

Submission to
Review of Australian Broadcasting Services in the Asia Pacific

Submitter: Darryl Fallow
[Redacted]
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About the Submitter:

Darryl Fallow has over 30 years practical experience in the broadcasting industry in New Zealand, the Pacific Islands and Australia. He commenced his broadcasting career with the New Zealand Broadcasting Corporation as a technical trainee in 1967, gaining practical experience in radio and television broadcasting at studios and transmitter sites and completing a comprehensive technical training programme. From 1970 to 1975 he worked in the former New Hebrides (now Vanuatu) as a studio technician and assisted with the establishment of medium wave and shortwave broadcast facilities and training of local New Hebridean staff. During this period the importance of shortwave broadcasting, especially from Radio Australia to the people of the Pacific, was noted. From 1975 to 1979 he was employed by Radio New Zealand as a studio technician at Auckland and undertook further tertiary training leading to the NZ Certificate in Telecommunications Engineering. From 1980 until 1989 he worked at Australian satellite tracking stations at Orroral Valley and Tidbinbilla, ACT. In 1989 he completed a Bachelor of Telecommunications Engineering Degree at the Canberra College of Advanced Education.

In 1989 he joined the National Broadcasting Branch of the Department of Communications (later the National Transmission Agency) as a broadcast coverage planning engineer where he undertook planning for the establishment and refurbishment of medium wave and FM radio and television broadcast transmissions for the national broadcasters, ABC and SBS. His broadcast career continued with the privatised transmission entities ntl Australia and Broadcast Australia where he specialised in medium wave broadcast transmission, including conducting digital radio trials using the Digital Radio Mondiale (DRM) platform. He was involved with antenna proof-of-performance testing for the Radio Australia shortwave transmission facilities at Shepparton and Brandon and has a good understanding of the issues related to shortwave coverage planning, transmission and propagation. Now retired, Darryl maintains an interest in the changes that are occurring in the broadcasting industry.

Introduction:

Thank you for the opportunity to provide input into the Review of Australian Broadcasting Services in the Asia Pacific. I am pleased to see that both the Department of Communications and the Arts and the Department of Foreign Affairs and Trade have instigated this review. However, the timing of the Review is untimely – it should have taken place before the Australian Broadcasting Corporation ceased international shortwave broadcasting.

The main focus of my submission is in relation to radio broadcasting as, in the past, this has traditionally been the broadcast transmission medium that has proved most useful to the majority of people, particularly in the Pacific.

Coverage and Access of Existing Australian Media Services in the Asia Pacific Region:

Existing Australian media services in the Asia Pacific Region are a shadow of what they used to be. Radio broadcasting services to the Asia-Northern Pacific area were originally established in December 1939 as “Australia Calling”. Additional facilities were progressively added over time providing a radio coverage footprint that extended from Central Asia through to the Eastern Pacific. Over the years, international services have been cut back with shortwave services at Lyndhurst, Carnarvon, Cox Peninsula and Brandon being progressively closed. The shortwave transmissions at Shepparton, Victoria, were retained to provide radio broadcasting services to Asia and the Pacific. Eventually, the number of transmitters at Shepparton was reduced from 7 to 3. In January 2017 Australia’s ‘international voice’ transmitted via Radio Australia’s shortwave transmitters ceased with less than 2 months’ notice.

Currently transmissions are provided to 12 towns in 7 countries (Tonga, Samoa, Fiji, Vanuatu, Solomon Islands, Papua New Guinea and Timor-Leste) via local FM transmitters. General coverage of Radio Australia programmes is available via satellite to the Pacific and South East Asia (Intelsat-18) and to Asia (Intelsat-20). Radio Australia programming is also available via live internet streaming, on-demand audio and podcast downloads. So, to some observers, it might seem that there is sufficient coverage via newer technologies.

Local In-Country FM Transmitters:

The local FM transmissions in foreign overseas countries are useful. However, they have several disadvantages:

- The coverage is limited, perhaps to a maximum distance of 60-70km from the transmitter site.
- Coverage is essentially line-of-sight only and extends mainly to urban and suburban areas near the town where the transmitter is located. Only a small percentage of the national audience can receive the transmissions.
- FM transmission infrastructure is likely to fail during times of localized natural disasters (e.g. during the cyclone season)
 - During Cyclone Pam Radio Australia’s FM rebroadcast transmitter went off-air at a time when it could have been most useful.
- The transmission infrastructure is under the control of local authorities and can be switched off by the local Administration in the event that they may not agree with programme content (e.g. This happened during the Fiji coup in 2009).

Current Coverage of Local FM transmitters:

At the time of writing, the ABC had 12 transmitters located in 7 countries in the Asia Pacific region:

Fiji (2), Samoa (1), Solomon Islands (1), PNG (4), Tonga (1), Vanuatu (2), Timor Leste (1).

The potential audience in these countries alone is estimated to be about 11.7 million people. However, it is likely that coverage via FM transmitters extends to just over 1 million people. i.e. Coverage extends to ~10% of the people in the countries listed. (See Appendix A for details).

Satellite Coverage:

Coverage from the Intelstat satellite transmissions will generally be available throughout the Asia Pacific region.

- Satellite reception is useful for expatriate personnel, hotels, re-broadcasters and private individuals who can afford the cost of the satellite antennas and receivers. However, the majority of people living in the Pacific region are poor and most cannot afford the cost of satellite receiving infrastructure. Satellite transmission, while useful for some, is not seen as being useful for providing affordable broadcast coverage from Australia to the majority of people in the Pacific region. The situation would be similar for poorer people in rural areas of Asia and South East Asia. Furthermore, satellite reception is likely to be 'rained-out' during severe weather events and cyclones.

Live Internet Streaming, On-demand Audio and Podcasts:

The use of the internet for broadcasting makes Australian Broadcasting Services potentially available anywhere in the Asia Pacific area wherever an internet connection can be obtained. However, it should be noted that:

- Internet facilities are not available everywhere, and may not exist at all in many rural areas.
- The cost of internet services, where available, is expensive. Most people in the poorer developing countries of the Asia Pacific cannot afford an internet connection to listen to radio.
- It is fallacious to believe that international broadcasting is available to the majority of people in the Asia Pacific.

The Value of Australia Broadcasting to the Asia / Pacific

General:

Australia has seen value in broadcasting to Asia and the Pacific since December 1939. Initially overseas shortwave transmissions were designed to counter propaganda of the Axis powers during the Second World War. In 1944 shortwave services were relocated at Shepparton, Victoria, and operated as "Radio Australia". The site was selected because of its flat ground, good ground conductivity and its location - it is an ideal site for shortwave broadcasting to both Asia and the Pacific regions. Specialised broadband antenna systems were installed with targeted beams to various areas of the Pacific. Unfortunately, as I understand it, the Shepparton transmission site is no longer available for shortwave broadcasting.

Australia has really 'dropped the ball' as far as international broadcasting is concerned, particularly when some other countries see merit in increasing their investment in this area, at least in part because of the current geo-political situation. China is increasing its influence in many ways, including through international broadcasting (including the use of shortwave transmissions). Countering this, the United Kingdom and New Zealand have both increased their investment in international broadcasting.

There are several key questions that should be determined by this review:

- Should Australia have an international broadcasting service at all and who should determine this?

[This question is raised because the government has insisted that it was the Australian Broadcasting Corporation – not the Australian government - that made the decision to terminate Australian shortwave broadcasting to Asia and the Pacific. This raises the issue of who is actually responsible for determining whether Australia should have an International Shortwave Broadcasting Service – the broadcaster or the government].

- If Australia is to broadcast to the Asia Pacific region what should be the primary aim(s) of such broadcasts and who is the target audience?
- Who should determine the enabling policies for any broadcasts to Asia and the Pacific?
- What are the most cost-effective means for achieving the coverage required and how will this be achieved?

The Pacific Islands:

Many Pacific Islanders have been dependent on Australia's shortwave broadcasts, particularly during times of natural disaster when local electricity supplies and local radio broadcast transmissions fail. In addition to providing vital information in times of natural disasters, many people in the Pacific have been reliant on shortwave transmissions from Australia for general news and information. For some people, broadcasts from Australia have been their only source of news, as domestic broadcasting services in the Pacific often do not have sufficient coverage.

When news of Radio Australia's impending closure was announced, a petition organized by the Pacific Freedom Forum from over 1,000 petitioners was sent to the Chairman of the Australian Broadcasting Corporation, seeking to reverse the Corporation's decision to close its international shortwave broadcasting transmissions. 467 petitioners provided reasons for supporting the petition. [A copy of the petitioners' responses was forwarded with my input to the Senate Standing Committee on Environment and Communications Inquiry into the Australian Broadcasting Corporation Amendment (Restoring Shortwave Radio) Bill 2017. Furthermore, the Hon. Charlott Salwai, Prime Minister of the Republic of Vanuatu, provided input to the Standing Committee providing substantial reasons why the Committee should support the Bill favouring the restoration of shortwave radio. A copy of the comments from the petition can be provided to the current Review, if required].

Obviously, many people (including the Prime Minister of one country) saw value in Radio Australia's shortwave transmissions – and would continue to do so if transmissions could be restored.

Foreign Minister Julie Bishop has stated that the move to end shortwave services to the Pacific was an independent decision made by the ABC. She said the Government had articulated a clear vision for its engagement with the Pacific, and that the region was one of its "highest foreign policy priorities", and that Labor's record on Pacific engagement was, "one of neglect and disinterest". It is heartening to know that engagement with the Pacific is one of the government's highest foreign policy objectives - but words need to be matched by action. It seems likely that reduced government funding for the ABC was at least one significant factor in the ABC's decision to close its shortwave transmissions to the Pacific.

Furthermore, it is my understanding that the Department of Foreign Affairs and Trade accepted the broadcaster's decision and did not believe that it was necessary to inject more resources into maintaining Australia's International Shortwave Service - Radio Australia - which, to many people of the Pacific, has been seen as 'the face of Australia'.

Several things can be said:

- Partisan comments apportioning blame for the closure of Australia's international broadcasting service are of little interest to the people of the Pacific. It is clear that Australia has essentially been 'crab-walking' away from the Pacific for some time. Given the current geo-political tensions in the region, it is time to redress this situation.
- Over recent years, the government does not appear to have seen any strategic value in international broadcasting. Good international broadcasting requires specialised, dedicated quality programming and a reliable means of distribution to reach the target audience. The means of programme delivery are irrelevant without quality content. Radio Australia is now a shadow of its former self and it is questionable whether the service, in its current form, is worthwhile at all.
- Neither the broadcaster nor the Department of Foreign Affairs saw value in maintaining the Radio Australia shortwave service. Responsibility for the shortwave closure must be shared jointly by the government and the broadcaster. However, it is clear that the people of the Pacific do see value in such a service, because it is of value to them, and there is evidence they wish to have the shortwave service restored.
- Other countries see value in having international shortwave broadcasting services directed to the Pacific.
 - China Radio International (CRI) provides broadcasting services to the Pacific but does not provide specific programming for Pacific Islanders. CRI is more concerned about 'soft-selling' China to the Pacific (soft diplomacy).
 - Radio New Zealand International (RNZI) transmits via shortwave to the Pacific with specific programs of interest to those in the Pacific. Programs are mainly broadcast in English with some segments broadcast in Cook Island Maori, Samoan, Niuean and Tongan to countries which encompass New Zealand's general sphere of influence. RNZI targets the Solomon Islands and PNG for 2 hours daily in the evening with programming in English.
- Some Pacific nations have a tendency to be somewhat politically less stable and have potential to become 'satellites' of China. This should be ringing alarm bells within the government, because it is not in our interest to have failed states on our doorstep. It should therefore be in Australia's national interest to have its own dedicated 'voice' with comprehensive coverage to engage in a strategic dialogue with, and between, the peoples of the Pacific.

Asia:

Historically, Radio Australia provided transmissions to Asia in English, Cantonese, Standard Chinese (Modern Mandarin), Indonesian, Khmer and Vietnamese. As this Review is looking at Australia's broadcasting services to the Asia Pacific, it would be appropriate for government to consider how Australia might wish to engage / re-engage with the people of Asia – especially with our nearest neighbour Indonesia - and what role, if any, international broadcasting should play. Australia needs to have its own distinctive voice, particularly at a time when China is extending its influence. While high quality independent journalism and commentary is seen as essential, the role of 'soft power' and diplomacy provides reassurance and can do much to maintain friendships and promote goodwill.

As far as Asia is concerned, the Australian government needs to decide which specific nations Australia might wish to broadcast to. e.g. Timor-Leste only (currently by a single FM rebroadcast transmitter)? Or is a wider audience envisaged – e.g. Indonesia? South East Asia? The Far East? Should coverage extend west to the Indian subcontinent, given the rising influence of India? What languages should be used for broadcast? What are the most practical and useful delivery platforms to Asia?

The Role and Value of Shortwave Broadcasting Technology in the Asia Pacific

In an era of digital communication and media convergence, shortwave broadcasting can be seen by some as 'old technology' - fit for the scrap-heap. In fact, the ABC in its press-release prior to closure of the Radio Australia shortwave transmissions in January 2017 mentioned:

"The move is in line with the national broadcaster's commitment to dispense with outdated technology and to expand its digital content offerings including DAB+ digital radio, online and mobile services, together with FM services for international audiences."

and

"While shortwave technology has served audiences well for many decades, it is now nearly a century old and serves a very limited audience. The ABC is seeking efficiencies and will instead service this audience through modern technology".

Broadcasters should keep abreast of new technologies and use these where appropriate. In changing to new technologies, audience demand should also be a consideration. Shortwave or High Frequency (HF) transmissions is no older than medium wave AM broadcasting which is still currently used for domestic broadcasting. The national broadcaster would not think of closing the high power AM transmitters in Australia's capital cities because of the large coverage reach that can be achieved with this technology. A fundamental rule of broadcast planning is that the extent of existing coverage should not be reduced, particularly when changing to new technologies. A further consideration is the ability of the audience to purchase suitable receiving equipment at reasonable price.

ABC Corporate Affairs also advised 'Under the *ABC Act*, the ABC Board has an obligation to ensure that "the functions of the Corporation are performed efficiently and to the maximum benefit to the people of Australia". Within those parameters and operating with a fixed budget, the Board must make continual assessments about the appropriate allocation of funds. The ABC's history is one of constant adjustment as audience demands and technology changes, recognising that it is impossible to sustain every program and every service in perpetuity, and that investments need to be continually evaluated to ensure ongoing relevance and effectiveness.'

Indirectly, the ABC seemed to be blaming the government for the closure of shortwave services due to lack of funding, while the Foreign Minister has placed responsibility for the shortwave closures with the ABC Board. Key questions here are:

- Who is / was / should be responsible for determining whether Australia has an international shortwave broadcasting service? Should the decision rest with the broadcaster or the government?
- Does the requirement of the ABC Act that "the functions of the Corporation are performed efficiently and to *the maximum benefit to the people of Australia*" over-ride any obligation that the broadcaster might have to provide International broadcasts by shortwave transmission or other means?
 - Para 6 (1) (b) of the Australian Broadcasting Corporation Act 1983 states that it is a function of the Corporation 'to transmit to countries outside Australia broadcasting programs of news, current affairs and enrichment that will (i) encourage awareness of Australia and an international understanding of Australian attitudes on world affairs'
- Where does / should the decision for funding for international broadcasting rest? Should the government have a separate allocation for international broadcasting or does this come out of general funding for the ABC?
- What is the purpose of international broadcasting, particularly in the current era?
- What is the role of government (as distinct from the broadcaster) in determining the extent and reach of international broadcasting services?
- Should any other government entities apart from the Departments of Communications and the Arts and Foreign Affairs and Trade be involved in the Review? (e.g. Considering the current geo-political tensions in the Asia Pacific region and the strategic role that international shortwave broadcasting can potentially play, would input from the Department of Defence be useful or appropriate?)

Modern digital technologies such as Digital Radio Mondiale (DRM) are available for shortwave broadcasting and are being used. RNZI utilizes DRM transmissions for approximately 4 hours per day. These high quality noise-free transmissions to the Eastern Pacific and Vanuatu would be useful for re-broadcasting by local broadcasters. However, the high cost, power consumption and general low availability of suitable receivers would not make DRM transmissions a practical proposition for direct broadcast to the general public. Standard AM shortwave transmission is a better option. However, it should be stressed that good frequency management, with the optimum selection of frequency for the time of day, is essential for shortwave broadcasting to be successful in delivering the signal to the target area.

Some personal views:

- There is value in Australia having an International Broadcasting Service;
- Comprehensive international radio coverage is best achieved through shortwave broadcasting because:
 - It can provide comprehensive coverage to a wider audience, particularly for people in rural areas and on scattered islands where there are no other realistic options. Current FM re-broadcast transmitters and on-line broadcasts provide coverage to a very limited audience in urban areas (perhaps ~10% of the potential audience);
 - Shortwave transmission facilities are typically located outside the target broadcast area (ideally located within Australia) and are not subject to closure by foreign governments;
 - People in the Pacific have typically relied on shortwave transmissions from Australia in times of natural disaster;
 - It is a cost-effective means of providing wide-area coverage and maintaining good relationships with our neighbours in the Pacific and Asia.
- If Australia is to have an International Shortwave Broadcasting Service – and I think it should - then the government needs to determine the required coverage and how that is to be achieved.
 - The first question is “Who is the target audience?”
 - The required coverage may be based on both Australia’s strategic requirements, as well as input from prospective target nations (largely peoples of the Pacific).
- Dedicated finance needs to be provided to fund programming and transmissions.
 - If an International Broadcasting Service is to be provided, the funding should be kept entirely separate from that allocated to domestic broadcasting. [It should not have been possible for the ABC to close the shortwave transmissions and direct the savings for the provision of digital radio services in Australia].
 - There may be a case for funding allocation to be provided through the Department of Affairs. The government should have general oversight of international broadcasts, but the broadcaster should have the final say as far as editorial matters and management is concerned.
- An Australian international shortwave broadcasting service should be operated by an independent public broadcaster and not a commercial entity. [In the past contracted commercial arrangements for international television broadcasting have been problematic e.g. When the Australia Television (ATV) service was provided by Channel 7 circa 1998].
 - Traditionally, international shortwave broadcasting has been provided by the ABC and, given its resources and past experience, the ABC is probably best placed to produce programmes for international broadcasts.
 - A concern that I have is the apparent mistrust and antagonism that exists between the government and the ABC. If the government decides that international broadcasting is in the national interest, then the government and broadcaster need to work together in a co-operative way while maintaining the editorial independence of the broadcaster. This could mean that some current affairs analysis and reporting could contain critical analysis of government activities. This should be seen as part of healthy democratic debate.
 - An option could be for a separately entity, apart from the ABC, to be tasked with international broadcasting. This could be a separate division of the Special Broadcasting Service or a new public broadcasting entity specifically dedicated to international broadcasting.

Can International Shortwave Broadcast Transmissions in Australia Be Restored?

It would have been better to have carried out a review of Australian Broadcasting Services in the Asia Pacific prior to the closure of the Radio Australia shortwave transmissions. A consequence of the closure is that the dedicated shortwave transmission facilities site at Shepparton, which broadcast to both Asia and the wider Pacific may, as I understand it, be no longer be available. *If the government is at all serious about the possible re-establishment of international shortwave transmissions, it would be wise to check with the former transmission provider to see if there is still any possibility of the Shepparton site being used. The PX-Group antennas, previously used for dedicated transmissions to the Pacific, would be useful assets, if they might still be available.* Otherwise, if a decision is made to re-establish International shortwave broadcast transmissions, then different transmission sites, either within Australia or overseas, will be necessary.

There may be several options:

- I understand that the shortwave broadcast transmission facilities owned by Broadcast Australia and previously used for Radio Australia transmissions to PNG and the Coral Sea could potentially still be used. The site at Brandon, near Townsville, has two 20kW HF transmitters and two fixed HF curtain antennas – one directed to Papua New Guinea and another directed to the Coral Sea (New Caledonia, Vanuatu and the Solomon Islands).
- Shortwave transmissions to Asia present more of a challenge but there are some potential options:
 - Airtime might be leased from other overseas shortwave broadcasters with transmissions beamed to Asia and the Pacific. However, for strategic reasons, it may be desirable to retain transmission facilities within Australia.
 - It may be possible to lease air-time from another shortwave broadcaster. *Reach Beyond Australia*, located at Kununurra, has shortwave transmission facilities serving Indonesia, India, South Asia, Bangladesh, Myanmar, Korea and Japan. It is not known whether suitable airtime would be available.
 - A new shortwave transmission facility to serve Asia may be required. This might potentially be operated by the broadcaster, the Department of Defence or a private broadcast transmission provider.
 - There may be potential to establish an international shortwave transmission facility at the Broadcast Australia sites at either Roe Creek (near Alice Springs), Katherine or Tennant Creek. These sites were previously used for domestic HF shower service transmissions in the Northern Territory. The transmitters previously used for the Inland Shower Service may have sufficient frequency range to be useful for international broadcasting, but new antenna systems would be required to support international broadcasts.

The re-establishment of Shortwave broadcasting requires careful consideration but can be achieved if there is sufficient political will and a cooperative relationship with the national broadcaster. Shortwave broadcasting in New Zealand was closed for a period in the 1970s but re-opened under the foreign policy of the third Labour government in 1976. In 1990 transmission facilities were relocated and significantly upgraded with new transmitters and antenna systems. Radio New Zealand International has won several awards including International Radio Station of the Year Award in 2007, ahead of the BBC.

There is scope for Australia to once again become a significant international broadcaster, but it will require clarity of vision and a willingness to engage with peoples of the Pacific and Asia and deliver something that is seen to be of value to them.

I am happy to provide any further input should that be of assistance.



Darryl Fallow
Canberra
2 August 2018

APPENDIX A

Estimated coverage by existing ABC In-Country FM Transmitters

Country / Transmitter	Estimated Coverage	Population	% Coverage
Fiji		912,421	
Suva	88,271		
Nadi	42,284		
Total	130,555	912,421	14.3%
Samoa		197,615	
Apia	37,000	197,615	18.7%
Solomon Islands		623,281	
Honiara	84,520	623,281	13.6%
Papua New Guinea		8,414,346	
Port Moresby District	400,000		
Lae District	148,934		
Goroko District	86,517		
Mt Hagen	46,256		
Total	681,707	8,414,346	8.1%
Tonga		109,008	
Nuku'alofa	23,658	109,008	21.7%
Vanuatu		282,117	
Port Vila	45,000		
Luganville (Santo)	16,312		
Total	66,312	282,117	23.5%
TOTAL OCEANIA	1,023,752	10,538,788	9.7%
Timor-Leste			
Dili	193,563	1,167,242	16.6%
TOTAL ASIA	193,563	1,167,242	16.6%
TOTAL ASIA/PACIFIC	1,217,315	11,756,103	10.3%

Note: Coverage assumes 100% coverage of the towns / district listed are covered by the FM transmitter. Generally coverage will be less than this. Numbers are indicative. An additional FM transmitter has recently been added at Arawa (Bougainville) PNG, and is not included in the above analysis.

Areas Not Covered by In-country FM rebroadcast transmitters

<u>Country</u>	<u>Population</u>
Kiribati	118,414
Federated States of Micronesia	106,227
Marshall Islands	53,167
Nauru	11,317
Palau	21,964
Tuvalu	<u>11,287</u>
Total	322,371