ARCIA

Australian Radio Communications Industry Association

2016
ANNUAL
REPORT

NO PLANE TAKES OFF
NO SHIP SETS SAIL
NO TRAIN LEAVES THE STATION
Essential services can't operate
Without a working radio.

Two-way mobile radio is a unique, interconnected and irreplaceable part of the modern ICT world. It provides secure and reliable wireless communications networks for instant one-to-many voice and data calls over wide coverage areas.

While the radio communications industry itself isn't widely known to the public, every day, millions of Australians rely on the essential services that radio enables. What's more, this "invisible" industry contributes a whopping $3 billion+ to the Australian economy every year!

ARCIA is the voice of this $3bn industry in Australia.

Educational seminars, national networking events, position papers to government and industry, training, and career maps for industry talent are just some examples of what ARCIA provides to members.

▶ **Watch our video to learn more about ARCIA and radio communications:**
arcia.org.au/aboutLMR

ARCIA
Australian Radio Communications Industry Association

Your industry, your association
ARCIA.ORG.AU

OVERVIEW

The radio communications industry is a vital and essential part of daily life in Australia, but as it happens without people realising or seeing radio in action, it is often overlooked in importance. Two critical applications include emergency services using radio communications to protect life and property and every major resource project in Australia relying heavily on radio communications for their daily operations.

Many believe that mobile phones have replaced the need for radio communications, and in some instances this may be the case. But in most radio applications there is a need for multiple parties to communicate and mobile phones are only designed for *one–to–one* communications. When you add the levels of redundancy that 'mission–critical' and 'business–critical' applications require, they are well beyond the normal mobile phone operating parameters.

As the voice of the radio communications industry, ARCIA members are heavily involved in providing essential communication tools, from safety communications for school excursions and local swimming pool lifeguards, to recreational and industrial users, major resource projects and the mining industry and government and emergency service areas. It is our members who supply, design, install and maintain these necessary communications links—we are the vital support network behind the essential services.

There is no doubt that the radio communications industry is like most other industries —it is the people who work in the industry that make it all happen. From engineers to technical apprentices, from management and consultants through to clerical support staff, our industry comprises of highly skilled people from all walks of life.

The radio industry offers many different working environments and we offer many essential services to our clients. By giving excellent support and providing strong benefits to our clients, we are a vital part of Australia's economy. We encourage people to learn more about our industry, as we are now one of the leading proponents of 'converged communications' where the communications world merges with the Information Technology (IT) sector. It is the radio communications industry that is moving into the IT world and leading the way with equipment that is IP connected. Radio communications is an exciting and innovative industry, which is growing stronger each year.

ARCIA is continually striving to improve our industry and to enable rewarding careers for the thousands of people who work in the radio communications industry.

This Annual Report gives an overview of our Association and our industry.

PRESIDENT`S REPORT

I am delighted to present the 2016 ARCIA annual report. Over the last 12 months the Association has continued to represent the industry with a number of highlights through the year and these are mentioned in the various reports.

Firstly I commend the work that the entire committee and sub committees have done this year. Every member of the committee has made a positive contribution despite their own work pressures. The industry is indebted to the people that give up their time for the greater good. This year a lot of work and consideration has been given to membership levels and fees, web marketing and ARCIA branding, and of course training.

The new branding that ARCIA has developed and presented in 2016 is having an impact and we think it represents our industry message well. It is important that our messaging provides a platform that resonates with the different areas that ARCIA seeks to influence. We suggest that our members consider using similar branding as well.

The committee spends a great deal of time considering how to provide value to all members both city and regionally based. The industry is very diverse and we are acutely aware that some sections of the market, especially those involved in mining activities, are doing it tough at the moment. We all know that the mining boom is over but in some areas we also see new technology and new options being offered. ARCIA will continue to evolve alongside new technology options however the industry still needs to advocate the importance of communications to governments.

Over the past year ARCIA made a decision to help fund, where necessary, state Comms–Connect events, especially in Brisbane, Perth and Adelaide. We think it is very important that the industry is visible and is able to come together to discuss content, technology options and attempt to bridge the gap between vendors and users of communications. ARCIA feels this investment in these events is worthwhile but it is fair to say this program is still in a building phase. The intention is to have enough support for these events to become self–funding and this will depend on the market in general. It is important that ARCIA members provide feedback on these events and perceived value to the membership. While overall our events are well supported and numbers are growing the committee is always open to new ideas and we appreciate feedback about how to do better.

This year ARCIA also had several meetings with the Department of Communications relating to the new Radiocommunications Act. This is a major piece of policy work undertaken by the Federal Government and it is pleasing to see that ARCIA has established a position where our opinions and industry position are respected. ARCIA will need to keep working on this new Act as there is the potential for major changes to industry and the usage of spectrum in our markets.

ARCIA has an important role to play between government and industry and the relationship with the Australian Communications & Media Authority (ACMA) continues to grow. As the shape of future policy directions takes place ARCIA is recognised as the official industry body and again it is terrific to have a seat at the table and be in a position to express our views. It was especially pleasing to welcome James Cameron (Deputy Chair) and Giles Tanner (General Manager–Infrastructure) to our recent Sydney dinner to sit with industry in a social environment and be seen by our members.

ARCIA would also like to thank all our corporate partners for their continued support of the Association and the events in each state. The Association simply could not function to such a degree without this ongoing support and we really appreciate it. During our annual planning day we set aside time for partners to provide feedback directly to the committee and over the last couple of years this has been very worthwhile. The results inform the committee and provide us with some great ideas for some of the work programs. Items such as illegal imports or the use of CB radios in safety situations have arisen from these sessions.

The Association believes that it is becoming clearer that we need to take a role in advocating alongside public safety organisations for a better communications plan for Australia. In our view public safety agencies are often put in an invidious position and perhaps not fully able to outline their needs and options. With new technology horizons and capabilities appearing we think it is important that the entire industry plays a role in obtaining the outcomes that public safety agencies deserve.

Finally it is pleasing to report that the Association is in a stable financial position thanks to the hard work of the committee, the events team and of course the continued support of our members and partners. This year, due to the investment that ARCIA has made in events, our figures are slightly down, however the ARCIA committee is confident we can make future adjustments if required.

Finally I would like to thank all members for this honourable position and the feedback I receive from many people as I move around Australia.

Hamish Duff

EXECUTIVE OFFICER'S REPORT

Once again I am proud to provide a report to our members and supporters that reflects on an active and fruitful year, our Association continues to grow and increase the benefits for our members and those involved in the wireless communications industry. As mentioned by our President in his report, the support of our committee members (who are all volunteers) and our promotional partners underwrites our efforts and our successes, so please remember to thank them for their efforts. We must also thank our hard–working executive team, Hamish Duff as President, Jim Simpson as Vice–President, Andrew Wyborn as Treasurer and Anthony Blyth as Secretary, they all perform vital functions for ARCIA.

One of the important segments of our charter is to provide networking opportunities for our members to meet socially and talk about common issues and opportunities, as well as understand more about our industry. This year our industry dinners reached record numbers, over 500 at Melbourne in November, 200 in Sydney recently, around 130 in Brisbane last year and very strong numbers in both Perth and Adelaide. For an industry spread amongst many types of businesses to see these numbers of people enjoying our networking events is very rewarding. Moving into the new year we will again be trying to improve these events and offer better opportunities for industry participants.

As we look around many of the industry events we have to acknowledge that the typical age lean towards older people and we don't have enough young people coming into the industry. In the report from the Education and Training Committee, further on in this document, you will see that we are making headway in the technical training field, after a long and exhaustive exploration. In addition, we are also looking at trying to attract young people into our industry. In Victoria we have attended school careers days in Ballarat and the Wimmera and this year we had a young lady come back and tell us that as a result of our attendance at the Wimmera events she is enrolling in a communications engineering course at university.

In addition, we have also sponsored and attended a careers day at Australian National University in Canberra run by the Engineering Students Association, and we are involved in other upcoming events there. Our theme of 'No plane takes off, no ship sets sail and no train leaves the station without working radio communications' resonates with young people and they realise that smartphones are not the only essential device for communications. Even if we don't convert young people to work in the communications industry, we are educating them that radio communications are still an essential service in modern communities.

As an industry we all depend on the spectrum for our livelihood, without clean and unencumbered spectrum our industry will wither and die. Our role has always been recognised as supporting the regulator (ACMA) and working with government through the Department of Communications and Arts. The Department and the ACMA ecognise ARCIA as the peak industry body for land mobile radio (LMR)communications, and respect our opinions in regard to other spectrum segments. We also meet with ACMA staff regularly and more detail is provided in our Spectrum and Technical report later in

this document. Our interaction with these organisations is always constructive and we appreciate the respect that our Association is accorded at all levels.

This year we recognised that there was confusion regarding the equipment standards and various offerings of products to the 'Intrinsically Safe' (IS) markets, with offerings of products approved to ATEX (European) and UL (USA) standards, as well as some products to IECEx standards. From this confusion ARCIA engaged an independent hazards assessor familiar with the requirements of the IS industry to write a White Paper on the actual Australian requirements. This has been completed and a document, Electrical Equipment for Hazardous Areas (EEHA) has been released and is available for download on our website. This paper outlines the requirements for Australia and very clearly gives site operators and managers specific details on hazard assessment and the safety levels required. We would caution industry personnel that they should not attempt to instruct the user or purchaser on what equipment levels are required, but refer the users to the EEHA document so they can reach their own conclusions.

ARCIA has also taken a lead role, in conjunction with Air Services Australia and the ACMA, in preparing a document to give the 'best practice guidelines' for interconnecting VHF Airband radio systems to Land Mobile Radio systems in airport environs. This again is an area that has developed over the years but, with some installations of questionable quality and presenting interference potential, it is timely for many to be reviewed. This document should be released shortly and will most likely become the preferred format from the government agencies for installations.

Throughout the past year we have taken many opportunities to be involved with other industries and associations to further promote our industry and educate people that radio communications is an integral part of the new 'ICT world'. This involves time and effort but we believe that it is an essential part of maintaining the viability of our industry. Through our affiliation with Comms Connect we continue to agitate for better information and support for Public Safety Mobile Broadband, as an Association we are concerned that there is no apparent national voice or coordinated movement in this area and as it appears each jurisdiction is having to fight their own battles without a common national vision, we will continue to work towards assisting in this area.

As we look towards the future, there are still many battles to be fought and opportunities to be seized. Our future is exciting and our industry requires an Association that can be involved in change and lead the way ahead. It is humbling to sit quietly and review the efforts of our volunteer committee members and what they have made happen over the past twelve months and the previous seven years. Back in 2007, when the Association came together in its present form, we could not have forecast just how much we would achieve, nor would we be able to recognise the industry as it is today.

We are all part of an exciting and essential industry, be proud of who you are and what you belong to. Have a great day.

Ian Miller

MISSION

The Australian Radio Communication Industry Association (ARCIA) is an association representing individuals and professional organisations that provide and support two way radio communication and wireless based solutions, whose mission is to:

• Promote and foster future industry development and growth.
• Promote high ethical standards of business conduct within the industry.
• Create environments to promote the exchange of ideas among its membership, radio users, industry professionals and manufacturers.
• Provide educational and promotional opportunities to enable its membership to grow and advance professional standards.
• Represent and promote the interests of its membership to the radio user community, manufacturers, regulators, other associations and the media.
• Provide, from time to time, specialist services that the membership require to further develop the interests and benefit of the industry.

AIM

ARCIA's key aim is to actively canvass support and involvement from all sections of the radio communications industry right around Australia in order to become an effective voice on behalf of the industry to the Australian government and regulators.

ARCIA also strives to implement diverse, industry–specific initiatives to raise the profile, importance and awareness of radio communications in Australia.

ARCIA aims to reach out to other similar industries and organisations to improve the ability for wireless communications to be recognised as an essential service. To also supports the Public Safety sector with advice and support in their needs to have communications facilities offering the best possible communications platforms.

ABOUT THE COMMITTEE

ARCIA is made up of elected Committee and Ex–Officio members who are actively engaged in the Australian radio communications industry. They bring many years of knowledge and expertise to the Association without personal financial gain.

ARCIA Committee and Ex–Officio members work on behalf of the Association's members on issues where they believe the industry should be protected or represented and areelected based on their interest to best serve the industry as a whole.

The Association welcomes regular comments and suggestions from its members to ensure the committee continues to fulfil its role.

ARCIA Committee meets monthly to manage, coordinate and implement the Association's various activities, including Accreditation, Technical and Spectrum Issues, Training and Education, Membership and Events.

Each member is involved in various sub–committees to ensure the Association's goals are achieved.

Nominations for Office Bearers are open four weeks prior to the Annual General Meeting in August each year. ARCIA is keen to represent all sectors of the Australian radio communications industry and encourages all to attend and nominate. ARCIA ensures it maintains its national representation by offering teleconference for those interstate or in rural areas who are unable to physically attend the Association's meetings, which are currently hosted in ARCIA's head office in Melbourne, Victoria.

COMMITTEE MEMBERS

Hamish Duff, PRESIDENT

Jim Simpson, VICE PRESIDENT AND CONVENOR EDUCATION AND TRAINING COMMITTEE

Anthony Blyth, SECRETARY AND QUEENSLAND REPRESENTATIVE

Andrew Wyborn, TREASURER AND VICTORIAN REPRESENTATIVE

Ian Miller, EXECUTIVE OFFICER — CONVENOR OF SPECTRUM AND TECHNICAL COMMITTEE

Chris Stapleton, COMMITTEE MEMBER AND ACCREDITATION REPRESENTATIVE

Matt Pickering, COMMITTEE MEMBER AND SOUTH AUSTRALIA REPRESENTATIVE

Rob Howes, COMMITTEE MEMBER AND WESTERN AUSTRALIA REPRESENTATIVE

Andrew Findlay, COMMITTEE MEMBER AND NEW SOUTH WALES REPRESENTATIVE

John La Cava, – COMMITTEE MEMBER AND QUEENSLAND REPRESENTATIVE

Phil Dowd, CONVENOR MEMBERSHIP COMMITTEE AND QUEENSLAND REPRESENTATIVE

Glenn Sneddon, CONVENOR MEMBERSHIP COMMITTEE AND VICTORIAN REPRESENTATIVE

Gary Botley, COMMITTEE MEMBER AND QUEENSLAND REPRESENTATIVE

David Ruscitti, COMMITTEE MEMBER

Graham Rallings, COMMITTEE MEMBER AND QUEENSLAND REPRESENTATIVE

Denis Colbourne, COMMITTEE MEMBER

Kathryn Askwith, COMMITTEE MEMBER

EX–OFFICIO COMMITTEE MEMBERS

David Cox, COMMITTEE MEMBER AND MEMBER FINANCE COMMITTEE

Noel Higgins, STANDARDS REPRESENTATIVE AND VICTORIA REPRESENTATIVE

Jamie Baker, COMMITTEE MEMBER AND VICTORIA REPRESENTATIVE

Kit Wignall, COMMITTEE MEMBER

STATE REPORTS

NEW SOUTH WALES REPORT

ARCIA NSW participated in a number of events over the last 12 months.

RF Industries once again organised the Spurious Challenge on Sydney Harbour with the proceeds again going to a worthy charity. It was truly a great day for the industry to get together away from work. A huge thank you to RF Industries for making this happen over so many years. Many ARCIA members participated on the day as part of their own crews.

As part of our plan to connect with other industries ARCIA members supported the BICSI South Pacific conference at Darling Harbour by holding an exhibition stand. Thank you to the local members who made the time to step away from work and support these efforts. It is interesting to observe how other industries are dealing with the constant technical and regulatory change, and see that we stand up well in comparison with other industries.

A delegation of NSW and interstate members made a special visit to Riverina Tafe this year in Wagga Wagga. The ARCIA team are very impressed with the specialist RF facility on this campus and the obvious passion of the staff involved. This facility exists because of the requirement by Air Services Australia to provide RF trained staff to support critical aviation systems around Australia and ARCIA sees an obvious advantage in being able to tap into this fantastic resource. Of course, things are not that easy, but we all recognise the importance of specialist skills in our complex world and we are working on how we can achieve access to the Riverina Tafe facility for our diverse industry requirements.

In June ARCIA NSW hosted our annual Industry Dinner and Networking Event at Homebush alongside Sydney Comms Connect. We had to put up the 'house full' sign at 200 members and guests. For 2017 we will be looking to see if we can build on that great result even further. Our special guest speaker was Lance Valcour from Canada and he provided a wonderful insight into how some sections of the public safety communications community are building support for the inevitable technical changes that are coming to our industry. Events such as these are a great opportunity for collaboration and his message was well received by the audience.

The NSW Dinner was briefly interrupted by a mob from Queensland that wanted to celebrate another win in the State Of Origin, and well known ARCIA members were noted to be parading around in maroon for most of the evening. Of course, this is our fault for hosting the dinner on the same night as such an important sporting event! I feel sure however that NSW will find a way to repay our Queensland colleagues in the future.

The NSW subcommittee was delighted to award the ARCIA NSW Industry Professional of the Year Award to Mark Crosland from RF Industries. Mark has worked for RFI for a very long time and his work on the Spurious Challenge is legendary. However, it was Mark's commitment and outstanding customer service to the industry over so many years that made the choice simple for ARCIA NSW.

Hamish Duff

SOUTH AUSTRALIA REPORT

Over the past year I have had many conversations with people in our industry who are becoming increasingly frustrated with the lack of formal training that is available to young people who are wishing to join our industry.

ARCIA has taken this issue on board and is working to provide a solution to the problem for all areas of Australia. Unfortunately, the problem becomes harder to solve when companies stop employing apprentices and trainees as a result of the training limitations. This reduces the critical mass required for training organisations to run the necessary courses. Our industry is in need of new talent and I urge all employers to shoulder some responsibility in training willing, young people.

The 2015 South Australia Industry Dinner and Networking Event was once again held at the National Wine Centre and was an extremely successful and enjoyable night. The guest speaker this year was Mr. Mike Heard who formally held the position of MD CEO at Codan and is now with the Australian Academy of Technological Sciences and Engineering. Mike presented his thoughts on the way collaboration between industry bodies, companies, universities and government could be beneficial to the growth of our industry and the stakeholders within it.

This year saw the establishment of an ARCIA Industry Professional of the Year Award that is presented to the industry representative that is judged to have contributed the most to the radio communications industry in South Australia. This year it was won by Andrew Birks of Gambier Electronics. Andrew and his wife travelled to Melbourne as the state representatives for South Australia and finalists in the Peter Wallace Award.

Prior to the industry dinner, Critical Comms hosted a series of seminars which were extremely well attended and were received very well. We thank Westwick Farrow for their involvement in the day and we look forward to another interesting program in the coming year.

For further information please don't hesitate to contact me or check the ARCIA website at *www.arcia.org.au*.

Jeff Perry

QUEENSLAND REPORT

A number of Queensland Local Government Authorities have deployed digital radio systems with others planning to deploy in the coming year. Many recognise the safety aspects of digital radio; such as emergency signalling with geographic location, and lone and remote worker functionality; and the increase in operational effectiveness; through the use of wide area calling due to linking radio sites together, dedicated talking groups, individual call capability, telephone interconnect, status and text messages; make the deployment of digital radio systems essential.

The Queensland Government Wireless Network is being used by 17,500 frontline police fire and ambulance personnel across a coverage area of 30,000 km^2, stretching from Tweed Heads in the south, west to Oakey and north to Gympie. This significant network utilizes Project 25 Phase 2 technology.

In July 2016 we welcomed back to Brisbane the Comms Connect Conference and ARCIA Queensland Industry Dinner and Networking Event at Rydges, Southbank. Both events were very well attended and received excellent feedback. It is a pleasure to deliver these educational and networking opportunities for our members, and we thank all the organisers, presenters and attendees for their support.

The guest speaker for our dinner was Superintendent Mark Plath, the Queensland Police Service's Coordination and Readiness Program Manager for the 2018 Commonwealth Games. Mark impressed the audience revealing just how big these games are, how good it is for Queensland to be part of it with numerous new facilities and facility upgrades being delivered.

At the dinner we were also very pleased to present the 2016 Queensland Industry Advancement Award to Retired Senior Sergeant Paul Hopley of the Queensland Police Service in recognition of his massive contribution during his career. Congratulations Paul!

This year we welcome to the Association new Queensland members Harris Communications (Australia) Pty Ltd, Radio Wave Technical Contracting Pty Ltd, and Warren Perry and we thank all of our continuing members for your support.

ARCIA has enjoyed the support of a significant number of Queensland based committee members, and for the first time the ARCIA Annual General Meeting was held in Brisbane on 28 July, with special thanks to Telstra for providing excellent facilities for the meeting. The annual elections have resulted in continued strong support from Queensland, and we welcome new committee members Jimmy Whelan and Michael Ryan.

Anthony Blyth

VICTORIA REPORT

In previous years the activities of ARCIA in Victoria were mainly associated with the National Industry Gala Dinner and Comms Connect. Again this year our Victorian committee members were active in both of these important events, but we have also been active in other areas on behalf of our members and the communications industry in general.

Along with other state groups, this past year we selected an individual to receive the Victoria Industry Professional of the Year Award. There were several nominations but the choice was Troy Abel from JVC-Kenwood. Troy gives a lot of his personal time to talking to young people about our industry and encouraging them to consider a career in communications. Some further details are listed below, however, Troy was a popular choice and he then went on to be a contender for the coveted Peter Wallace Award at the National Industry Gala Dinner. These series of local awards are another way ARCIA is encouraging people to become involved in our industry and recognise the efforts of some of our 'quiet achievers'.

The opportunity to present the award was made possible by the local Victorian committee members organising a 'Sundowner' event at the Notting Hill Hotel in Melbourne's East.

The concept of the 'Sundowners' is to allow members and radio users to gather for a quiet drink and some light snacks at the end of the working day in a social environment and generally share information. There were around thirty people at this first event and another one will be held in late August in 2016 to again make the award for this year.

As indicated above, Troy spends his time talking to young people and over recent years the Victorian member has been involved in school careers days. This past year this included career days at Longernong (near Horsham), where around 1200 students attended for the day, and in Ballarat where close to 1000 students attended an evening session. Our aim with these events is to not only encourage students to consider a communications career, but just as importantly to educate them that communications doesn't just mean their mobile phones. It is a very satisfying few hours and young people are always keen to learn.

In addition to the school careers events, ARCIA are a sponsor of the RMIT University Electronics and Communications faculty programmes. As part of this our committee members get involved in the EnGenius program where students design and build their own electronics/communications projects. Our members are invited to be part of the evaluation and training programs, as well as attending the students presentation dinner, our thanks to Glenn Sneddon for his support of this process and also to Bob Rogers who initiated the involvement several years ago.

We are always keen to be involved in industry and community activities, so if you have any ideas on other areas we could be involved in please contact a committee member or get in touch with us through our website.

Andrew Wyborn

WESTERN AUSTRALIA REPORT

This year ARCIA welcomed Kathryn Askwith onto the state committee, expanding the level of industry engagement to promote the LMR industry in Western Australia. Over recent years ARCIA has worked with the local industry in several areas and the inclusion of Kathryn spreads the load a little and gives us better penetration.

During the year, ARCIA was invited to participate in a West Australian forum to provide industry perspective on apprentice training, engaging with local training providers and representative groups. The outcome is that all agree that training for specialist fields such as radio technicians is diminishing, for a number of reasons, but partly due to the low student numbers wishing to enter the field. ARCIA is assisting by working with national training groups, encouraging students to undertake subjects that will assist them enter into the radio field, and highlighting radio engineering as a future career.

In March this year, ARCIA again partnered with the Comms Connect team, to deliver an industry focused information session timed to coincide with ARCIA's State Industry Dinner and Networking Event, which was held at the Pagoda Ballroom. The events were well received and the format of a mini-conference during the day and our regular industry dinner in the evening led to an expanded attendance from all sectors of the radio industry. We hope to be able to continue this format of increasing industry participation but it is important that the industry supports the events to a higher degree.

ARCIA acknowledged the contribution to be LMR industry of Barry Kitson, WA Police Communications (retired) and Volunteer Surf Life Saving Communications Advisor, by presenting him with the 2016 WA Industry Professional of the Year Award for outstanding achievement. The award is recognition of his efforts in co–ordinating large scale deployment of LMR solutions, and his lifetime support of community safety through the WA Life Saving Association. Barry's nomination places him in the running for the national Peter Wallace Award, which will be announced at the Annual ARCIA Industry Dinner to be held in Melbourne later this year.

We also celebrated success at the quarterly networking Sundowner Events,, giving members an opportunity to network in an informal environment. In late June we were lucky enough to have an information evening in conjunction with the ACMA Field Operations staff, which gave an opportunity to learn more about interference management and also the requirement for third–party authorisations on sub–licencing of frequencies. The following evening we took part in a joint presentation to the Institute of Instrumentation and Control Automation, which was again a great opportunity to strengthen the bonds between ARCIA and the ACMA.

We thank members for their support over the past year, in what have been challenging times for the industry, and look forward to continued prosperity in the coming year.

Rob Howes and Kathryn Askwith

OUR WORK

SPECTRUM AND TECHNICAL

Again this year we have maintained close contact with the ACMA and Department of Communications & Arts (DoCA) to ensure that the requirements of the LMR industry are kept to the forefront of policy discussions. Late in 2015 the Minister announced a review of spectrum management and the Radiocommunications Act, which had been in place since 1992. ARCIA responded to early discussion papers and took part in the review process. This year we met with the DoCA officers on two occasions for formal meetings, as well as several informal discussions. The Department has welcomed our inputs in response to discussion papers and commended ARCIA for presenting input which reflected an overall spectrum management situation and not just LMR specifically. At this stage the review is digesting information from responses and formal meetings and further action will follow once the new Government is established. ARCIA expects to have more involvement in this process over the coming year.

As usual, we have held regular meetings with senior management from the ACMA and discussions cover a wide range of topics, plus we also have several informal meetings each year. In particular there have been two developments during the past year that are worthy of mention—
• We have become involved with the Field Operations section of the ACMA and have participated in joint presentations to the Institute of Instrumentation and Control Automation (IICA) on spectrum regulation and interference management. This is an excellent opportunity to develop our relations with other bodies as well as cement our relationship with the ACMA.
• During the year, as a result of interference tracking by the ACMA, it was discovered that the quality of radio installations at some airports was well below the level of 'industry best practice'. ARCIA requested a meeting with the ACMA and Air Services to discuss the application of interconnect systems between local LMR and VHF Airband (AB)radio systems. Out of this meeting it was agreed that ARCIA would take the lead on preparing a 'Code of Practice' for the interconnection of these systems, with the accent on minimising the risk of interference, especially to AB services. This document is now at the review stage and should be released later in 2016. This is an excellent example of the industry body taking a lead role with government agencies to achieve a common goal of better communication services.

As a result of the close working relationship with the ACMA we are now assisting the ACMA in many ways. One particular area where the ACMA Field Operations staff sought ARCIA help was with regard to 'third–party authorisations' of radio system licences, where many industry suppliers will hold a licence and allow the end user to use that licence. For this to be legal, the end user must be given a written authority from the licence holder explaining some basic items, such as actual frequency of use and the permitted usage area. After finding that many licensees were not following the legal requirement, the ACMA approached ARCIA and two brochures were produced to explain the requirements. ARCIA has copies of these brochures and we provide them at all of our exhibitions in conjunction with Comms Connect and others.

Throughout the year we get many technical queries, some of which apply to our industry segment, others which may not. Each of these queries gets a response

and where we can help we provide the information. We are also called on from time to time to assist others with technical questions, or to advise in general terms on communications needs or clarify information. As mentioned above we have developed a White Paper on EEHA regulations to guide the users of Intrinsically Safe equipment, and our next project will be to prepare a document on UHF CB and how it should (or specifically should not) be used. There is much confusion in this area and most industry personnel do not understand the particular requirements within the UHF CB standard or the limitations they place on using UHF CB frequencies in commercial radios. We hope this guide will be available in the second half of 2016 and we hope that it will be the start of seeking to develop a separate UHF Business Band to cater for the quasi business users of CB radio such as civil construction projects. Standards Australia RC006 and RC004 development committees held back to back meetings on 22/23 July in Sydney, 21/22 October in Melbourne and on 17/18 February in Christchurch.

The RC006 (Land mobile and General) chaired by Noel Higgins (For ARCIA) progressed the following:
• Developed an amendment to the recently published AS/NZS4295 standard to correct editorial errors which were not identified by the ACMA during the public comment period.
• Revised the VHF AM aeronautical standard AS/NZS 4583 as an ARCIA sponsored project, to become a direct adoption of ETSI EN 300 676-1:2011 with some error corrections.
• Developed a draft AS/NZS 4768 part three standard for digital land mobile equipment, (ARCIA sponsored) to extend coverage to the latest "mature" international standards to include non–continuous envelope emissions and narrower 6.25kHz channels. (Now on hold)
• Started a major revision of AS/NZS 4268, a project sponsored by the ACMA, to encompass recent changes made to the LIPD class licence and move the structure of the standard to one that will eventually update automatically by directly referencing requirements in a "re–vamped" LIPD class licence.

Also of note: Standards New Zealand is now a business unit within the Ministry of Business, Innovation and Employment (MBIE) in New Zealand and the Department of Communications has undertaken a review of radio communications regulation in Australia. The outcome of the review will be a new Radiocommunications Act which will incorporate changes to both licensing and equipment supply (including standards) to better manage the risks associated with emerging technologies and changing spectrum usage. The ACMA has advised the standards committees (RC004 and RC006) that the new arrangements for equipment supply will require a reconsideration of the committees' interaction with the ACMA. This could include a more advisory role for the committees (e.g. recommending to the ACMA standards for inclusion in the ACMA's regulatory arrangements).

Ian Miller and Noel Higgins

ACCREDITATION REPORT

ARCIA Accreditation is a program where ARCIA undertakes an independent audit of an applying radio industry related business and verifies that the company meets certain trading and company criteria.

The criterion audited includes:
• Length of time that the company has been in business
• Health and safety processes
• Training programs
• Quality assurance process
• Company structure and ownership
• References from other companies traded with
• Company process, training policy, ownership and insurances held

ARCIA Accreditation adds value to the accredited company by providing a level of confidence to prospective customers, project work and tender evaluations.

The ARCIA website publishes a list of accredited members and a brief summary of the company and its line of business. The list can be found here — *http://www.arcia.org.au/accreditation/accredited-members-register.html.*

Accreditation is reviewed every three years and an applicant must be a member of ARCIA to proceed with the application.

Accreditation fees are invoiced annually along with the ARCIA membership renewals. The separate accreditation component is clearly identified.

Newly accredited members for 2016 include Koinonia Enterprises Pty Ltd and MCS Digital Pty Ltd. ARCIA welcomes these companies on board.

ARCIA encourages other companies seeking a level of valuable industry recognition to contact ARCIA and discuss the Accreditation Program.

Glenn Sneddon, Andrew Wyborn and Chris Stapleton

TRAINING AND EDUCATION REPORT

Business disruption driven by technological change is challenging every industry business, the way we deliver education, even govern is driving fundamental change. As a result, there are fewer people coming into the sector and those who do, lack support in terms of funding to get started, but also for further training and quality assurance. The workforce is also ageing and very few trainees or post–school students are entering the industry. In the commercial world, we are currently experiencing a convergence of technologies, from LMR, Telecommunications, and IT, via the adoption of IP–based technologies, utilising GPS and software applications in LMR solutions, as well as the planned deployments of LTE and eventually 5G.

We believe that a collective effort is required from our industry and its members to offer attractive recruitment packages to potential candidates. The attraction of new and in particular younger people 'with the right attitude' should be done in conjunction with parents or carer's who can endorse the outline of their future 'career path' from an early age. ARCIA has produced a careers brochure that can form part of a package, this can be downloaded from the ARCIA website. We are actively engaged in increasing technology awareness by visiting numerous schools' careers seminars, and hosting or partnering industry events nationwide.

Our industry is now operating in a changed environment where IP–connectivity is used in most of our industry products i.e. base stations, log servers, DAS, BDAs, and the use of APPs is part of our daily routine. To solve problems there is a growing requirement to develop universal skill–sets and form a base of qualified technical engineers and support staff. Training must be at all levels and existing staff must be brought up to the required qualification levels to meet the development of new and emerging technologies. A diverse range of training methods is being deployed to assist with these demands.

In order to retain staff, employers must provide an environment where employees want to grow and excel and become product experts. We need to develop their people skills so that they can understand customer requirements and be able to meet their needs. Qualified people are required to build, maintain and service networks and must be well remunerated for their skills and qualifications.

During May, 11 ARCIA representatives from as far away as Cairns and Perth travelled to Wagga Wagga to talk to Riverina TAFE about the next stages of developing a nationwide industry training program. Discussion focused on how ARCIA, if set up as a GTO (group training organisation), could self–manage administration, recruitment, employment, and with assistance from Regional Advisors, coordinate government funding applications for trainees. Riverina TAFE uses blended training delivery methods and currently caters for students on a national and international basis.

The talks were fruitful and of much value to both the ARCIA representatives and also the Riverina TAFE staff. In our long and winding road towards proper radio theory training for our industry, we are now beginning to see some real progress being made.

Jim Simpson and John La Cava

MEMBERSHIP REPORT AND MEMBERSHIP PIE CHART

A review of membership categories was undertaken during the year with a reduction in the number of categories, aligned to typical industry employee numbers and simplifying the process. Fees were also revised for the first time in nine years for corporate members which is noteworthy given the increase in ARCIA activities such as dinners, industry collaboration and white papers over that time.

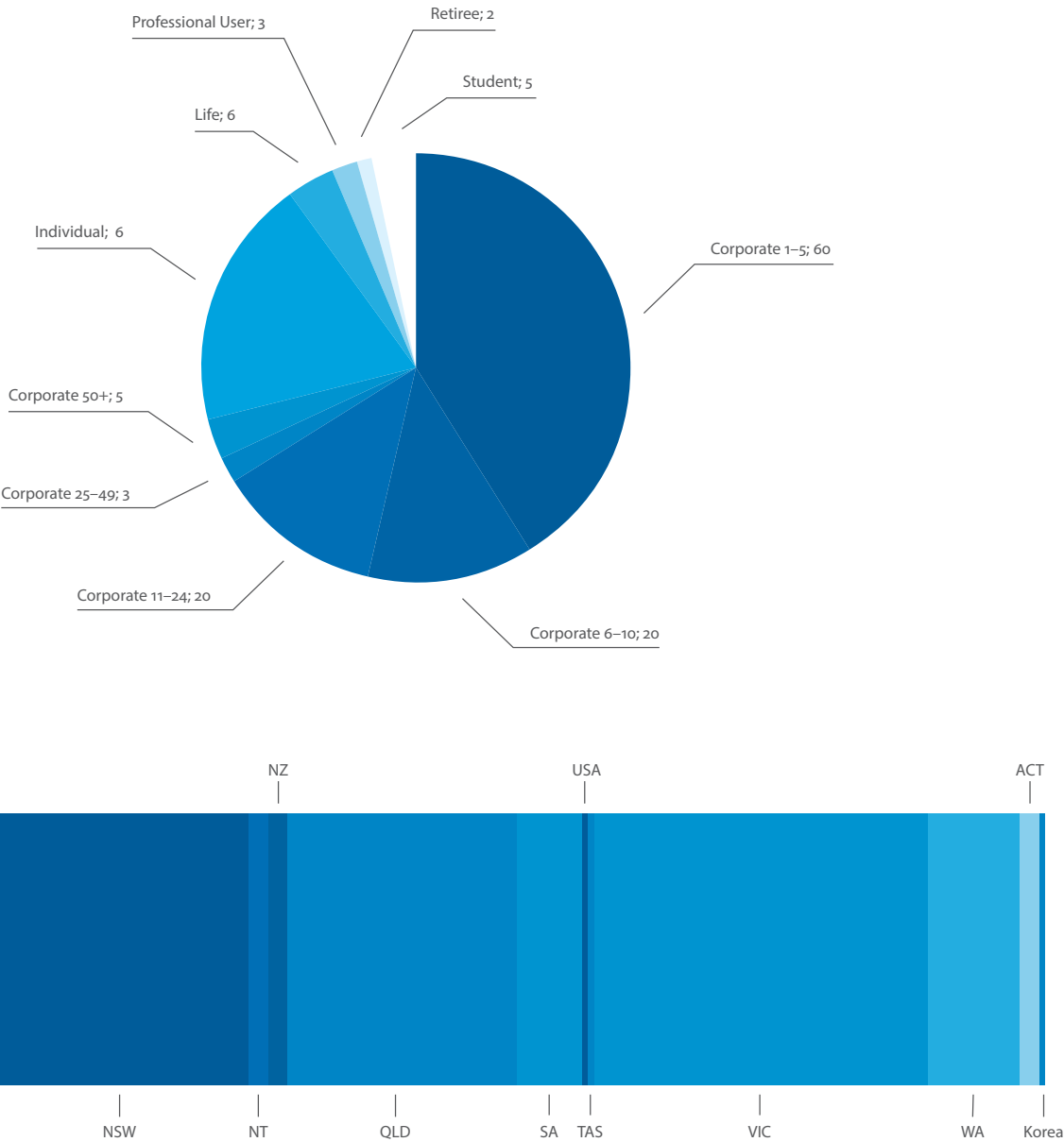The new membership levels for financial year 2016/17 will be as follows;

MEMBERSHIP LEVEL	PREVIWOUS	NEW
Corporate 1–10	Between $ 275 and $ 550	$ 300
Corporate 11–24	Between $ 1,250 and $ 4,000	$ 1,500
Corporate 25+	$ 5,000	$ 5,000
Individual	$ 99	$ 99
Life	Free	Free
Professional User	$ 250	$ 250
Retiree	$ 25	$ 25
Student	$ 15	$ 15

We encourage members to renew for the new financial year based on the level of membership that represents the overall number of staff in their organisation.

Membership numbers remain at a similar level to last year with a number of business acquisitions resulting in cancellation of memberships as they consolidate into single memberships. An increase in memberships for the corporate 1 to 5 was noted after the various industry events, which is a positive indication that the events hold value for the industry. A breakdown of membership by category and location is shown in the charts below.

A small survey of members was undertaken to solicit feedback and gather ideas on how ARCIA can assist members, what their areas of interest are and their preferred methods of communication.

Key outcomes were:
• Continue networking events
• Participate in regulatory matters and relay information and outcomes to members
• ARCIA website as information source for industry
• Certificate of Membership

In line with the small survey, the ARCIA website has already undertaken changes and a Certificate of Membership has been drafted and will be available to members for them to demonstrate their commitment to the industry.

The survey will be revised and expanded to include all financial members. We urge all members to complete and survey so that ARCIA can use the information to develop and implement strategies to benefit members.

Phil Dowd and Graham Rallings

EVENTS REPORT

The Annual Industry Gala Dinner, ARCIA's flagship event for the year, was held in Melbourne at the Melbourne Convention and Exhibition Centre on 2 December 2015. It's always a popular event, but this year it set a new record with five hundred industry personnel enjoying a great night. Well known media personality, Tommy Deans was the Master of Ceremonies — he was very popular and entertaining. Life Membership was awarded to Martin McLeod who had served as Association Vice — President for five years and has been instrumental in the growth of the Association.

Industry Awards are always an important part of the Industry Gala Dinner and this years winners were —

PROFESSIONAL SALESPERSON – Mark Waite – Pullan of Progility
CUSTOMER SERVICE – Dina Roubis of Telechnics
TECHNICAL EXCELLENCE – Beau Heron of Radlink
ENGINEERING ELEGANCE – Mark Thomas of Zetron
APPRENTICE/TRAINEE – Shay Peled – Bolger of Miles Electronics
NEW TALENT – Anita Jay of Tetracom
COMMUNITY SERVICE – Chris Stevens of Surf Life Saving Australia
PETER WALLACE *'Industry Professional of the Year'* * – Nick Stefanou (QLD)
JONATHAN LIVINGSTONE SEAGULL – Leo Doherty

* The inaugural '*Industry Professional of the Year*' award was selected from the five winners of the various regional award winners — Ralph Dix (WA), Bruce McDonald (NSW/ACT), Nick Stefanou (QLD), Andrew Birks (SA/NT) and Troy Abel (VIC/TAS).

The event continues to grow and offers an exciting window onto the radio communications industry, the night encompasses all the best we have to offer and reflects the excitement and potential of this important industry. Many attendees commented on the event as being the 'best Gala Dinner ever'. In conjunction with the Comms Connect Conference it is now a '*not to be missed'* occasion!

Throughout the year ARCIA holds dinners and events. These are important to the industry as they provide a unique opportunity for professionals in the industry to network.

In 2015 – 16 they key events included:
• NSW Industry Dinner and Networking Event in conjunction with Comms Connect 22 June 2016, Novotel, Sydney Olympic Park
• Perth Sundowner, 15 June 2016, Generous Squire, Perth
• Comms Connect Expo and RFUANZ Dinner, 14 April 2016
• WA Industry Dinner and Networking Event in conjunction with Comms Connect 8 March 2016, Pagoda Resort and Spa
• Perth Sundowner, 16 September 2015, Generous Squire, Perth
• SA Industry Dinner and Networking Event in conjunction with Comms Connect 23 September 2015, National Wine Centre, Adelaide

Ian Miller

COMMUNITY INVOLVEMENT

This year our community involvement has turned more towards becoming involved in the schools and young people's education outside of our own Association training initiatives. For several years now we have been a sponsor of RMIT University School of Computer and Communications Engineering projects, the main event of which is EnGenius. The EnGenius program encourages students to undertake development projects to do with the Information and Communications Technology (ICT) world and they are then judged by industry and given encouragement to increase their involvement and career options within the ICT sector. We have been proud to be a sponsor of this program and there have been many quite unique outcomes from the students projects.

This year we have also become sponsors of the Engineering Students Association (ESA) at Australian National University in Canberra. During early 2016 we attended their annual careers day in Canberra and it was great to have engineering staff from both RFI and BAI Group with us to talk to students. There was quite a high degree of interest and we understand that several students made approaches to industry suppliers regarding internship opportunities. As we go to print we are working with ESA again on their Science, Technology, Engineering and Maths (STEM) team targets for projects to devvelop technology and sustainability. This particular project will also encompass some of the senior students from secondary schools around Canberra.

For the past two years we have also been involved in careers events in two Victorian regions, Ballarat and Wimmera. In both cases there were over 1000 students attending the events and we have found that young people are interested in communications, especially when we take them beyond the ubiquitous mobile phone and highlight other communications areas. Our primary theme of transport communications (No plane takes off, no ship sets sail, no train leaves the station) was developed as a result of talking to young people and how the concept resonates with them. After being at several of these events we are now finding that students remember us from previous years and there is a much higher recognition of communications. We see our role in these events as being to not only encourage young people to join our industry, but equally as important to get them to understand that communications platforms other than mobile phones are essential in our daily lives.

Although we have previously sponsored a boat in the annual Spurious Challenge in Sydney, there has always been a difficulty in managing to crew the boat, so this year we stepped back and allowed our NSW members to take the main role in this important charity event. We also know that several of our members take part in regular charity events such as 'Cupcake Day' and similar types of events, and we are pleased to see our industry taking this community assistance view.

ARCIA is keen to be involved in community events and if you are aware of suitable options being available that offer ARCIA exposure, as well as promoting community benefits, please contact us through a committee member or the website.

Ian Miller

TREASURER'S REPORT

The Association has once again met all of its financial commitments this financial year and as at 30th June 2016 is in a sound financial position for next year with a balance of just over $100k.

Our major expenditure of the Association continues to be our national events such as the National Gala Dinner held in Melbourne and our state based dinners. These once again represented 60% of our costs with many events being subsided by ARCIA to help our member's network with other radio industry users.

The total expenses of the Association this year was up by $50,000 on last year to just over $370,000.00.

The Association's income was just over $300,000 for the financial year 2015–2016, an $80,000.00 decrease from the previous year, however, in line with previous years.

The Association's income, as with past years, is predominantly made up from our partners 30%, our members 35% and ticket sales to our events 35%.

As the Association continues to grow and its services are increasing we have also seen a modest increase this year in the costs of our part time staff, including our Executive Officer, Accounts Payable and Administration roles.

The Finance Committee continues to ensure that all expenses are in the best interest of our members and our Association.

I would like to thank all of our financial supporters of the Association as without your generosity we would not be able to function on the scale in which we do.

Andrew Wyborn

WEB REPORT

Discussions began at the ARCIA planning day in February to begin the process of reviewing and updating the current website. Our objective is to make the website more marketable in the current environment, and present the industry in a better light to a wider range of stakeholders who are becoming more important to our industry environment. These stakeholders include government entities, end users, manufacturers and suppliers, and the ICT industry.

The goal of our website is to provide information and news to the industry, provide access to support mechanisms for members, advertise events, and centralise peripheral interactions via other forms of media (LinkedIn page, LinkedIn discussion group, Twitter, email campaigns).

We have made some updates in the past few months to modernize our homepage and to launch the Intrinsic Safety Radio Equipment Whitepaper. New forms were created for subscription–based access to this paper, so we can monitor how our documents are accessed and collect more information about who is interested in the information we publish and how they may be using it. We have held back on making major changes as it has been decided a new website is necessary to provide all of the functionality required to achieve our goals and allow us to manage updates efficiently for the long term.

The committee has been busy determining the full requirements of the website, mapping out a development plan and timeline, and speaking to potential web developers about our requirements and budget. We are in the process of finalising quotations and proposals, and selecting a web developer. Once we have made our selection, we will need to determine formatting, structure, navigation, pages, and content. Our greatest challenge and most time consuming task will be in redeveloping and rewriting content. We plan to have the website fully developed and ready to launch by the end of the year, pending approval of funds and availability of content.

Kathryn Askwith

DIAMOND

EVENT PARTNER

PLATINUM

GOLD

SILVER

BRONZE

DIAMOND

EVENT PARTNER

PLATINUM

GOLD

SILVER

BRONZE

STAKEHOLDER ENGAGEMENT REPORT

ARCIA engages with its members and industry interest groups throughout the year using a variety of different channels. We use mediums that are relevant, appropriate and that best allow our stakeholders to engage with us.

Our Website
The Association's website *www.arcia.org.au* is the main channel in which members and industry groups engage with us about our membership, accreditation program, events, news and other interest areas.

LinkedIn
Another main avenue in which ARCIA seeks to engage with stakeholders is through the LinkedIn group called the Australian Radio Communications Industry Association. The group is growing daily and serves as a great medium for stakeholders to share information with each other as well as the Association. At the end of the 2015–2016 fiscal year, ARCIA had 1121 members in this group, a 9% increase from the last financial year.

Connect with ARCIA and others in the industry on LinkedIn. Just login and search for the Australian Radio Communications Industry Association (ARCIA) group.

Twitter
ARCIA's Twitter account is used to further our engagement with stakeholders. All interested parties can follow ARCIA at *@ARCIAorg* and continue the conversation with us by including the hashtag *#radiocomms* in their tweets.

Other mediums ARCIA uses to engage stakeholders:
• Association and Industry News
• Monthly eNewsletter
• Regular member announcements
• Email, phone, mail and Skype
• Face–to–face meetings and teleconferences
• Regional networking events
• Our Annual Report and surveys
• Digital media and print including industry magazines
• Industry events including Comms Connect and our national industry dinners and networking events.

Contact us
General — *info@arcia.org.au*
Events — *events@arcia.org.au*
Spectrum and Technical — *technical@arcia.org.au*
Accounts — *accounts@arcia.org.au*

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9/21 Huntingdale Road
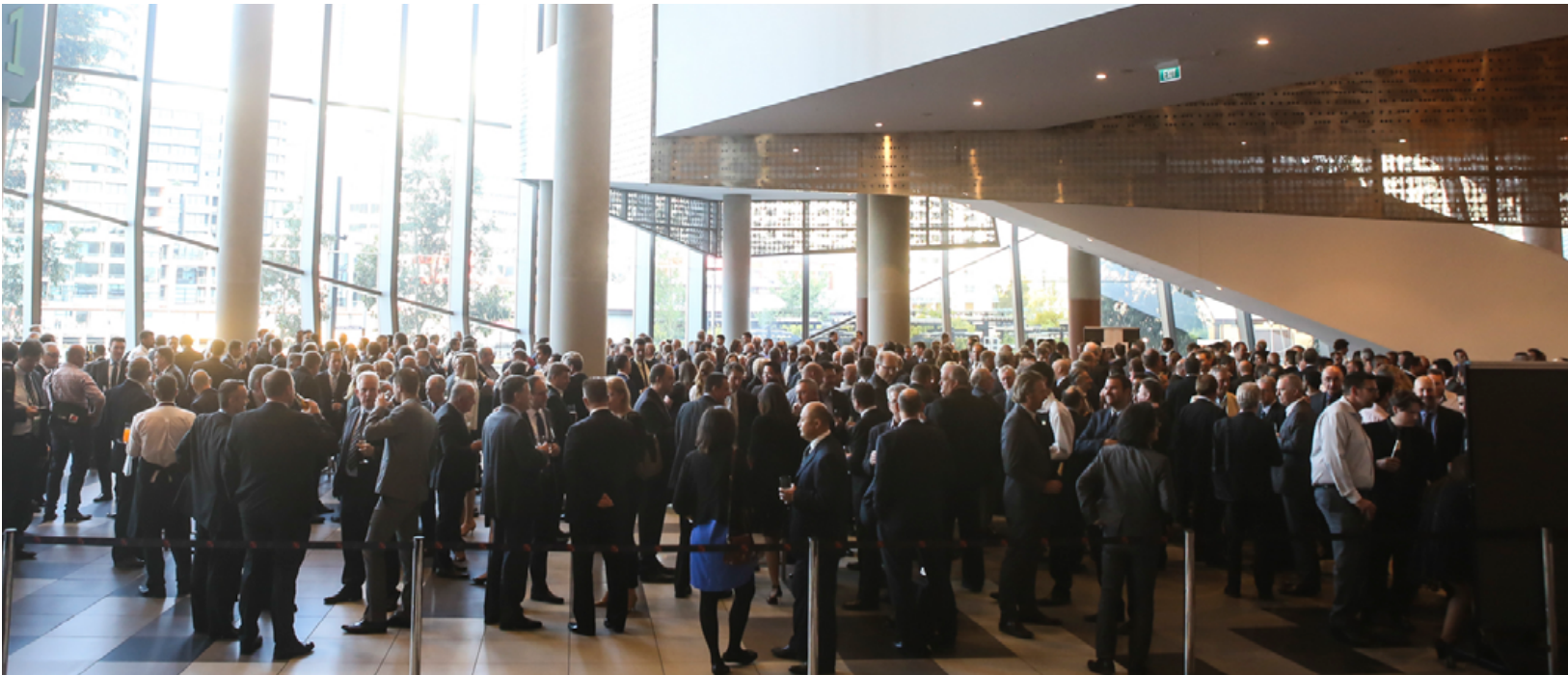Burwood, Victoria, 3125
Australia

GET INVOLVED

ARCIA is seeking interest from members of the Australian radio communications industry who would like to join ARCIA state representatives in NSW, QLD, SA, VIC and WA to form state working groups. ARCIA is also interested in hearing from those who would like to represent the radio communications industry in TAS and NT or those who would like to join one of the Association's sub–committees.

As you have read in this report, state representatives and sub–committees play a major role in managing, coordinating, implementing and promoting the Association's various activities and initiatives such as the Accreditation Program, Technical and Spectrum Issues, Training and Education, Membership, Events and other areas that best serve the industry as a whole.

By joining a state working group or sub–committee, you will contribute to having a beneficial effect on the industry at a local and national level. Your knowledge of and commitment to the Australian radio communications industry will be well regarded and any amount of time you can dedicate to your involvement with the Association will be recognised.

To get involved, contact a state representative directly or email us at *info@arcia.org.au*.

ABOUT THIS REPORT

This is ARCIA's seventh annual report, which documents the Association's performance over the 2015–2016 financial year.

This report has been published to inform our stakeholders about our activities and will be published annually.

As part of our commitment to sustainability, this report is published online at *www.arcia.org.au* with a small number of copies produced in hard copy to satisfy some of our stakeholder needs.

The Association's financial information is being released separately and will be available to members.

Comments about this report are welcome and should be directed to *info@arcia.org.au* or:

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