden, D.B. Copland, E.C. Dyason, L.F. Giblin and C.H. Wickens, *The Australian Tariff: An Economic Enquiry*, Second Edition, Melbourne University Press, Melbourne, 1929.

F.C. Browne, *They Called Him Billy: A Biography of the Rt Hon. W.M. Hughes*, Peter Huston, Sydney, 1940.

K. Burke (ed.), *With Horse and Morse in Mesopotamia: The Story of Anzacs in Asia*, Arthur McQuitty and Co., Sydney, 1927.

R. Burns, *Communications: An International History of the Formative Years*, Institution of Electrical Engineers, London, 2004.

N.G. Butlin, A. Barnard and J.J. Pincus, *Government and Capitalism: Public and Private Choice in Twentieth Century Australia*, George Allen and Unwin, Sydney, 1982.

N.G. Butlin, "Trends in public/private relations, 1901-75" in B. Head (ed.), *State and Economy in Australia*, Oxford University Press, Melbourne, 1983.

P. Cairney, *Understanding Public Policy: Theories and Issues*, Palgrave Macmillan, Basingstoke, 2012.

P. Cairney and M.D. Jones, "Kingdon's Multiple Streams Approach: What Is the Empirical Impact of this Universal Theory?" in *The Policy Studies Journal*, Vol. 44, No. 1, 2016.

P. Cairney and N. Zahariadis, "Multiple streams analysis: A flexible metaphor presents an opportunity to operationalize agenda setting processes" in N. Zahariadis (ed.), *Handbook of Public Policy Agenda-Setting*, Edward Elgar, Forthcoming.

D.A.S. Campbell, "Australia and Economic Nationalism" in *The Australian Quarterly*, Vol. 5, No. 20, 1933.

F. Carrigan, "The Imperial Struggle for Control of the Broken Hill Base-Metal Industry, 1914-1915" in E.L. Wheelwright and K. Buckley (eds), *Essays in the Political Economy of Australian Capitalism: Volume Five*, Australia and New Zealand Book Company, Frenchs Forest, NSW, 1983.

B. Carty, *Australian Radio History*, Bruce Carty, Gosford, 2011.

F. Clune, *Overland Telegraph: The Story of a Great Australian Achievement and the Link Between Adelaide and Port Darwin*, Angus and Robertson, Sydney, 1955.

L. Coe, *Wireless Radio: A Brief History*, McFarland and Company, Inc., London, 1996.

R.W. Connell and T.H. Irving, *Class Structure in Australian History: Documents, Narrative and Argument*, Longman Cheshire, Melbourne, 1980.

M. Coper, *Encounters with the Australian Constitution*, CCH Australia Ltd, North Ryde, NSW, 1987.

M. Counihan, *The Construction of Australian Broadcasting: Aspects of Radio in Australia in the 1920s*, M.A. Thesis, Monash University, 1981.

D. Craig, *Fireside Politics: Radio and Political Culture in the United States, 1920-1940*, Johns Hopkins University Press, Baltimore, 2000.

D. Cryle, "'Reciprocal and Universal': Robert Donald, the Press Union and Empire Wireless 1920-1933" in *Historical Journal of Film, Radio and Television*, Vol. 30, No. 3, 2010.

R. Curnow, "The Origins of Australian Broadcasting: 1900-1923", in I. Bedford and R. Curnow (eds), *Initiative and Organisation*, Sydney Studies in Politics 3, F.W. Cheshire, Melbourne, 1963.

R. Dahl, *A Preface to Democratic Theory*, University of Chicago Press, Chicago, 1956.

R. Dahl, "A Critique of the Ruling Elite Model" in *The American Political Science Review*, Vol. 52, No. 2, 1958.

G. Davis, J. Wanna, J. Warhurst and P. Weller, *Public Policy in Australia*, Second Edition, Allen and Unwin, St Leonards, NSW, 1993.

F. Donaldson, *The Marconi Scandal*, Rupert Hart-Davis, London, 1962.

S. Douglas, *Listening In: Radio and the American Imagination*, University of Minnesota Press, Minneapolis, 2004.

P. Dunleavy and B. O'Leary, *Theories of the State: The Politics of Liberal Democracy*, Macmillan Education, Basingstoke, 1987.

L. Durrant, *The Seawatchers: The Story of Australia's Coast Radio Service*, Angus and Robertson, North Ryde, NSW, 1986.

B. Dyster and D. Meredith, *Australia in the International Economy*, Cambridge University Press, Cambridge, 1990.

B. Dyster and D. Meredith, *Australia in the Global Economy: Continuity and Change*, Second Edition, Cambridge University Press, Melbourne, 2012.

M. Edwards, "The policy-making process" in D. Woodward, A. Parkin and J. Summers (eds), *Government, Politics, Power and Policy in Australia*, Ninth Edition, Pearson Australia, Frenchs Forest, NSW, 2010.

P.G. Edwards, *Prime Ministers and Diplomats: The Making of Australian Foreign Policy 1901-1949*, Oxford University Press, Melbourne, 1983.

S. Encel, *Cabinet Government in Australia*, Second Edition, Melbourne University Press, Melbourne, 1974.

H. Evans, "'The Path to Freedom'? Transocean and German Wireless Telegraphy, 1914-1922" in *Historical Social Research*, Vol. 35, No. 1, 2010.

T. Falleti and J. Lynch, "Context and Causal Mechanisms in Political Analysis" in *Comparative Political Studies*, Vol. 42, No. 9, 2009.

R. W. Ferrier, *The History of the British Petroleum Company. Volume 1: The Developing Years 1901-1932*, Cambridge University Press, Cambridge, 1982.

L.F. Fitzhardinge, *The Little Digger 1914-1952*, Volume 2 of *William Morris Hughes: A Political Biography,* Angus and Robertson, Sydney, 1979.

C. Forster, "Australian Manufacturing and the War of 1914-18" in *Economic Record*, Vol. 29, November 1953.

J. Gaddis, *The Landscape of History: How Historians Map the Past*, Oxford University Press, Oxford, 2002.

W. Gammage, *The Broken Years: Soldiers in the Great War*, Penguin, Ringwood, Victoria, 1975.

R.R. Garran, *Prosper the Commonwealth*, Angus and Robertson, Sydney, 1958.

P. Geeves, "Australia's radio pioneers – 1" in *Electronics Australia*, May 1974.

P. Geeves, "Marconi and Australia" in *AWA Technical Review*, Vol. 15, No. 4, 1974.

P. Geeves, *The Dawn of Australia's Radio Broadcasting*, Federal Publishing Company, Alexandria, NSW, 1993.

J. Given, "Not Being Ernest: Uncovering Competitors in the Foundation of Australian Wireless" in *Historical Records of Australian Science*, Vol. 18, No. 2, 2007.

J. Given, "Talking Over Water: History, Wireless and the Telephone" in *Media International Australia*, No. 125, 2007.

J. Given, *Transit of Empires: Ernest Fisk and the World Wide Wireless*, Ph.D. Thesis, University of Melbourne, 2007.

J. Given, "A 50/50 Proposition: Public-Private Partnerships in Australian Communications" in *Media International Australia*, No. 129, 2008.

J. Given, "Another Kind of Empire: The Voice of Australia, 1931-1939" in *Historical Journal of Film, Radio and Television*, Vol. 29, No. 1, 2009.

J. Given, "Wireless Politics: Marconi and the Parliament at Point Lonsdale, 12 July 1906" in *Telecommunications Journal of Australia*, Vol. 60, No. 4, 2010.

J. Given, "Born Global, Made Local: Multinational Enterprise and Australia's Early Wireless Industry", *Australian Economic History Review*, Forthcoming.

R.E. Goodin and C. Tilly (eds), *The Oxford Handbook of Contextual Political Analysis*, Oxford University Press, Oxford, 2008.

L. Gorman and D. McLean, *Media and Society in the Twentieth Century: A Historical Introduction*, Blackwell Publishing, Melbourne, 2003.

P. Gourevitch, "The second image reversed: the international sources of domestic politics" in *International Organization*, Vol. 32, No. 4, 1978.

B. Griffen-Foley, *Changing Stations: The Story of Australian Commercial Radio*, University of New South Wales Press, Sydney, 2009.

M. Haig-Muir, "The economy at war" in J. Beaumont (ed.), *Australia's War, 1914-18*, Allen and Unwin, St Leonards, NSW, 1995.

E. Harcourt, *Taming the Tyrant: The first one hundred years of Australia's international communication services*, Allen and Unwin, Sydney, 1987.

S. Harris, "Resources, development and the international system" in B. Head (ed.), *The Politics of Development in Australia*, Allen and Unwin, Sydney, 1986.

G. Hartcup, *The War of Invention: Scientific Developments, 1914-1918*, Brassey's Defence Publishers, London, 1988.

B. Harte, *When Radio Was The Cat's Whiskers*, Rosenberg Publishing, Dural, NSW, 2002.

C. Hay, *Political Analysis: A Critical Introduction*, Palgrave, Basingstoke, 2002.

B. Head, "The Australian political economy: introduction" in B. Head (ed.), *State and Economy in Australia*, Oxford University Press, Melbourne, 1983.

B. Head, "Economic development in state and federal politics" in in B. Head (ed.), *The Politics of Development in Australia*, Allen and Unwin, Sydney, 1986.

B. Head and S. Bell, "Understanding the modern state: Explanatory approaches" in S. Bell and B. Head (eds), *State, Economy and Public Policy in Australia*, Oxford University Press, Melbourne, 1994.

D. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*, Oxford University Press, Oxford, 1981.

D. Headrick, *The Invisible Weapon: Telecommunications and International Politics 1851-1945*, Oxford University Press, Oxford, 1991.

D. Headrick and P. Griset, "Submarine Telegraph Cables: Business and Politics, 1838-1939" in *The Business History Review*, Vol. 75, No. 3, 2001.

C.J. Hewitt, "Elites and the Distribution of Power in British Society" in A. Giddens and P. Stanworth (eds), *Elites and Power in British Society*, Cambridge University Press, Cambridge, 1974.

H.J. Hiery, *The Neglected War: The German South Pacific and the Influence of World War I*, University of Hawai'i Press, Honolulu, 1995.

R. Higgs, *Crisis and Leviathan: Critical Episodes in the Growth of American Government*, Oxford University Press, Oxford, 1987.

J. Hills, *The Struggle for Control of Global Communication: The Formative Century*, University of Illinois Press, Chicago, 2002.

J. Hirst, "Distance in Australia – Was it a Tyrant?" in *Australian Historical Studies*, Vol. 16, 1974-5.

J. Hirst, "Labor and the Great War" in R. Manne (ed.), *The Australian Century: Political Struggle in the Building of a Nation*, Text Publishing, Melbourne, 1999.

R.I. Hofferbert, *The Study of Public Policy*, The Bobbs-Merrill Company, New York, 1974.

D. Horne, *Billy Hughes: Prime Minister of Australia 1915-1923*, Black Inc., Melbourne, 2000.

W.G. Howell, "Presidential Power in War" in *Annual Review of Political Science*, Vol. 14, 2011.

W.G. Howell and T. Johnson, "War's Contributions to Presidential Power" in G.C. Edwards III and W.G. Howell (eds), *The Oxford Handbook of the American Presidency*, Oxford University Press, Oxford, 2009.

C.A. Hughes and B.D. Graham, *A Handbook of Australian Government and Politics: 1890-1964*, Australian National University Press, Canberra, 1968.

W.M. Hughes, *The Splendid Adventure: A Review of Empire Relations Within and Without the Commonwealth of Britannic Nations*, Ernest Benn, London, 1929.

P. Hugill, *Global Communications Since 1844: Geopolitics and Technology*, Johns Hopkins University Press, Baltimore, 1999.

W.H.N. Hull, "The Public Control of Broadcasting: The Canadian and Australian Experiences" in *The Canadian Journal of Economics and Political Science*, Vol. 28, No. 1, 1962.

A. Huurdeman, *The Worldwide History of Telecommunications*, John Wiley and Sons, Inc., Hoboken, 2003.

K.S. Inglis, "The Imperial Connection: Telegraphic Communication between England and Australia, 1872-1902" in A.F. Madden and W.H. Morris-Jones (eds), *Australia and Britain: Studies in a Changing Relationship*, Sydney University Press, Sydney, 1980.

K.S. Inglis, *This is the ABC: The Australian Broadcasting Commission 1932-1983*, Melbourne University Press, Melbourne, 1983.

L. Johnson, "Radio and everyday life: The early years of broadcasting in Australia, 1922-1945" in *Media, Culture and Society*, Vol. 3, No. 2, 1981.

L. Johnson, *The Unseen Voice: A Cultural Study of Early Australian Radio*, Routledge, London, 1988.

W. Jolly, *Marconi*, Constable and Company Limited, London, 1972.

C. Jones, *Something in the Air: A History of Radio in Australia*, Kangaroo Press, Kenthurst, NSW, 1995.

I. Katznelson, "Rewriting the Epic of America" in I. Katznelson and M. Shefter (eds), *Shaped by War and Trade: International Influences on American Political Development*, Princeton University Press, Princeton, 2002.

P. Kennedy, "Imperial cable communications and strategy, 1870-1914" in *The English Historical Review*, Vol. 86, No. 341, 1971.

J. Kent, *Out of the Bakelite Box: The Heyday of Australian Radio*, Angus and Robertson, Sydney, 1983.

J.W. Kingdon, *Agendas, Alternatives, and Public Policies*, Second Edition, Longman, New York, 2003.

S. Lawson, "Political Studies and the Contextual Turn: A Methodological/Normative Critique" in *Political Studies*, Vol. 56, No. 3, 2008.

K.T. Livingstone, "Anticipating Federation: The Federalising of Telecommunications in Australia" in *Australian Historical Studies*, Vol. 26, No. 102, 1994.

K.T. Livingstone, *The Wired Nation Continent: The Communication Revolution and Federating Australia*, Oxford University Press, Melbourne, 1996.

K.T. Livingstone, "Charles Todd: Powerful communication technocrat in colonial and federating Australia" in *Australian Journal of Communication*, Vol. 24, No. 3, 1997.

C.J. Lloyd, "Marr, Sir Charles William Clanan (1880-1960)" in *Australian Dictionary of Biography*, Vol. 10, Melbourne University Press, Melbourne, 1986.

A.L. Lougheed, *Australia and the World Economy*, McPhee Gribble, Fitzroy, Victoria, 1988.

P. Loveday, "The Federal Parties" in P. Loveday, A.W. Martin and R.S. Parker (eds), *The Emergence of the Australian Party System*, Hale and Iremonger, Sydney, 1977.

D. Lowe, "Australia in the world" in J. Beaumont (ed.), *Australia's War, 1914-18*, Allen and Unwin, St Leonards, NSW, 1995.

S. Lukes, *Power: A Radical View*, Macmillan, Basingstoke, 1974.

I.K. Mackay, *Broadcasting in Australia*, Melbourne University Press, Melbourne, 1957.

J. McMahon, "Father Archibald Shaw: The Wireless Priest" in *Journal of the Australian Catholic Historical Society*, Vol. 7, Part 3, 1983.

P. McMahon, "Early Electrical Communications Technology and Structural Change in the International Political Economy – The Cases of Telegraphy and Radio" in *Prometheus*, Vol. 20, No. 4, 2002.

P. McMahon, *Global Control: Information Technology and Globalization since 1845*, Edward Elgar, Cheltenham, 2002.

S.S. Mackenzie, *The Australians at Rabaul: The Capture and Administration of the German Possessions in the Southern Pacific*, Volume X of the *Official History of Australia in the War of 1914-18*, Angus and Robertson Ltd, Sydney, 1937.

D. Marsh, "Meta-Theoretical Issues" in D. Marsh and G. Stoker (eds), *Theory and Methods in Political Science*, Third Edition, Palgrave Macmillan, Basingstoke, 2010.

K. Marx, *The Eighteenth Brumaire of Louis Bonaparte*, George Allen and Unwin, London, 1943.

D. Mayhew, "Wars and American Politics" in *Perspectives on Politics*, Vol. 3, No. 3, 2005.

D. Mayhew, "Events as Causes: The Case of American Politics" in I. Shapiro and S. Bedi (eds), *Political Contingency: Studying the Unexpected, the Accidental, and the Unforeseen*, New York University Press, New York, 2007.

N. Meaney, *Australia and World Crisis, 1914-1923*, Volume 2 of *A History of Australian Defence and Foreign Policy 1901-23*, Sydney University Press, Sydney, 2009.

G. Melleuish, "From the 'social laboratory' to the 'Australian Settlement'" in P. Boreham, G. Stokes and R. Hall (eds), *The Politics of Australian Society: Political Issues for the New Century*, Second Edition, Pearson, Frenchs Forest, NSW, 2004.

R.C. Mills, "The Tariff Board of Australia" in *Economic Record*, Vol. 3, May 1927.

B. Minns, "A History in Three Acts: Evolution of the *Public Service Act 1999*", Australian Public Service Commission, Occasional Paper Three, 2004.

C.J. Morgan, *The First Minister in Australia: Studies in the office in crisis situations, 1920-1941*, Ph.D. Thesis, Australian National University, 1968.

A. Moyal, *Clear Across Australia: A History of Telecommunications*, Thomas Nelson Australia, Melbourne, 1984.

G. Mundy, "'Free Enterprise' or 'Public Service'? The Origins of Broadcasting in the U.S., U.K. and Australia" in *The Australian and New Zealand Journal of Sociology*, Vol. 18, No. 3, 1982.

J. Murdoch, *Sir Joe: A Political Biography of Sir Joseph Cook*, Minerva Press, London, 1996.

J. Murdoch, *A Million to One Against: A Portrait of Andrew Fisher*, Minerva Press, London, 1998.

W. Muscio, *Australian Radio: The Technical Story 1923-83*, Kangaroo Press, Kenthurst, NSW, 1984.

G. Orwell, *The Lion and the Unicorn: Socialism and the English Genius*, Penguin, Ringwood, Victoria, 1982.

G. Osborne, "Communication – see Transport" in G. Osborne and W.F. Mandle (eds), *New History: Studying Australia Today*, George Allen and Unwin, Sydney, 1982.

G. Osborne and G. Lewis, *Communication Traditions in 20th-century Australia*, Oxford University Press, Melbourne, 1995.

P. Overlack, "The Force of Circumstance: Graf Spee's Options for the East Asian Cruiser Squadron in 1914" in *The Journal of Military History*, Vol. 60, No. 4, 1996.

C. Parsons, *How to Map Arguments in Political Science*, Oxford University Press, Oxford, 2007.

G. Pickworth, "Germany's imperial wireless system" in *Electronics World + Wireless World*, No. 99, May 1993.

D. Pope, "Australia's Development Strategy in the Early Twentieth Century: Semantics and Politics" in *Australian Journal of Politics and History*, Vol. 31, No. 2, 1985.

J. Potts, *Radio in Australia*, NSW University Press, Kensington, NSW, 1989.

P. Putnis, "The Early Years of International Telegraphy in Australia: A Critical Assessment" in *Media International Australia*, No. 129, 2008.

M. Raboy, *Marconi: The Man Who Networked the World*, Oxford University Press, Oxford, 2016.

R.A.W. Rhodes, J. Wanna and P. Weller, *Comparing Westminster*, Oxford University Press, Oxford, 2009.

W.H. Richmond, "S.M. Bruce and Australian Economic Policy 1923-9" in *Australian Economic History Review*, Vol. 23, No. 2, 1983.

A.T. Ross, *Armed and Ready: The Industrial Development and Defence of Australia, 1900-1945*, Turton and Armstrong, Wahroonga, NSW, 1995.

J. Ross, *Radio Broadcasting Technology: 75 Years of Development in Australia*, John F. Ross, Port Macquarie, 1998.

C. Rossiter, *The American Presidency*, Hamish Hamilton, London, 1956.

M. Rutledge, "Leverrier, Francis Hewitt (Frank) (1863-1940)" in *Australian Dictionary of Biography*, Vol. 10, Melbourne University Press, Melbourne, 1986.

P. Sabatier, "The Need for Better Theories" in P. Sabatier (ed.), *Theories of the Policy Process*, Second Edition, Westview Press, Boulder, 2007.

G. Sawer, *Australian Federal Politics and Law 1901-1929*, Melbourne University Press, Melbourne, 1956.

B. Scharfstein, *The Dilemma of Context*, New York University Press, New York, 1989.

I. Shapiro and S. Bedi, "Introduction: Contingency's Challenge to Political Science" in I. Shapiro and S. Bedi (eds), *Political Contingency: Studying the Unexpected, the Accidental, and the Unforeseen*, New York University Press, New York, 2007.

M. Smith, "Pluralism" in D. Marsh and G. Stoker (eds), *Theory and Methods in Political Science*, Macmillan, Basingstoke, 1995.

P. Spartalis, *The Diplomatic Battles of Billy Hughes*, Hale and Iremonger, Sydney, 1983.

P. Starr, *The Creation of the Media: Political Origins of Modern Communications*, Basic Books, New York, 2004.

G. Stokes, "The 'Australian Settlement' and Australian Political Thought" in *Australian Journal of Political Science*, Vol. 39, No. 1, 2004.

P. Strangio, P. t'Hart and J. Walter, *Settling the Office: The Australian Prime Ministership from Federation to Reconstruction*, Melbourne University Press, Melbourne, 2016.

S.G. Sturmey, *The Economic Development of Radio*, Gerald Duckworth and Co., London, 1958.

P. Taylor, *An End to Silence: The Building of the Overland Telegraph Line from Adelaide to Darwin*, Methuen Australia, Sydney, 1980.

A. Thomas, *Broadcast and Be Damned – The ABC's First Two Decades*, Globe Press, Fitzroy, Vic., 1980.

M. Thomas (ed.), *The Disintegration of the World Economy Between the World Wars*, Volumes 1 and 2, Edward Elgar, Cheltenham, 1996.

M. Thomas, "Introduction" in M. Thomas (ed.), *The Disintegration of the World Economy Between the World Wars*, Volumes 1 and 2, Edward Elgar, Cheltenham, 1996.

C. Tilly, "Why and How History Matters" in R.E. Goodin and C. Tilly (eds), *The Oxford Handbook of Contextual Political Analysis*, Oxford University Press, Oxford, 2008.

C. Tilly and R.E. Goodin, "It Depends" in R.E. Goodin and C. Tilly (eds), *The Oxford Handbook of Contextual Political Analysis*, Oxford University Press, Oxford, 2008.

J. Todd, *Colonial Technology: Science and the Transfer of Innovation to Australia*, Cambridge University Press, Melbourne, 1995.

M. Toll, *Australia in the Evolution of the British Commonwealth, 1919-1939: The Impact of the International Environment*, Ph.D. Thesis, Johns Hopkins University, 1979.

A. Tooze, *The Deluge: The Great War and the Remaking of Global Order, 1916-1931*, Penguin, London, 2014.

K. Tsokhas, "W. M. Hughes, the Imperial Wool Purchase and the Pastoral Lobby, 1914-20" in *The Journal of Imperial and Commonwealth History*, Vol. 17, No. 2, January 1989.

K. Tsokhas, *Markets, Money and Empire: The Political Economy of the Australian Wool Industry*, Melbourne University Press, Carlton, Vic., 1990.

K. Tsokhas, "Wheat in Wartime: The Anglo-Australian Experience" in *Agricultural History*, Vol. 66, No. 1, 1992.

K. Tsokhas, "The Forgotten Economy and Australia's Involvement in the Great War" in *Diplomacy and Statecraft*, Vol. 4, No. 2, 1993.

K. Tsokhas, "War, Industrialization, and State Intervention in the Semiperiphery: The Australian Case" in *Review*, Vol. 19, No. 2, 1996.

R. R. Walker, *The Magic Spark: The story of the first fifty years of Radio in Australia*, Hawthorn Press, Melbourne, 1973.

J. Wanna and P. Weller, "Traditions of Australian Governance" in *Public Administration*, Vol. 81, No. 1, 2003.

H. Ward, "Structural Power – A Contradiction in Terms?" in *Political Studies*, Vol. 35, No. 4, 1987.

K. Ward, *Mass Communications and the Modern World*, Macmillan Education, Basingstoke, 1989.

P. Weller, *Cabinet Government in Australia, 1901-2006: Practice, Principles, Performance*, University of New South Wales Press, Sydney, 2007.

P. Weller, J. Scott and B. Stevens, *From Postbox to Powerhouse: A Centenary History of the Department of the Prime Minister and Cabinet 1911-2010*, Allen and Unwin, Sydney, 2011.

R. Wenzlhuemer, *Connecting the Nineteenth-Century World: The Telegraph and Globalization*, Cambridge University Press, Cambridge, 2013.

J.K. Wilson, "Government and the evolution of public policy" in S. Ville and G. Withers (eds), *The Cambridge Economic History of Australia*, Cambridge University Press, Port Melbourne, 2015.

J.R. Winkler, "Information Warfare in World War I" in *The Journal of Military History*, Vol. 73, No. 3, July 2009.

D. Winseck and R. Pike, *Communication and Empire: Media, Markets and Globalization, 1860-1930*, Duke University Press, Durham, 2007.

N. Zahariadis, "The Multiple Streams Framework: Structure, Limitations, Prospects" in P. Sabatier (ed.), *Theories of the Policy Process*, Second Edition, Westview Press, Boulder, 2007.