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PACMAS: state of media and communication report: regional

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PACMAS
Pacific Media Assistance Scheme

Regional

STATE OF MEDIA & COMMUNICATION REPORT 2013

International Development
Australian Broadcasting Corporation

Australian AID

PACMAS:
State of Media and Communication Report
By the Pacific Media and Communication Research Consortium

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Disclaimer:

Any opinions represented in this report are those of the authors and research participants and do not necessarily reflect the views of the Australian Government or the Australian Broadcasting Corporation.

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About the Report

The Pacific Media Assistance Scheme (PACMAS) is an AusAID-funded regional media program that supports better governance in the Pacific through the development of a diverse, independent and professional media, promoting informed and meaningful public discourse region-wide. The program is managed by the Australian Broadcasting Corporation (ABC) and is based in Vanuatu.

The PACMAS State of Media and Communication Study was undertaken through a partnership between RMIT University (Australia), the University of Goroka (UoG, Papua New Guinea) and UNITEC (New Zealand). The study was commissioned as a baseline study to inform PACMAS activities across 14 countries. The study was developed and undertaken between June 2012 and April 2013, and included visits to each country to conduct a total of 212 individual interviews, and the establishment of a Panel of Expertise for verification.

Study design

The PACMAS State of Media and Communication Study is designed to provide baseline measures on the key evaluation questions developed by PACMAS across four components:

- Media Policy and Legislation
- Media and Communication Systems
- Media Capacity Building
- Media Content

For this reason, observations on the four PACMAS components should be understood to represent changes in the media and communication environment based upon an investigation focused on the PACMAS strategic activities. The following sections are organised according to the long- and short-term outcomes specified in the PACMAS Monitoring and Evaluation Framework (PACMAS MEF).

Part One of this report explores these four components ***through*** six strategic activities, which were announced by PACMAS in May 2012:

- Technical and Vocational Education and Training (TVETs);
- Pacific Emergency Broadcasting Systems (PEBS);
- Pacific Communication Technicians;
- National Media and Communication Associations;
- Non Communicable Diseases (NCDs); and,
- Climate Change.

While the strategic activities overlap the four components in some cases, their main connections are illustrated in the following diagram, produced by ABC ID.

Strategic activities and PACMAS Components

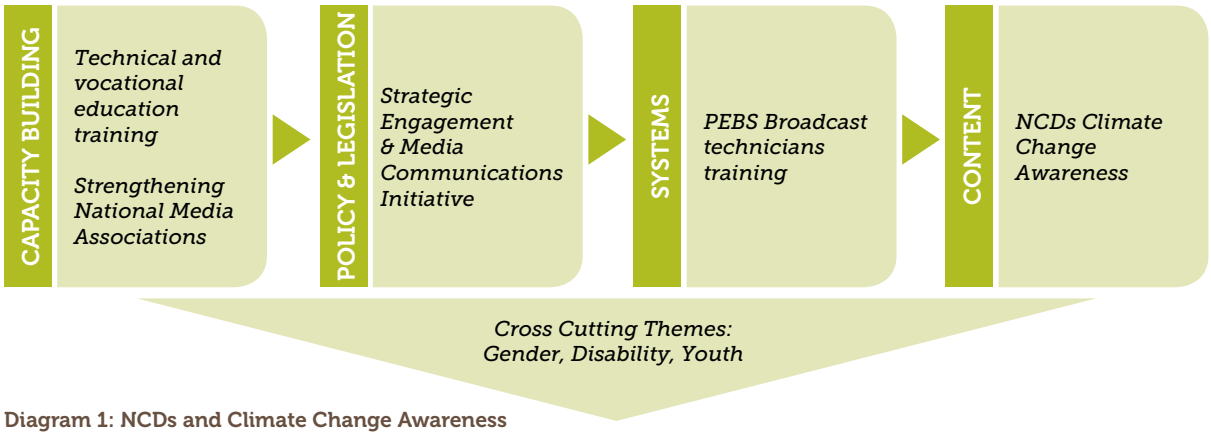


Diagram 1: NCDs and Climate Change Awareness

In addition, three 'cross-cutting' themes were included in the study – gender, disability and youth. These were explored specifically in relation to the Media Content component, through the thematic areas of NCDs and climate change. However, throughout the study other strategic areas are also examined through the lens of these cross-cutting issues where relevant.

Through an exploration of these activities and components, the study provides information on the current state of media and communication in the Pacific. The aim of the study is to support the development of diverse, independent and professional media that promotes informed and meaningful public discourse throughout the region. To support such development, the study aims to be relevant and useable for PACMAS and all people and organisations working towards the same goals across the region. This research must acknowledge the dynamic nature of media and communication environments across the Pacific. It must also acknowledge that a broad study covering 14 diverse countries will inevitably present only a partial picture. The breadth and scope is to some extent at the expense of depth. Over time, additional studies and materials will be required to extend its scope and embrace emerging and not yet knowable developments. Following the commitment by PACMAS to broadening its focus to include Communication for Development (C4D), the baseline deliberately encompasses all forms and modes of communication, including community radio, information and communication technology (ICT) initiatives, and processes such as community dialogue along with the more traditional mass media.

The Report

The regional report is organised in two sections:
Part I: The first section provides a regional overview of the PACMAS key components (Media Policy and Legislation, Media Systems, Media Capacity Building and Content) as they emerged through interviews focused upon six PACMAS strategic areas.

Part II: The second section of the report includes the detailed methodology and research design. This section also provides an ***overview*** of the research participants in the study and the list of Panel of Expertise (PoE) members. An appendix is provided at the end of the report for further details on sources and resources used to inform the research.

- The report draws on the following data: 212 Interviews across 14 countries using questionnaires developed from the six strategic activity concept notes, and in relation to the PACMAS components and Monitoring and Evaluation Framework.
- Verification and questionnaire responses from a Panel of Expertise (28 members).
- Desk-based research, including literature searches, online searches and reviews of policy reports.

All participants received information on the reasons for and uses of the research.

The appendix also includes further details on sources and resources used to complete the research. This section also provides a summary of the research participants in the study and the list of Panel of Expertise (PoE) members.

- The report draws on the following data: 212 Interviews across 14 countries using questionnaires developed from the six strategic activity concept notes, and in relation to the PACMAS components and Monitoring and Evaluation Framework.
- Verification and questionnaire responses from a Panel of Expertise (28 members).
- Desk-based research, including literature searches, online searches and reviews of policy reports.

The research was undertaken following ethical procedures. All participants received information on the reasons for and uses of the research, and their role in it. Research participants completed consent forms, and are not identifiable in the report.

There are also individual reports for each of the 14 Pacific countries included in the study. Each country report provides basic background information, an overview of the media and communication landscape and discusses in detail media and communications technicians; emergency broadcast systems, Technical and Vocational Education and Training (TVETs), media associations, climate change and Non-Communicable Diseases (NCDs). Each report also highlights areas that are notable and/or illustrative of broader issues in the local or national communicative ecology.

Characteristics and Limitations of the Study

The study is about the current situation of media and communications in the Pacific across the four PACMAS components, as explored through the strategic activities. It is not a needs analysis. As such, the report does not include a set of recommendations. Rather, we include a regional overview that explores some of the similarities and differences across the region.

The study will act as a programmatic baseline for PACMAS. The AusAID definition of a baseline study is, a study that 'gathers key information early in an Activity so that later judgments can be made about the quality and development results achieved of the Activity'[1]. A common set of issues identified by AusAID include, that studies can become excessively complex or theoretical, unjustifiably expensive, not readily replicable by partners, and do not include information that can be used in subsequent activities. Given that PACMAS has decided on six key long-term strategic activities, and that the study is designed around these, it is anticipated that the information will directly inform PACMAS activities. The data collected can also be replicated by local partners, either through the use of the same survey instruments and design (all protocols are available on request); through building upon the already collected data (de-identified data sets will be retained by PACMAS); or through adding additional layers and/or complexity.

Research participants, while large in number, present their particular perspectives, experience and knowledge. Nevertheless, not all of the people we would have liked to have included were available, and the views gathered will always, as in every case, present only a partial view.

The choices and decisions made in the study design give the State of Media and Communication Study a particularly qualitative character, which is challenging to some ideas of what a baseline looks like, and how indicators can be measured. The design was developed with the specific goal of making the study useful and useable. Further details on the research design and methodology can be found in Part II of this report.

Research Team

The Research Team for the State of Media and Communication Study consists of the following members:

Chief Investigators:

Jo Tacchi (RMIT University, Australia), Heather A. Horst (RMIT University, Australia), Evangelia Papoutsaki (UNITEC, New Zealand), Verena Thomas (University of Goroka, Papua New Guinea), Joys Eggins (University of Goroka, Papua New Guinea)

1 http://www.ausaid.gov.au/Publications/Documents/baseline_guidelines.pdf

Research Team:
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Alongside members of ABC International Development, PACMAS Technical Advisory Group members and the Panel of Expertise members (see Appendix), the report benefits from the perspectives of advisors for the project, Usha Harris (Macquarie University, Australia) and Ellen Strickland (InternetNZ/University of Queensland).

Glossary

ABC	Australian Broadcasting Corporation
ATC	Australian Technical College
ADRA	Adventist Development and Relief Agency
AT	Appropriate Technology Projects
AusAID	Australian Agency for International Development
AVI	Australian Volunteers International
BCN	Broadcasting Corporation of Niue
BPA	Broadcasting and Publications Authority (Kiribati)
C4D	Communication for Development
CAPA	Communication Arts Professionals Association
CBA	Commonwealth Broadcasting Association
CBO	Community Based Organisations
CC	Climate Change
CCD	Climate Change & Development Office (Federated States of Micronesia)
CCTV	China Central Television
CDI	Community Development Initiative
CIDA	Canadian International Development Agency
CISNOC	Cook Islands Sport & National Olympic Committee
CITV	Cook Islands TV
CMI	College of the Marshall Islands
COFA	Compact of Free Association
COM	College of Micronesia
CRMF	Christian Radio Missionary Fellowship
CSIRO	The Commonwealth Scientific and Industrial Research Organisation
CSCM	Centre for Social and Creative Media
CSFT	Civil Society Forum of Tonga
CTO	Chief Technology Officer
DBTI	Don Bosco Technical Institute
DFID	Department for International Development
DISMAC	National Disaster Management Council (Fiji)
DMO	Disaster Management Office (Samoa)
DMT	Disaster Management Team
DPA	Disability Promotion and Advocacy Association
DPS	Department of Public Safety
DRM	Disaster Risk Management
DRMO	Disaster Risk Management Office
DRR	Disaster Risk Reduction
DRR Gateway	Asia-Pacific Gateway for Disaster Risk Reduction & Development
DSEI	Department of State Enterprises and Information (Papua New Guinea)
DVD	Digital Video Disc
DWU	Divine World University
EC	European Commission
EDF	European Development Fund
EOC	Emergency Operations Centre
EWS	Early Warning System
FBC	Fiji Broadcasting Corporation
FCOSS	Fiji Council of Social Services

FEMA..... Federal Emergency Management Agency
FOI ..... Freedom of Information
FNU ..... Fiji National University
FSM..... Federated States of Micronesia
FSMTC..... FSM Telecommunications Corporation
GDP..... Gross Domestic Product
GEF..... Global Environment Facility
GIS ..... Geographic Information System
GIO..... Government Information Office
GoA ..... Government of Australia
HF..... High Frequency
IAP ..... Industry Advisory Panel
ICT ..... Information and Communication Technologies
ICTV..... Island Cable TV (Federated States of Micronesia)
ICTD..... Information and Communication Technologies and Development
IEC ..... Information Education and Communication
IOM..... International Organisation for Migration
IPTV..... Internet Protocol Television (Niue)
ITU..... International Telecommunications Union
JAWS..... Journalists Association of Western Samoa
JICA..... Japanese International Cooperation Authority
JNAP..... Joint National Action Plan for Climate Change and Disaster Management
KANGO..... Kiribati Association of Non-government Organisations
KIRICAN ..... Kiribati Climate Change Action Network
KIMA ..... Kiribati Media Association
LPV..... Limited Preferential Voting (Papua New Guinea)
MA..... Media Associations
MASI..... Media Association of Solomon Islands
MAV..... Media Association Blong Vanuatu
MBC..... Marshall Islands Broadcasting Company
MCTTD ..... Ministry of Communication, Transport & Tourism Development (Kiribati)
MDG..... Millennium Development Goals
M&E..... Monitoring and Evaluation
MEF..... Monitoring and Evaluation Framework
MIBA ..... Micronesian Information Broadcast Association
MIMRA ..... Marshall Islands Marine Resource Authority
MMA..... Micronesian Media Association
MOU ..... Memorandum of Understanding
NAPA ..... National Adaptation Programme for Action
NBC..... National Broadcasting Corporation (PNG)
NCDs ..... Non-Communicable Diseases
NDC ..... National Disaster Committee
NDM ..... National Disaster Management
NDMC..... National Disaster Management Committee
NDMP..... National Disaster Management Plan
NDMO..... National Disaster Management Office
NDRMO ..... National Disaster Risk Management Office
NDRM..... National Disaster Risk Management Framework (Palau)
NEMO..... National Emergency Management Office
NEC ..... National Emergency Committee (Palau)
NEOC..... National Emergency Operations Committee
NGO ..... Non-government organisation
NIANGO..... Nauru Island Association of Non-government organisations
NICTA..... The National Information and Communication Technology Authority (PNG)

NOAA ..... National Oceanic and Atmospheric Administration
NTA ..... National Telecommunications Authority (Marshall Islands)
NUS ..... National University of Samoa
NZAID..... New Zealand Agency for International Development
O3B..... Other Three Billion (Broadband Service)
OCCD ..... Office of Climate Change & Development
OTV ..... Oceania Television Network
PACC..... Pacific Adaption to Climate Change
PACMAS..... Pacific Media Assistance Scheme
PasiMA ..... Pacific Media Association
PCS ..... Palau Conservation Society
PEBS..... Pacific Emergency Broadcasting System
PDD ..... Project Design Document
PFNet..... People First Network
PIANGO..... Pacific Islands Association of Non-government Organisation
PIBA..... Pacific Islands Broadcasting Association
PICISOC..... Pacific Islands Chapter of the Internet Society
PIF ..... Pacific Islands Forum
PINA ..... Pacific Islands News Association
PITA..... Pacific Islands Telecommunication Association
PM ..... Program Manager
PMCF ..... Pacific Media Communications Facility
PMC..... Palau Mobile Corporation
PMG ..... PACMAS Program Management Group
PMG..... Pitt Media Group (Cook Islands)
PMI ..... Pacific Media Initiative
PNCC..... Palau National Communications Corporation
PNG ..... Papua New Guinea
PNG-LNG ..... Papua New Guinea – Liquefied Natural Gas
PNGMC..... Papua New Guineas Media Council
PNGMWA..... Papua New Guineas Media Workers Association
PO ..... Program Officer
PSSV..... Pacific Secondary School Certificate
PWD..... Public Works Department
RAMSI..... Regional Assistance Mission to the Solomon Islands
RMI ..... Republic of the Marshall Islands
RMC..... Regional Media Centre
ROU ..... Record of Understanding
RTC..... Rural Training Centres
SANA ..... Situation Analysis and Needs Assessment
SIBC..... Solomon Islands Broadcasting Corporation
SICHE ..... Solomon Islands College of Higher Education (now Solomon Islands National University)
SIM..... Subscriber Identity Module
SINU..... Solomon Islands National University
SOE..... State-Owned Enterprises
SOLMAS..... Solomon Islands Media Assistance Scheme
SOP..... Standard Operation Procedure
SOPAC..... Pacific Islands Applied GeoScience Commission
SPC ..... Secretariat of the Pacific Community
SPREP ..... Secretariat of the Pacific Regional Environment Programme
SUNGO ..... Samoa Umbrella of Non-government Organisations
STAR..... Samoa Television and Radio
TA ..... Technical Assistance
TAG ..... Technical Advisory Group

TBC..... Tonga Broadcasting Commission
TBN..... Trinity Broadcasting Network (Solomon Islands)
TCI..... Telecom Cook Islands Limited
TCS..... Telecommunications Commission Solomon Islands
THPF..... Tonga Health Promotion Foundation
TMC..... Tonga Media Council, or, Media Council inc. (Tonga)
TMD..... Tuvalu Media Department
TMN..... Taimi Media Network
TOR..... Terms of Reference
TSKL..... Telecom Services Kiribati Ltd
TTC..... Tonga Telecommunications Corporation
TVET..... Technical and Vocational Education and Training
TVL..... Telecom Vanuatu Limited
UNDP..... United Nations Development Programme
UNESCAP..... United Nations Economic and Social Commission for Asia and the Pacific
UNESCO..... United Nations Educational, Scientific and Cultural Organisation
UNFCCC..... United Nations Framework Convention on Climate Change
UNFPA..... United Nations Population Fund
UOG..... University of Goroka
UPNG..... University of Papua New Guinea
USP..... University of the South Pacific
VIT..... Vanuatu Institute of Technology
WACC..... World Association Christian Communication
WAVE..... Women Advancing a Vision of Empowerment media network
WHO..... World Health Organisation
WSB..... Wan Smolbag Theatre Company
WUTMI..... Women United Together Marshall Islands

Part I: PACMAS Regional Overview

Introduction

The Pacific region has a rich and complex media and communication environment. Some of the largest media industries are present in Fiji, PNG, Samoa and Tonga and many media industries have undergone privatisation over the last decade. Overall radio remains an extremely important broadcast media platform for communication across vast distances and audiences, with most radio consumption occurring on public transport and in other communal spaces. Television retains its importance (especially in urban areas) but the practice of television viewing and infrastructure of television continues to change. For example, there is a growing trend towards watching television via satellite and cable, a shift that often provides greater access to foreign content but lesser access to local content. Many Pacific countries are also responding to the global switch from analogue to digital, although cost and logistics are mentioned as barriers to full transition. The availability of DVD players and recordable DVDs has also transformed the experience of television viewing. Finally, many newspapers and newsletters are published, and have taken on a new life as they are uploaded and shared online to be read by members of the various Pacific diasporas.

Access to media is widening, particularly in Melanesia where individuals in the community and community media are training to use radio, internet and mobile. Provisioning High Frequency (HF) radios in small and isolated communities in PNG has been a core focus of the NGO Christian Radio Missionary Fellowship (CRMF). In Solomon Islands, NGOs have focused on the use of ICTs for education in rural areas. FemLINKpacific, based in Fiji, focuses upon training women to use mobile suitcase transmitters that transmit up to 100 watts over a 10 kilometre radius.

The access to and diversity of media sources in the Pacific is affected by geography. For example Intermedia Europe[1] conducted a survey on media and information access patterns in PNG. The results show that the levels of accessibility are mainly associated with geography rather than demographics such as age, gender, education. They describe geographic regions in terms of whether they are 'media-rich' or 'media dark'. In PNG, media dark areas are predominantly located in the islands. Further, TV and newspapers are mainly accessed in urban areas, so that radio and word of mouth remains a significant source of information, especially via family members and friends who travel between provinces. This situation is repeated in slightly different ways in other Pacific countries, such as Tuvalu, Marshall Islands, Palau, and Kiribati, where isolation means that outer islands receive only government radio, or no access to mass media. Face-to-face communication remains highly valued across all Pacific countries.

Studies of media in the Pacific from as little as five years ago considered access to new digital infrastructure less relevant than access to traditional media, especially radio. Issues such as power supply, unsuitable climate, and lack of maintenance and repair capacity in the region were noted.[2] While radio remains important, more recent studies find ICTs are becoming more relevant, and indeed are underutilised for development despite presenting significant potential.[3] In places such as PNG, where radio has been a dominant and effective platform, recent studies suggest that more households now have access to mobile phones than to radio[4]. In fact, this research and others[5], suggests that people are increasingly using their mobile devices to access radio programs. Intermedia Europe found that in PNG, mobiles are amongst the most common ways to access the internet, with Facebook one of the most accessed sites[6]. Alongside traditional broadcast media, information and communication technologies have entered the media and communication landscape.

1 Intermedia Europe. 2012. Citizens Access to Information in Papua New Guinea. ABC International Development. http://www.abcinternationaldevelopment.net.au/wp-content/uploads/2012/09/ABC-PNG-Report.pdf
2 Duffield, Lee; Watson, Amanda H.A.; Hayes, Mark (2008) "Media and Communication Capacities in the Pacific region" ejournalist Vol 8. (1) p 20-34
3 Cave, Danielle (2012) Digital Islands: How the Pacific's ICT Revolution is Transforming the Region, Lowy Institute for International Policy. http://www.lowyinstitute.org/files/cave_digital_islands_web.pdf.
4 Intermedia Europe (2012) "Citizens Access to Information in Papua New Guinea", ABC International Development, http://www.abcinternationaldevelopment.net.au/wp-content/uploads/2012/09/ABC-PNG-Report.pdf
5 Cave, Danielle (2012) Digital Islands.
6 Intermedia Europe (2012) "Citizens Access to Information in Papua New Guinea", ABC International Development, http://www.abcinternationaldevelopment.net.au/wp-content/uploads/2012/09/ABC-PNG-Report.pdf

The most ubiquitous of these technologies is the mobile phone; according to ITU statistics, around 60 per cent of Pacific Islanders in 2012 had access to a mobile, compared to just 10 per cent in 2006. Mobile phones are now used for a variety of services ranging from voice communication and SMS (text) to accessing the internet and social media. In a number of Pacific countries (e.g. Fiji, PNG, Samoa and Tonga), mobiles are being used for banking tasks such as payments and the circulation of transnational remittances. Mobile phones are also 'converging' with other media by providing access to camera, video and Bluetooth functions that enable people to share and transfer images and other files between mobile phones. Prepaid phone cards (which facilitate the ability to control costs) and purchasing a Subscriber Identity Module (SIM) card that can be transferred between different devices represent just a few of the possibilities that emerge through the increased access to mobile phones and mobile communication.

Like other parts of the world, access to and use of ICTs (particularly internet-enabled mobile phones) is often credited with bringing about social change[7]. While we have yet to understand the full impact and influence of mobile phones in the lives of Pacific Islanders, early evidence suggests that the new mobile infrastructure in parts of the region is addressing some of the barriers – remoteness, financial cost and availability – that have to date hindered the circulation of information and communication.

Yet, as the media and communication environment becomes more complex, questions remain about the appropriateness of ICTs for specific purposes, such as for use during emergencies and disasters. The ability of broadcasters and technicians to keep up-to-date with the latest equipment and software is sometimes an issue. There is also a greater need for understanding the possibilities of integrating ICTs like mobile phones into media and communication plans for disaster response technologies like broadcast radio.

Despite the growth in mobile phones and internet access, and the convergence of broadcast and ICTs, barriers to the use of and participation in local, national and transnational media persists. In the baseline research we found that the internet in Tuvalu (provided by the government) was often down for days at a time and, when available, had serious connection problems. Even with the mobile phone across the region, the quality and availability of signals varies, and sometimes people have to walk to "bush phone booths" where the signal is stronger[8]. As will be highlighted in Media Capacity Building, online and social media may be providing a way to critique the political regime in Fiji, or expand public participation and discourse in Papua New Guinea for many young people, but there are serious concerns about the quality of information and consequences of postings as people turn to blogs and social media for information. Cost, speed, signal strength and a range of other access factors can both limit and present opportunities for participation in the region.

Table 1 demonstrates the diversity of media and communication landscapes, adding geographic and population factors. This reflects the importance of considering geographic and population factors when thinking about media and communication across the region. Populations range from 1,538 in Niue to over 7 million in PNG. Nauru is made up of one island of 21 square kilometers, while Kiribati consists of 33 low-lying coral atoll islands, across 3.5 million square kilometers of ocean. Each country has its own unique challenges and opportunities related to media and communication.

7 Cave, Danielle (2012) Digital Islands: How the Pacific's ICT Revolution is Transforming the Region, Lowy Institute for International Policy. http://www.lowyinstitute.org/files/cave_digital_islands_web.pdf.

8 Intermedia Europe (2012) "Citizens Access to Information in Papua New Guinea", ABC International Development, http://www.abcinternationaldevelopment.net.au/wp-content/uploads/2012/09/ABC-PNG-Report.pdf

Table 1: Comparative media and communication landscape

Country	Television	Radio	Print	Telecoms	Population and geography
Cook Islands	2 commercial 7 community on outer islands	4 commercial, only one with almost national coverage 1 community	2 commercial newspapers 1 daily & 1 weekly	Telecoms monopoly, private company. 66% mobile penetration. Internet 'expensive and slow'[10]	20,000 pop 15 islands, 12 inhabited, over 236 sq km, mix of low-lying coral atoll islands, and hilly volcanic rises
Fiji	4 commercial companies offering 20 channels 1 church network	2 government 10 commercial 2 church 2 community (one campus)	12 commercial 3 daily, 4 weekly, 4 monthly, 1 quarterly 1 student 2 community	Telecoms competitive environment. 84% mobile penetration, 28% access the internet (in 2011), rapidly growing due to mobile phone expansion	868,400 pop 332 volcanic islands, approximately 110 inhabited, over 18,274 sq km
FSM	4 commercial one in each state	4 government 2 commercial 1 church 1 community	1 community bi-weekly	Telecoms monopoly, public corporation. 25% mobile penetration, 20% access the internet	107,008 pop 607 islands, combined land area of 702 sq km, spread over 2,600,000 sq km of ocean, made up of 4 federated states
Kiribati	1 government currently not operating	2 government 1 commercial	1 government 2 commercial 1 church all weekly or less frequent	Telecoms monopoly, government owned. 14% mobile penetration, 10% access the internet	103,000 pop 33 low-lying coral atoll islands, 21 inhabited, land area of 811 sq km, across 3,500,000 sq km of ocean
Marshall Islands	2 commercial with limited coverage 1 US armed forces	1 government 1 commercial 2 church 1 US armed forces	1 commercial, weekly	Telecom monopoly, private owned, government controlled. 7% mobile penetration, 3.5% access the internet	54,800 pop 29 coral atoll islands, 24 inhabited, land area 181 sq km, spread over 1,210,000 sq km of ocean
Nauru	1 government	1 government	1 government, monthly	Telecoms competitive environment. 65% mobile penetration, 6% access the internet	10,300 pop 21 sq km, phosphate rock island.
Niue	1 government	1 government 1 hobby	1 commercial, every 3 weeks	Telecoms government monopoly, but free public wifi. 38% mobile phone penetration, 83% access the internet	1,538 pop Island of 260 sq km
Palau	1 part government owned 2 commercial	1 government 3 commercial 2 church	1 government, irregular 3 commercial, two published irregularly and one twice weekly	Telecoms near government monopoly. 80% mobile phone penetration, 6% access the internet	26,610 pop > 300 islands, 8 inhabited. Mountainous and low, coral islands. land area 458 sq km

9 perceptions of research participants; statistics on use unavailable.

PNG	1 commercial 1 public 1 commercial (satellite)	3 government 7 commercial 2 community 5 church	3 commercial 1 church	Telecoms competitive environment. 38% mobile phone penetration 2% access the internet	7,013,829 462 sq km, a group of islands including the eastern half of New Guinea island, mountainous interior (Highlands)
Samoa	2 commercial 1 church 1 commercial (foreign-owned)	1 government 5 commercial 4 church 1 community	2 government 3 commercial 3 commercial (foreign-owned) 1 community	Telecoms competitive environment. 91% mobile penetration, 7% access the internet	183,900 pop 2,831 sq. km, includes 2 main islands, several smaller uninhabited islets; a narrow coastal plain with rugged volcanoes in the interior
Solomon Islands	2 commercial 1 government (international) 1 church (international)	4 government 2 commercial 1 church 1 community	4 commercial	Telecoms competitive environment. 50% mobile phone penetration, 6% access the internet	538,000 27,986 sq km, 992 islands
Tonga	1 government 1 commercial 2 church	1 government 5 commercial 1 church	4 commercial 3 church	Telecoms competitive environment. 53% mobile penetration, 12% access the internet	104,500 pop. 260 sq km, archipelago consisting of 176 islands, 26 of which are inhabited
Tuvalu	No service	1 government	None	Telecoms government monopoly. 20% mobile phone penetration, 40% access the internet	9,847 pop 9 islands, land area 26 sq km
Vanuatu	1 government 2 foreign government 2 church (international)	2 government 1 commercial 1 community 1 church	3 commercial	Telecoms competitive environment. 76% mobile phone penetration, 8% internet access	245,600 pop 12,189 sq km, 83 Islands (65 inhabited)

Media Policy and Legislation

The PACMAS Monitoring and Evaluation Framework (PACMAS MEF) includes three outcomes under Media Policy and Legislation. There are two long-term outcomes that are partially within the scope of PACMAS:

- The protection and promotion of Article 19 rights and independent regulatory systems; and,
- Increased plurality within the media and communications environment.

There is also one short-term outcome that is within the scope of PACMAS:

- An increasing number of governments, NGO and civil society organisations promoting media freedom and plurality.

This section of the PACMAS baseline report discusses these three outcomes in relation to the research findings. It also explores three additional areas that emerged in the research around media policy and legislation, Information and Communication Technology for Development including legislation and policies related to freedom of information, telecommunications, e-governance and Information and Communication Technology for Development (ICTD).

Article 19 of the Universal Declaration of Human Rights

Article 19 states 'Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers'[10].

The situation in relation to freedom of information, speech and expression, and freedom of the press and media varies across the 14 countries. Most countries have some reference to freedom of speech or expression in their constitution, often with some exceptions relating to national security. The most extreme exception to this is Fiji where the constitution is currently suspended, and criticism of the government is a crime. Tonga also has some extra exceptions to protect the Royal family, government and people from 'abuse of press freedom' under a constitutional amendment in 2003[11].

The freedom of media in practice is complex and nuanced across the 14 countries. In Kiribati for example, the government has used the Broadcasting and Publications Authority Ordinance and the Newspaper Regulations Act to control independent newspapers and broadcasters. In Papua New Guinea journalists are usually free to report, but are reported to have experienced pressure from both government and big business to censor stories, including direct threats and violence. In small island contexts it is difficult to make categorical claims about media freedom, as very often government department operated media outlets are the only source of content. This is the case in Nauru and Tuvalu, and to some extent in Niue where the only non-government media is published offshore.

To give a sense of the differences and similarities, Table 2 sets out some freedom measures across the 14 countries. It draws upon Freedom House measures from 2012, and includes freedom ratings, (drawn from measures of political rights and civil liberties), and measures of press freedom. Panel of Expertise (PoE) members were asked to assess whether, in their countries, there is freedom of the press and media in practice. These assessments, also informed by relevant comments by other research participants, are included in the table. We also asked PoE members about the presence of independent press complaints or an ombudsman. It is worth noting that the Pacific Freedom Forum (PFF), in partnership with the Media Association of Solomon Islands (MASI), convened a meeting in May 2013 to explore the need for and creation of a Pacific Media Ombudsman, to work online with a small regional group[12]. Also notable is that Tonga moved from 'partly free' to 'free' in the freedom rating during 2012, due to an improved civil liberties rating. The improvement was based on an improved media environment and the increased ability of civil society groups to form and operate without interference.

10 United Nations. The Universal Declaration of Human Rights. www.un.org/en/documents/udhr Accessed April 2013
11 Tonga Government. 2003. Protection from Abuse of Press Freedom Ordinance 2003 http://legislation.to/Tonga/DATA/PRIN/2003-008/ProtectionfromAbuseofPressFreedomOrdinance2003.pdf Accessed April 2013
12 see http://www.pacificfreedomforum.org/2013/04/pacific-ombudsman-concept-for-world.html

Table 2: Freedom measures across countries

Country	Freedom House, freedom rating (FR), political rights (PR), civil liberties (CL) and status FR:PR:CL:status[14]	Freedom of the press Freedom House rank:rating:status[15]	Freedom of press and media in practice	Independent press complaints or ombudsman
Cook Islands	Not available	Not available	Yes	No
Fiji	5: 6: 4: partly free	120: 56: partly free	No	No
FSM	1: 1: 1: free	31: 21: free	Yes	No
Kiribati	1: 1: 1: free	52: 27: free	No	No
Marshall Islands	1: 1: 1: free	19: 17: free	Yes	No
Nauru	1: 1: 1: free	55: 28: free	No (Gov't media only)	No
Niue	Not available	Not available	Some reported issues	No
Palau	1: 1: 1: free	13: 16: free	Mostly, some reported issues	No[16]
PNG	3.5: 4: 3: partly free	55: 28: free	Yes	Yes, but reported as ineffective
Samoa	2: 2: 2: free	61: 29: free	Yes	Yes
Solomon Islands	3.5: 4: 3: partly free	55: 28: free	Yes[17] (some self-censorship reported)	Yes
Tonga	2.5: 3: 2: free	61: 29: free	Mostly, some issues reported	No[18]
Tuvalu	1: 1: 1: free	47: 26: free	No (Gov't media only)	No
Vanuatu	2: 2: 2: free	45: 25: free	No	No

Tradition and culture are significant considerations in the practice of journalism in the Pacific and also impact media freedom. Scholars and practitioners around the region have engaged in dialogues seeking to define a 'Pacific Way' of doing journalism, reflecting culturally appropriate modes of inter-personal communication and deliberation[18]. While professionals interviewed in several Pacific nations identified positively with a regional approach of this kind, Hayes[19] notes that tradition and culture can be impediments to media freedom. He suggests that in Polynesia governments promote Western principles of journalism's role in good governance when accepting donor funding to improve media capacity, yet 'when a crisis erupts caused by a journalist doing his/her job rather well, governments tend to selectively invoke "tradition" or "the Pacific Way" to criticise, even silence the media'. In Tuvalu, Hayes notes a cultural reluctance to push stories in the context of a culture that is consensus based with a cultural practice of 'apologising'. The government pressured and eventually banned a non-government newspaper in Tonga, and in Federated States of Micronesia (FSM), young media graduates have struggled to secure jobs in media since it is often seen as culturally inappropriate to question elders.

13 0 – 7 numerical ratings for political rights and civil liberties, with 0 = most free. The average of these ratings = the freedom rating and overall status: free (1.0 to 2.5), partly free (3.0 to 5.0), or not free (5.5 to 7.0). Freedom House, Freedom in the World 2013, http://www.freedomhouse.org/report/freedom-world/freedom-world-2013 accessed July 2013.

14 The freedom of the press index ranks 197 countries, using a scale of 0-100 to measure the degree to which each country permits the free flow of news and information, with 0=best, 100=worst. A score of 0-30 = a classification of 'free', 30-60 = 'partly free', 61-100 = 'not free'. Freedom House, Freedom of the Press 2013, http://www.freedomhouse.org/report/freedom-press/freedom-press-2013 accessed July 2013.

15 Note: conflicting reports from the Panel of Expertise (PoE) members

16 Note: conflicting reports from PoE

17 Note: conflicting reports from PoE

18 For an overview see Papoutsaki, E. & Sundar Harris U. (2008) "Unpacking 'Islandness' in South Pacific Islands" in South Pacific Islands Communication: Regional Perspectives, Local Issues eds. Papoutsaki, E. & Sundar Harris U. Asian media Information and Communication Centre; Singapore, Aotearoa, Suva pp 1-14

19 Hayes, M. 2008. On Being a Tuvaluan Tino Tusitala: Reporting from the frontlines of global warming" in South Pacific Islands Communication: Regional Perspectives, Local Issues eds. Papoutsaki, E. & Sundar Harris U. Asian media Information and Communication Centre; Singapore, Aotearoa, Suva pp 254-273

Plurality within the Media and Communications Environment

Plurality of the media is considered one of the key media development indicators related to democracy and democratic debate[20]. Media models across most Pacific nations are shaped by historical influences and conditions. As Cass explains, 'historically there have been three kinds of media in the Pacific: Mission or church-owned or directed, government-owned or directed and commercial'[21]. Although his argument relates primarily to the newspaper industries, this summation can be expanded across media platforms throughout most of the Pacific (see Table 1).

Cass argues that commercial media are most prevalent in countries where there has traditionally been a strong ex-patriot community. Commercial media are also dependent upon audience size and reach, and several country reports note instances of commercial media struggling for viability in small markets with highly dispersed populations. Viability issues have led to the rollback of corporatisation in Tuvalu, and to a contracting media environment in Kiribati, where the only TV station was off air at the time of research fieldwork. A further point of note is the commercial and non-profit enterprises are becoming increasingly indistinct. While in FSM two media outlets are formally run as NGOs, in other contexts such as Samoa, Marshall Islands and Palau, directors of some outlets labelled as 'commercial' media express a sense of community service, and many run with the goal of subsistence rather than with expectations of large profits.

As Cass has outlined, church or mission-owned media are a traditional pillar in the media environment in almost all Pacific countries. Churches and religious groups operate TV channels, radio stations, print newspapers and media production houses; and are active in other communication methods such as community dramas and performance. Eggins[22] and Cass[23] both discuss the role of the church in providing community-based radio in isolated areas of PNG. Local communities, regardless of their connection to the church, listen to these radio stations which, unlike mainstream media, discuss local issues in local language. Apart from countries that only have government media, the Cook Islands is the only country with a total absence of church media.

Formal community media are less common, potentially due to the historical dominance of other media models. Radio is the most common platform for community media, with the key examples currently in operation being FemLINKpacific in Fiji, CREST FM in Vanuatu, Radio Wantok and Community Development Initiative (CDI) FM in PNG, and the student radio stations associated with various education institutions operating in Fiji, Samoa, Cook Islands, and PNG.

The accessibility of licenses for establishing a media outlet is an important consideration in relation to the regulatory conditions for media diversity. Legislation for broadcast and newspaper licenses varies, but in most cases the application and registration process is reported to be quite straightforward. Newspapers often only require a business licence, and broadcasters are usually required to register and apply for a frequency. No countries have separate or formal community media legislation, but several have 'non-commercial licenses' stipulated in the legislation. In FSM, for example, although there is no specific legislation for community media, there are locally understood processes for applying for non-commercial licenses. According to research respondents, some of the countries where licenses have been withheld or used to limit media plurality include: Niue, where an application for a radio frequency has been repeatedly ignored; Marshall Islands, where Women United Together Marshall Islands was denied a license for several years and later struggled to negotiate airtime on the government broadcaster; Tonga, where licensing laws were used to close FM 88.1; and Kiribati, where the newspaper licensing law was used to cause a newspaper to cease distribution.

Public Discussions and Advocacy on Policy and Legislation

Levels of public discussion and advocacy on policy and legislation in relation to media and communication vary throughout the Pacific. This was established through findings from both interviewees and the Panel of Expertise (PoE).

The Panel of Expertise had varied perceptions of how frequently and how inclusively discussions on media policy and legislation take place in each country. In the Cook Islands, Samoa and Tonga the panel felt that

20 UNESCO. 2008. Media development indicators: a framework for assessing media development. http://unesdoc.unesco.org/images/0016/001631/163102e.pdf Accessed April 2013

21 Cass P. 2004. Media ownership in the pacific: Inherited colonial commercial model but remarkably diverse. Pacific Journalism Review. Vol 10(2):82-110.

22 Eggins, J. 2008. Community Development and Church-Based Radio Broadcasting in Papua New Guinea in South Pacific Islands Communication: Regional Perspectives, Local Issues eds. Papoutsaki, E. & Sundar Harris U. Asian media Information and Communication Centre; Singapore, Aotearoa, Suva pp 206-218

23 Cass, P. 2011. Fr Francis Mihalic and Wantok niuspepa in Papua New Guinea. Pacific Journalism Review Vol17 (1) pp 210-226

such discussions take place publicly, and that a range of groups are able to participate. For example, in Samoa several media outlets reported on deliberations between the media industry and the government in regards to a new media council. In addition (although not restricted to media legislation), the Samoa Umbrella of NGOs (SUNGO) is a strong advocate of public consultations on government policies. Elsewhere the situation is mixed; for example in Marshall Islands the Panel of Expertise member explains that the media covers the introduction of new legislation, but that there are few opportunities for community groups to participate. In Fiji, Kiribati, Palau and Vanuatu the panel members felt that policy and legislation is rarely discussed, and that there are few opportunities for community participation.

Even though some national media associations include advocacy in their mandate, there were few suggestions by interviewees of any national media association taking an active role in advocating for policy and legislation changes. Those interviewed most strongly associated national media associations with training provision. This situation is similar for most interviewees when discussing regional media associations, with some particular criticisms of the Pacific Island News Association (PINA) as lacking in this area. An exception to this is Papua New Guinea, however, where two bodies, the PNG Media Council and the PNG Workers Union, advocate on behalf of the industry and train media staff on their rights.

Another site of public discussion is campus-based newspapers. Robie (2010) has outlined the contributions of such publications in Fiji and PNG towards advocating for freedom of expression, freedom of the press and media pluralism. [24]

Freedom of Information Legislation

The first and only country in the Pacific to introduce Freedom of Information (FOI) legislation to date is the Cook Islands ***(Official Information Act)***. However, implementation of the legislation has been problematic and respondents say journalists in the Cook Islands face ongoing barriers to access of government information. Papua New Guinea and Solomon Islands have freedom of information provisions in the constitution, but there are indications that separate laws are being considered in both countries. A number of other Pacific countries are in dialogue with advisory agencies in relation to FOI legislation, including Vanuatu, Tonga and Palau. For example, in Tonga the government has developed an Information Disclosure Policy, which it intends to convert to legislation through the parliamentary process. Respondents from several Pacific countries report that in practice their governments are generally open to sharing information. For example, in Marshall Islands the Panel of Expertise member says, ***'The difficulty, for the most part, is that few government offices have policies or systems for releasing information, so obtaining information is an ad hoc situation. I have found most government offices to be willing to share information when asked, but many do not offer it because there is no system in place.'***

Telecommunications Legislation

Throughout the past decade there has been a significant opening of the telecommunications market in many nations across the Pacific. Countries that have passed new legislation since 2000 generally include provisions for independent regulators and competitive market conditions. Legislated monopolies still exist in the Cook Islands, FSM, Marshall Islands, and Tuvalu. However, some countries (most recently Marshall Islands) have agreed to address restrictive legislation. Kiribati, Nauru and Niue still have a monopoly in the telecommunication market, despite having passed legislation allowing for liberalisation. The implications of these monopolies play out differently. For example, in FSM the private telecommunications corporation is reported to be an innovative company, despite having a monopoly. In other countries, it was the introduction of competition that led to expansion and innovation. Digicel has entered six Pacific countries (Fiji, PNG, Vanuatu, Tonga, Samoa and Nauru); this has led to massive shifts in affordability and penetration rates. For example, within two years of taking over telecommunications provision in Nauru, 65 per cent of the population were subscribers, with Digicel estimating that over half of them access internet and social media via their phones[25]. In some countries (e.g. Nauru), Digicel has replaced the existing telecommunications company, thereby maintaining a monopolised market. In other cases Digicel enters as a competitor to incumbents, such as Vodafone in Fiji. There are some examples of a pushback against Digicel. The Government of the Cook Islands rejected proposals from Digicel, and the Government of Solomon Islands decided against allowing Digicel to operate in Solomon Islands after a pilot period.

24 Robie, D. 2010. Pacific Freedom of the press: Case studies in independent campus-based models. Pacific Journalism Review Vol 16 (2) p99-126

25 Cave, D., 2012. Digital Islands; How the Pacific's ICT Revolution is transforming the region, Available at: http://www.lowyinstitute.org/publications/digital-islands-how-pacifics-ict-revolution-transforming-region.

Table 3: Telecommunication Legislation

Country	Laws allow competition	Competition in the market	Independent regulator	Mobile phones per 100 inhabitants
Cooks	No	No	No	66
Fiji	Yes	Yes	Yes	84
FSM	No	No	No	25
Kiribati	Yes	No	Yes	14
Marshall Islands	No	No	No	7
Nauru	Yes	No	No	65
Niue	Yes	No	No	38
Palau	Yes	Yes	No	80
PNG	Yes	Yes	Yes	38
Samoa	Yes	Yes	Yes	91
Solomon Islands	Yes	Yes	Yes	49
Tonga	Yes	Yes	No	53
Tuvalu	No	No	No	20
Vanuatu	Yes	Yes	Yes	76

e-Governance & ICTD Policies

Under the regional Digital Strategies program initiated through the Pacific Islands Forum Secretariat, all Pacific Islands countries have either drafted or enacted ICT related policies. These generally include plans for universal ICT access and strategies for developing ICTs[26]. Niue stands out for its focus and implementation of pro-ICT policies and services, including free wifi and e-governance activities.

Most Pacific Island governments have some web presence. Anderson (2007) suggests that Digital Government (access to information) is more prevalent than Digital Democracy (participation) in the Pacific. Of the 12 countries surveyed by Anderson,[27] the Cook Islands and Fiji were found to have the most significant web presence. Niue also has a growing government web presence. Some governments' websites serve dual purposes, for example much of the Kiribati government website is targeted at international audiences as part of its climate change campaign. However, some governments struggle to maintain up to date information, as is the case in Nauru where research participants noted that information on the government website was out of date. Ongoing barriers to ICT access and use (including access to devices and repair services, power, connectivity, cost and literacy) are ongoing considerations to the usefulness of e-governance and political participation[28]. Internet penetration rates across the countries are relatively low, as Table 4 illustrates. Niue, with its public wifi, is an exception with 83 per cent of the population accessing the internet. As mobile penetration rates increase steeply in some countries, internet access through mobiles is expected to impact on these figures, for example in Fiji.

26 Pacific Islands Forum Secretary. 2010. Review of Pacific Regional Digital Strategy; Part A: Technological Capacity. Network Strategies Report. http://www.forumsec.org.fj/resources/uploads/attachments/documents/Review%20of%20Digital%20Strategy_PartA.pdf Accessed April 2013

27 Countries included are Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Solomon Islands, Samoa, Tokelau, Tonga, Tuvalu, and Vanuatu

28 See Anderson, K., 2007. Whither Pacific "traditional" media? Internet technology in political education and participation. Pacific Journalism Review, 13(2), pp.94–111; Sundar Harris, U. 2007. Community informatics and the power of participation U. S. Harris. Pacific Journalism Review, 13(2), pp.2007–2045; Herman, F. 2010. The Pacific right to know in the Digital Age. Pacific Journalism Review, 16(2), pp.51–55.; and Leh, A.S.C. & Kennedy, R., 2004. Instructional and Information Technology in Papua New Guinea. Educational Technology Research and Development,, 52(1), pp.96–101.

Table 4: Internet penetration rates across countries

Country	% of population accessing the internet[30]
Cook Islands	Not available
Fiji	28
FSM	20
Kiribati	10
Marshall Islands	3.5
Nauru	6
Niue	83
Palau	6
PNG	2
Samoa	7
Solomon Islands	6
Tonga	12
Tuvalu	40
Vanuatu	8

Most Pacific countries were targeted as part of the One Laptop Per Child program[30], but few interviewees reported much success in this area. For example, reports from Niue suggest that ICTs were not properly integrated into the curriculum, and other issues such as the language of the software created barriers to their effective use. Furthermore, Niuean children also quickly discovered the claim that the laptops were "unbreakable" to be incorrect.

29 2011 most recent figures used where available.
30 OLPC Oceania. http://wiki.laptop.org/go/Oceania Accessed May 2013

Media Systems

The PACMAS MEF includes three outcomes under Media Systems. There is one long-term outcome that is partially within the scope of PACMAS:

- Access to media (public, commercial and community) and information is increased through effective maintenance and extension of broadcast and ICT structure.

There are two short-term outcomes that are within the scope of PACMAS:

- Coordination and knowledge sharing between broadcast and IT engineers is enhanced and sustained; and,
- Mapping is in place of media access across the Pacific, assessment of which areas have poor media coverage and strategies are developed for extending access to community, commercial or public media.

This section of the PACMAS baseline report discusses these three outcomes in relation to the research findings. It also explores an additional area that emerged in the research related to media systems and disaster response.

Maintenance and Extension of Infrastructures

This first section focuses upon technicians' perspectives of the maintenance and extension of infrastructures across Melanesia, Polynesia and Micronesia. The effective maintenance and extension of broadcast and information communications technology infrastructure plays an important role in increasing coverage and access to the media and the development of emergency broadcast systems.

Technicians in broadcasting and ICTs operate in an environment where they face the challenges of building, maintaining and supporting a dynamic media environment. From guaranteeing the transmission of radio broadcasts, repairing mobile phone towers after a storm, purchasing new routers to support local networks, downloading new software or working with the government to roll out the new technologies for the latest national disaster plan, they are responsible for keeping up to date with a range of new media and technologies. They also must engage with a variety of stakeholders, such as telecommunications companies that provide mobile and internet services via satellite, undersea fibre cables, broadcast towers and other infrastructures.

As a series of studies of infrastructures of media and technology have highlighted[31], a range of factors influence the effectiveness of these new media technologies across the diverse countries of the Pacific. This section focuses upon the current state of media and communication infrastructures through the lens of broadcast and ICT technicians and managers (including those involved in emergency broadcast systems). It explores four areas identified as core issues for PACMAS: the maintenance and extension of infrastructures; support networks; media access and coverage; and disaster response.

Maintenance

Technicians use a series of strategies to maintain media and communications systems. In Niue technicians store old equipment to use for standby and/or spare parts, as needed when their regular equipment breaks down. In Tonga, a significant amount of equipment is donated through bilateral assistance schemes although the donated equipment is often old or used. When the opportunity to purchase does arise, technicians try to identify technologies and systems that are less costly than the industry standards. Technicians in Tonga also attempt to purchase equipment from companies in New Zealand; given its proximity to Tonga, it becomes easier to resolve issues if there are problems with the product. The main commercial media outlet in the Cook Islands, Elijah Communications, employs a comprehensive and systematic maintenance strategy which includes replacing equipment every six months and purchasing two pieces of equipment at the same time to make sure technicians have spares when equipment breaks down.

The region is notable for its self-reliance and culture of repair. In Tonga for example, technicians make their own repairs by mending broken or out of date equipment. Often technicians do not have the expertise, or access to replacement parts, and send their equipment abroad for repair. For example, Federated States of Micronesia (FSM) uses RadioCom's repair facilities in Guam, Saipan, and Pohnpei. Costs can be so high for sending equipment abroad for repair that replacing equipment is often the most cost efficient option in Palau. Technicians in Tuvalu worry that recently updated equipment from Japan will break down once the warranty expires and they will be reliant upon external sources to service the equipment. In effect, even with extended warranties and stocking spare equipment, repairing equipment in remote regions and outlying islands present challenges for many of the Pacific countries.

31 Examples of work focusing on infrastructures include: Bell, Genevieve and Paul Dourish. 2012. Divining a Digital Future. Cambridge: MIT Press.; Star, Susan Leigh. 1999. The Ethnography of Infrastructure. American Behavioral Scientist 43(3):377-391.

Technical Changes or Upgrade Systems

New technologies and upgrades are planned which will impact technicians working in broadcast, information technologies and emergency broadcast systems across the region. The transition to digital was noted in countries such as Samoa, Papua New Guinea and the Cook Islands as one of the most important changes in the media environment; others noted lack of funds to make this transition. Because parts and spares for analogue transmitters are no longer being manufactured, there is growing impetus to 'make the switch' to digital. However, technicians and media practitioners in the Cook Islands and PNG expressed ambivalence about the speed and cost of this transition as well as the consequences of switching to digital for their audiences who did not have digital screens or set top boxes. Mobile and other telecommunications infrastructures were primarily the concern of technicians working in private sector telecommunications companies such as Digicel, but were viewed as having potential benefits for other sectors. For example Elijah Communications in the Cook Islands saw the potential to capitalise on the sale of equipment resulting from the network upgrades in the telecommunications industry. Overall, the technical changes or upgrade systems add further challenges and complexity to the Pacific media and communication environments.

Coordination and Knowledge Sharing: Support Networks

The growing complexity of media and communication environments heightens the importance of building and strengthening the skills, training, resources and support networks between IT and broadcast technicians in the Pacific. In the following section the support networks of technicians in the region are discussed, including those working to develop and sustain national emergency broadcast systems.

Skills

One of the common challenges in the region is the lack of access to and availability of skilled technicians. For example, in FSM the government-owned radio station does not have an engineer or technician on staff. The previous technician's contract ended and they have been unable to find a replacement. Instead, they outsource work to a technician at another radio station in Pohnpei, FSM. In countries such as the Cook Islands, FSM, Kiribati and Solomon Islands, when technicians are employed at one organisation, they are often called upon to assist at other organisations. In the case of Samoa, technicians are flown in from New Zealand to assist when there is a major issue. The Broadcasting and Publications Authority in Kiribati and RadioCom in FSM charge other companies and organisations for outsourcing their services.

Skills are often shared within organisations that offer training with more experienced technicians (see also the section of Capacity Building and Training below). In Vanuatu, media and broadcasting organisations have tried scholarships and a range of incentives to attract qualified students, but have focused more recently on hiring young people and training them directly. In PNG, retention of staff once trained was cited as a key issue. As research participant from PNG describes, *'We've found that our people in the effort to take the next step up in their careers leave for other engineering inclined industries, mining and petroleum that kind of thing. So the cycle of training and all that yeah, tends to be a very big problem for us.'*

In general, there is an expectation that technicians in the Pacific should be skilled across a variety of types of equipment; this was addressed directly in Nauru, Palau and other countries. However in Niue technicians reported that this expectation was not realistic. Technicians in Niue perceived very little overlap in the skills required for telecommunications networks and broadcast networks.

Formal qualifications of technicians vary. In countries like Fiji, technicians might take coursework for a diploma in Electronics at the Fiji National University (FNU), which is currently considering developing the diploma into a TV certificate. Kiribati's chief engineer for New Air FM also trained in Fiji. Tongan technicians have successfully applied for scholarships to train in IT and broadcasting in Fiji and India.

Capacity Building and Training

There were a number of nations where there are few to no opportunities for technical capacity building and training. In Palau participants noted basic training for broadcasting remained a serious gap for technicians. Engineering and transmission training were described as 'missing' in Solomon Islands.

Yet, even in countries such as Fiji where training for technicians is available, the vast majority of technicians do not possess any formal qualifications. Instead they train on the job in the IT industry or, for broadcast training, they train on the job at FijiTV. Once on the job, additional formal training and qualifications are often sought. Most of

the certified training in countries such as Tuvalu and Nauru takes place offshore. Other countries such as Tonga fly in trainers from overseas. In Vanuatu, overseas training involves short courses specific to professional needs and in Niue technicians participate in onsite training and training overseas, such as from the companies (based in New Zealand, Australia and China) that supply, install or upgrade computers. Many countries reported that individuals who trained overseas will train others in their company or organisation when they return. However, technicians in Nauru and Niue stressed the challenges of sending competent staff for training when they are central to the daily operations. The expense and time needed to travel is also an issue throughout the region. In Solomon Islands funding for technician training comes from scholarships from donors, in-house training or through corporate sponsorship for specialised skills.

Resourcing and Technical Inventories

Technicians generally operate in an environment of restricted funding and equipment. They engage in a number of strategies to cope with this situation, and to keep media systems running. One of the key activities involves the borrowing and pooling of resources within the broader media and communication landscape. For example, Communications Fiji Ltd piggybacks on Vodafone's internal distribution system for equipment. In addition, in Niue, following damage from Cyclone Heta, the Pacific Islands Telecommunications Association (PITA) was able to assist with sourcing a temporary replacement system from the Cook Islands. However, in nations like Solomon Islands, sharing resources is made more difficult by the fact that each organisation uses different brands of equipment.

To keep costs down, technicians in the Cook Islands hired a procurement management company in the US that substantially reduced the cost of supplies; from this experience technicians concluded that using individual suppliers in the Pacific is not cost effective. Technicians in Tonga and the Cook Islands were keen to work with other organisations to maximise their buying power. PITA has made an attempt to organise a Pacific collective for this purpose, but found that it was difficult to coordinate.

Networking and Support

Formal media and technical associations were also noted as sources of support. In the Marshall Islands, the National Telecommunications Authority (NTA) is a member both of PITA and International Telecommunications Union (ITU). Technicians in Vanuatu noted PITA as a regional support association, particularly for training, and the Solomon Islands Media Assistance Scheme (SOLMAS) was identified as a support and advice network for media technicians in Solomon Islands. Media and communication technicians in Niue mentioned the Pacific Islands Chapter Internet Society (PICISOC), the Pacific Islands Broadcast Associations (PIBA), and the International Telecommunications Union (ITU). In addition, support came from the Pacific Networks Operators Group (PacNOG)[32], which runs an email list for technicians, and local experts, such as the local ICT expert who runs the wifi in Niue. Several organisations in Samoa employ technical staff who are members of the Journalism Association of Western Samoa (JAWS), but technicians did not find JAWS particularly useful. While no formal networks for technicians exist in Kiribati, there have been informal discussions between the CEO of Telecom Services Kiribati Ltd (TSK) and Broadcasting Publications Authority (BPA) technicians about forming an association of technicians. The government media, telecommunications and church media in Kiribati also engage in informal support.

Colleagues, personal and professional networks represent the most common forms of technical support and assistance; technicians in the Cook Islands, Marshall Islands, PNG and Tonga emphasised this practice. In many instances technicians seek assistance from friends and networks overseas in Fiji, New Zealand, Australia and China. In some cases support comes from equipment providers via extended warranties and service contracts. In Samoa, technicians working for the telecommunications company Digicel noted that they could access knowledge across Fiji, PNG, Vanuatu, Tonga, Nauru, and the Caribbean.

Alongside formal media associations and workplace support, technicians reported going online to look for information (including watching YouTube tutorials), emailing colleagues and companies overseas, ordering equipment over the internet or consulting online manuals and videos. In countries such as the Federated States of Micronesia, emergency broadcast technicians reported using online sites such as the Federal Emergency Management Agency (FEMA), Google Earth and the National Oceanic and Atmospheric Administration (NOAA) weather centre based in Guam.

32 According to the PacNOG website, "PacNOG was established as a mailing list for ISP operations engineers in the Pacific region following on from the APNIC 18 conference held in Nadi, Fiji in August 2004." http://www.pacnog.org/, Accessed 14 May 2012

Mapping and Assessing Media Access and Media Coverage

Extending the coverage and access to media is an important dimension of participation via commercial, community or public media in the Pacific. However, the Panel of Expertise (PoE) responses suggest that very limited mapping and assessment work is being undertaken across the Pacific, with only five PoE members being aware of any such work.

In line with the strategic activity Pacific Emergency Broadcasting Systems (PEBS), this section highlights the ways in which technicians and organisations involved in emergency broadcasts are addressing access and coverage issues.

Extending Coverage

Geography remains a key challenge for technicians and others involved in the design and implementation of successful emergency broadcast systems. The vast majority of island nations in the region are geographically dispersed and separated by water or dense forest and vegetation. For example, the government in the Federated States of Micronesia recently purchased a siren warning that is activated by a text message (SMS). Currently the system is only operational in Pohnpei, but they envision that this system will eventually be quite useful for the atoll islands; the siren will be heard across the community where, in the past vast distances have hindered effective early warning systems. High Frequency (HF) radios are also effective in FSM. As a research participant from FSM observes, *'they install radios on the other islands mainly on the northeastern side of the island. They've install high frequency radios and antennas. We tested them and it worked. We prioritised the outer island and once those outer islands are complete then we come back here [Pohnpei] and that is because here we have communication system in place [and] we can reach the locals [here], but the atolls are very vulnerable so we prioritise that [we] want to put those radios out there'.*

In countries such as the Cook Islands, radio and satellite phones are key technologies for reaching the populations in the outer islands. For example, every island has a satellite phone to be used in emergencies and telecommunications companies prepare their staff with High Frequency radios and satellite phones. However, radio alone continues to have shortcomings. In the Cook Islands the radio station that reaches the outer islands transmits on a limited basis and does not broadcast all hours of the day. In Palau, the outlying islands' communication systems also do not operate at all times and the southwest islands or all the villages in the north are not reliably reached via radio broadcast. The Marshall Islands and Solomon Islands also suffer from coverage gaps in the outer islands. In PNG it's acknowledged that there is a need for better coverage beyond the capital, Port Moresby.

Technicians note that both limited access to financial resources and challenging geographical contexts are interrelated aspects of emergency broadcasting across the Pacific. For example, the cost of purchasing, distributing and maintaining equipment were highlighted particularly by respondents in Vanuatu. While the scale of the national boundaries, density of forests and inaccessibility of many of the islands means that radio towers are at risk of weather damage and theft of batteries.

Media Systems and Disaster Response

A range of media and communication platforms are now being used to provide access to early warning systems before a disaster and communication during disaster response. Fiji and Samoa have some of the most comprehensive activities. In Fiji, they use telephone, internet, warning sirens, shortwave equipment, human resources and key individuals, cars with speakers, word of mouth and NGOs to inform the public. Radio, TV, newspapers and telephone facilities, both landline and mobile, combine to cover all areas. During the 2011 floods in Fiji, radio broadcasters and others used social network sites to access and disseminate information. Samoa primarily uses a network of warning sirens that cover all town areas, and in villages church bells are used as an emergency broadcast system. In countries such as Samoa, Papua New Guinea and Tonga emergency broadcasters are experimenting with sending SMS messages to mobile phone owners; however, there remain a few difficulties given the limited number of messages that can be sent at one time (200 in Tonga). There were also reports in PNG that early warnings received via SMS were sometimes confused with spam messages and as a result people failed to take any action.

To prepare for new policies in emergency broadcast systems, a number of upgrades and technical changes are also planned. These changes include basic infrastructures such as the building of an emergency station in Samoa and the installation of a tower and a backup studio which are being built on higher ground in the capital of Solomon Islands, Honiara. Other countries are focused upon updating their emergency broadcast

systems of warnings including early warning systems, such as a siren, public announcement (PA) system and other audible systems (Nauru, Tonga) and the use of High Frequency (HF) radio (FSM). The implementation of innovative systems and the latest technology is also moving forward. For example, countries such as Niue and Vanuatu are exploring the use of the mobile phone as an early warning system for disasters, and the Cook Islands is focusing on a new system enabling emergency response teams to dial a certain code and be connected to other emergency response personnel across the islands. Samoa is in the process of implementing a digital radio communications network and improving upon the SMS emergency communication system used in recent cyclones. In Tonga, a tsunami unit is being installed and a submarine fibre cable linking Tonga with Fiji will be available to the Tonga Communications Corporation (TCC) in July 2013; the fibre cable will mean that they will only use satellite for backup in the event of a national emergency. Despite the progress in emergency broadcast systems, some countries lack the resources to fully implement the National Disaster Management plans. For example, Kiribati does not have generators to support the broadcasting of Radio Kiribati, which is the primary communication platform during disasters.

Table 5: Role of media in disaster response and preparedness across countries

Country	Relevant legislation	Main institutions & organisations	Role of broadcast media	Role of telecom	Primary media platforms used
Cook Islands	National Disaster Management Act drafted in 2007 but not passed.	Emergency Management Agency, Police Commissioner, Media Office, Minister of Works, Red Cross	Currently no formal arrangement for emergency broadcasting. A plan is reportedly in progress.	Currently no formal arrangement with Telecom for service provision during a disaster	Radio (especially Radio Cook Islands), sirens (on Rarotonga only), HF radios, satellite phones, Telecom has an emergency plan. Some capacity to send SMS messages.
Fiji	Disaster Management Act (1998), National Disaster Management plan (1995), municipal disaster management plans.	National Disaster Management Council (DISMAC), Red Cross, Public Works Department (PWD), Ministry of Health, Ministry of Agriculture, the Military, the Police, Fiji Meteorology Service.	Government broadcasters (Radio Fiji and FM96) are formally integrated into National Disaster Plans.	Formal agreements in place for the provision of free emergency calls (Telecom Fiji, Vodafone & Digicel), and use of networks during disasters (Telecom Fiji & Digicel).	Radio Fiji and FM96, sirens (in Suva),official websites, email, TV, social network sites, SMS messages (Vodafone)
FSM	Disaster Preparedness Plan review currently being approved.	Department of Public Safety, FSMTC, Public Utilities Corporation, Public Transport Agency, local government, Red Cross, International Organisation for Migration (IOM), Salvation Army, and private businesses, National Weather Service Office.	Local radio stations are included in the Disaster Preparedness plan, but there is a lack of awareness of this among stakeholders. Currently no formal emergency broadcasting plans.	Currently no formal plans, but indications that ICT use in disaster response is on the agenda	Police announcements using loud hailers & PA systems, warning sirens (in Pohnpei only), HF radios
Kiribati	National Disaster Act 1993 (was never implemented). National Disaster Management Plan endorsed in 2012.	Disaster Risk Management Office (DRM), National Disaster Management Committee (NDMC), Office of the President, Kiribati Meteorological Service (within the Office of the President)	Currently no formal agreements are in place. Informal plans are for the NDMC to make all announcements via Radio Kiribati	An agreement is being developed with Telecom.	Radio Kiribati, police cars and loud speakers, police VHF radios. Currently no mass-SMS systems.

Marshall Islands	National Disaster Management Plan (1997), official current plan is not publically available.	Chief Secretary's Office, Disaster Management Committee, Atmospheric Technology Services Company ATSC (US Military administered on Kwajalein Atoll)	Currently no formal emergency broadcasting plans. Informal plans are vague but involve announcements via V7AB (radio)	No formal agreements; telecom industry undergoing change. See http://www.worldbank.org/en/news/press-release/2013/03/19/world-bank-marshall-islands-launch-new-strategy-to-strengthen-partnership	Internet (between disaster responders), HF radios (especially to outer islands), mass SMS systems not used due to legal barriers.
Nauru	Disaster Risk Management Act 2008	National Disaster Risk Management Office (NDRMO), Emergency Operations Centre, Police Commissioner, President	The Disaster Risk Management Act states that TV and Radio will be used for emergency broadcasting but there are currently no formal emergency broadcasting plans	No formal agreements, but discussions are ongoing.	Police and Digicel have satellite phones. NDRMO is considering other warning options (sirens or PA system). Digicel can disseminate SMS warnings
Niue	National Disaster Plan (2010), Public Emergency Regulation (2004)	National Disaster Council, Chief of Police, Niue Meteorology Service	The government radio (BCN Radio) is formally integrated into the National Disaster Plan.	Niue Telecom is formally integrated into the National Disaster Plan.	Radio Sunshine (BCN), police cars travel to villages. Plans for sirens. Niue Telecom is exploring options for mass messages via mobile phones. Response stakeholders use email, phones, paper notes and HF radio communication
Palau	National Disaster Risk Management Framework (2010)	National Emergency Management Office, Red Cross, Police, National Weather Service	Formal plans describe an expectation of compliance by broadcasters to follow NEOC direction. Media staff must liaise with the NEOC for updates	No formal agreement with telecoms. See also: http://www.sidsnet.org/msi_5/docs/nars/Pacific/Palau-MSI-NAR2010.pdf	Radio, house-to-house visits in some areas.
PNG	Disaster Management Act currently being reviewed. PNG Vision 2050, National Disaster Management Plan, National Disaster Mitigation Policy and Disaster Risk Reduction, and Disaster Management National Framework for Action 2005 – 2015.	National Disaster Centre, provincial disaster offices, military, National Weather Office, Geo Physical Observatory	Formal disaster plans involve the National Broadcasting Corporation (including its 19 provincial stations) to disseminate information.	Telecoms are formally integrated into disaster plans, however most disaster initiatives are based on informal agreements.	NBC Radio (including provincial stations), some use internet and mobile communications. HF radio (for emergency services).

Samoa	National Disaster Management Act 2007, National Disaster Management Plan (2011-2016)	Disaster Monitoring Office, Disaster Advisory Committee, Police, Samoa Meteorology Division, Ministry of Natural Resources and Environment	Media organisations are included in the National Disaster Plan, and formal plans describe the government AM radio station, 2AP, as the primary media outlet in emergencies.	The National Emergency Telecommunications Plan involves Digicel and BlueSky Samoa.	2AP (government AM radio broadcaster), network of sirens and bells. Digicel can send mass-SMS messages
Solomon Islands	National Disaster Risk Management Plan 2010 for Disaster Management Arrangements and Disaster and Climate change Risk Reduction, (national plan in progress)	National Disaster Management Office, National Disaster Councils (national and provincial), Police, Red Cross, NGOs and civil society, private sector, Ministry for Energy and Mines, Meteorology Service.	In the National Disaster Risk Management Plan Broadcasters are considered 'Critical Infrastructure Agencies' and are therefore formally required to work within the plan. In the event of an emergency, SIBC hands control over to the NDMO.	Telekom is included in the national Disaster Risk Management Plan. NDMO may seek assistance from Telikom in emergencies.	Radio (SIBC), church bells or conch shells. HF radio and email among disaster responders. Telekom is exploring opportunities for warnings via mobile phones.
Tonga	Emergency Management Act 2007, National Emergency Management Plan 2007, draft Tsunami Plan	National Emergency Management Committee, National Emergency Management Office, Tonga Meteorological Service, Regional Meteorological Office in Fiji	National Emergency Management Plan (2007) outlines the roles of the Tonga Broadcasting Commission (TBC). TBC is expected to continue live broadcasts throughout impact. Work on the TBC Emergency Management Plan is in progress	National Emergency Management Plan (2007) outlines the roles of the Tonga Telecommunications Corporation (TTC). Responsible for maintenance of telecommunication capacity, reporting to Government on capacity status.	Radio Tonga (TBC), commercial media outlets, mobile phones (for calling). Warning sirens being piloted. Digicel uses a bulk SMS system.
Tuvalu	National Disaster Plan (1997, revised 2011), Disaster Management Act (revised 2007)	National Disaster Management Committee, Disaster Task Force, Tuvalu Meteorology Service	No official emergency broadcasting plan. Disaster Task Force responsible for information dissemination via Radio Tuvalu	ICTs are not integrated into national plans. Telecom provider has internal plans.	Radio (Tuvalu Radio), police cars with sirens and loudspeakers, satellite phones (for communication to outer islands).
Vanuatu	Disaster Risk Reduction (DDR) and Disaster Management (DM) National Action Plan (2006-2016)	Vanuatu Meteorology and Geo-Hazards Department (VMGD), National Advisory Board (NAB) on Climate Change and Disaster Risk Reduction, National Disaster Management Office (NDMO)	Formal agreement (MOU) signed between VBTC the NDMO & VMGD outlining procedures for broadcasting of official emergency information. NDMO send emergency information updates to all radio stations, including VBTC.	Informal agreements are being developed between Meteorology and Digicel (among others). Telecom providers have internal plans.	Radio (VTBC), warning lights at Police Headquarters, satellite phones (in each village). Currently no agreement on using mass-SMS messages or other ICTs.

As Table 5 demonstrates, a range of media is also now being used for disaster awareness and campaigns in the region. In many cases, face-to-face communication remains the most effective warning system and has been acknowledged and incorporated into disaster planning. Also, police are the primary communicators, and are often provided with satellite phones and radios to ensure they have the most up to date information. For example, in Kiribati the police drive around all of the islands (including outer islands in Kiribati) to inform people about the impending emergency, and in Niue police meet with the village councils who, in turn, go around the village to inform people of the alert and advise them to listen to the radio; they also check to make sure they have hot water and an emergency kit and remind people to close their shutters. In Solomon Islands the police circulate warnings; in some places church bells or conch shells are used to alert communities. While radio and television are the primary emergency systems in Palau, in the past the governor has also phoned households via landlines and sent people to relay the message to every household.

During Fiji's disaster preparedness week, posters, flyers and brochures are used to reach residents in cities, towns, communities and villages. Talkback radio and visits to communities enable a participatory dimension. In the Marshall Islands, radio, videos on TV channels, educational materials, visits to schools, collaborations with NGOs and communication via community leaders are all utilised. In Samoa, The Disaster Monitoring Office publishes locally produced videos online and makes strategic use of media in the lead up to drills and awareness days. In Vanuatu, the National Disaster Management Office (NDMO) circulates printed advertisements and has a one-hour weekly radio program, but finds the cost of advertisements on television and radio too expensive to use routinely. Internet use also remains limited to the urban areas.

A number of countries continue experimenting with ways to combine face-to-face meetings with mediated forms of awareness information strategies. In the Cook Islands, radio, television and newspapers are commonly used for disaster preparedness although these are combined with face-to-face meetings in outer islands. A similar situation is noted with the Federated States of Micronesia and Tuvalu. Given the relative isolation of the Chinese community in Tuvalu from Tuvaluan networks, even face-to-face meetings present challenges when all of the community awareness and warning communication materials are in Tuvaluan.

Media Capacity Building

The PACMAS MEF outcomes for Media Capacity Building are listed below. The long-term outcome partially within the scope of PACMAS and covered as part of the study is:

- Regional and national organisations (such as national and regional media associations, NGOs, CSOs) with a stake in media governance, media systems and media production are strengthened.

There are three short-term outcomes that are within the scope of PACMAS:

- Regional and national organisations with a stake in media governance support self- regulation (codes of ethics), support members effectively, build their capacity and advocate for media plurality.
- Leadership and technical training is available for senior media practitioners/owners and broadcast/ communication engineers; and,
- Sustainable, accredited and accessible industry oriented tertiary-level training is available for new entrants to the media industry;

This section of the PACMAS State of Media and Communication Report discusses these outcomes in relation to three key areas highlighted above: regional and national media associations, media training and support including training for practitioners and entry level training.

Regional and National Media Associations

Mixed responses about media associations were noted in each country and across the region. In countries with existing and functioning associations, general concerns are over organisational structure and management, governance, representation, conflicts of interest, collaboration, funding and resourcing, development of a code of ethics and membership composition.

National Media Associations

Media associations (MAs) and councils vary widely in their scope, levels of logistical functioning and activities, membership and degree of inclusiveness, and overall engagement with the industry and key stakeholders. In countries including the Marshall Islands, Nauru, Niue, Tuvalu, Fiji and Palau, media associations do not currently exist, while in the Cook Islands the association is dormant.

In some instances, media associations' affiliation with government has caused industry professionals to lose faith in their association's ability to fully represent them and respond to their needs. In the smaller island states, like in Micronesia, this becomes most evident when associations fail to fully function as a result of the small number of industry personnel and dual roles that personnel have in both government, industry and the association. In PNG, two corporate organisations have contributed funding towards conferences hosted by the Communication Arts Professionals Association, however no continued advocacy on media freedom is noted. A Constitutional Law Reform Commission has supported the need for a 'sharper' media performance and recommended the establishment of the Independent Media Standards Committee. As a result of this, the PNG Media Council was invited to organise training around the Code of Ethics and paralegal training for committee members who formerly served in organisations such as the Ombudsman Commission, Transparency International and the police.

Feedback from the Panel of Expertise indicates that many of the 14 countries do not have a code of ethics. This includes Vanuatu, FSM, Kiribati, Marshall Islands, Nauru and Tuvalu. Palau has a Community Media Code of Ethics, while Niue has one for its government media section. Parts of Fiji's Code of Ethics have been integrated into the Media Decree. Samoa and Tonga have a code of ethics for commercial and public broadcasters, but none noted for community media. PNG has perhaps the most comprehensive set of codes of ethics, including a General Code of Ethics for News Media, a Broadcasting Code of Practice, Code of Ethics and Practice for Broadcasting Advertisements, and another document on Advertising to Children.

Due to the increase of mobile penetration in PNG, as well as access to the internet and social media, media professionals have issued a call for the Code of Ethics to be reviewed to better reflect current media trends and practices. At one point, journalists were copying stories from other journalists online and reproducing them as their own, which caused uproar among journalists on Facebook. It was also in this forum that a vigorous discussion was held, calling for a review of the Code of Ethics to include new media and protect journalism benchmarks when using online media, indicating the increasing role of these new media in daily journalism practices in the region.

Regional Media Associations

The emergence of the Pasifika Media Association (PasiMA), a regional body with a more Polynesia-focused membership including representatives from Samoan, Tonga and the Cook Islands media, facilitates a level of representation at the regional level. This is alongside the Pacific Islands Media Association (PINA), which is increasingly seen as a Melanesian media-dominated association. Another regional association, the Micronesian Media Association (MMA) has been reported however research participants from Micronesian countries say that is does not include key media and communication organisations from those countries. The Micronesian Information Broadcast Association (MIBA) was created in the late 1980s but it did not survive.

Table 6: National Media Associations

Countries	National Media Associations	Membership	Notes
Cook Islands	Cook Islands Media Association	Not active	Association not active despite being resurrected around 2011
FSM	No national association		North Pacific Federation of Media Professionals was being established, and was mentioned by research participants in FSM. Micronesian Media Association (MMA) reported in literature, but no local accounts of membership.
Fiji	Fiji Media Council (now disbanded)	When active: Media companies and private individuals.	Fiji journalists are planning to set up a new professional association[34].
Kiribati	Kiribati Media Association (KIMA)	Media companies and media practitioners	Revived in October 2012.
Marshall Islands	No national association		North Pacific Federation of Media Professionals was being established, and was mentioned by research participants in Marshall Islands. According to Freedom House, many Marshallese journalists are associated with the Micronesian Media Association (MMA) as of 2007, but no Marshall Islands research respondents reported being a member of MMA.
Nauru	No national association		Nauru Media Bureau is a member of PINA, but no recent engagement.
Niue	No national association		PINA is reported as the main media association for Niuean media outlets.
Palau	No national association		North Pacific Federation of Media Professionals was being established, and was mentioned by research participants in Palau.
PNG	PNG Media Council (PNGMC) PNG Media Workers Association (PNGMWA) Communication Arts Professionals Association (CAPA)	PNGMC: Media houses, media organsations PNGMWA: journalists and media professionals CAPA: graduates from the Communication Arts Department at Divine World University	PNG Media Council reported lack of activity in past five years. PNGMWA established in 2012.
Samoa	Journalism Association of Western Samoa (JAWS)	Journalists	PINA and PasiMA mentioned as important for Samoa's media professionals.
Solomon Islands	Media Associations of Solomon Islands (MASI)	Television and radio broadcasters, print media and the PFnet packet radio network.	

33 http://pacmas.org/blog-post/fiji-media-talk-of-setting-up-a-new-professional-association
34 see http://www.mic.gov.to/news-today/press-releases/4381-2013-world-press-freedom-day

Tonga	Media Council Incorporated, Tonga (also referred to as Tonga Media Council)[35]	Media and news organisations	Media Council inc. (Tonga) was consistently referred to as defunct by research participants.
Tuvalu	No national association		TMD is the only media organisation in Tuvalu, and is a member of PINA
Vanuatu	Media Asosiesen Blong of Vanuatu	All media practitioners, including production, technical and administrative staff.	

Media Training and Support: Practitioner Training

For many of the 14 countries, media associations, at national and regional level, have been key players in providing training for professionals. Niue does not have a media association but has maintained its membership to the Pacific Islands News Association (PINA) due to the training it provides. There is a desire to start a 'small islands' organisation for Tuvalu, Palau and Kiribati that will address their specific needs, which might not be seen as priorities by the larger Pacific Island associations.

Some national media associations, such as those of PNG and Solomon Islands, used to provide training, but this has not occurred in recent years. The PNG Media Council has an existing resource centre for journalists and with the support it received from the Media for Development Initiative, was able to carry out media research in the past. The Media Association of Solomon Islands (MASI) has contributed to networking and sharing of information among media workers, however there are calls for MASI to actively facilitate more training.

Regional collaboration in terms of capacity building is noted with various media organisations in New Zealand such as Radio New Zealand. This is also an important network due to the technician's support that it offers. The Pacific Media Centre at Auckland University of Technology also has a strong presence in the industry in the Pacific through its Pacific Media Watch[35] resource offering rich online facility and contribution to media research and publications.

Church-based organisations have also been prominent in most of the 14 countries in terms of capacity building. The churches have a stake in the industry due to their participation in operating media organisations. Some examples include the Oceania arm of the Catholic Communication (SIGNIS)[36], and the World Association of Christian Communication (WACC), which builds media research capacity through its various regional research projects[37].

AusAID has committed to supporting the development of good governance through media development and capacity building schemes such as the Media for Development Initiative, SOLMAS and PACMAS. Other institutions include agencies of the United Nations, such as UNDP, UNICEF and UNESCO. The latter has been a major supporter in the promotion of media freedom. Divine Word University in PNG is home to a UNESCO chair in media freedom and holds an annual media freedom day event. UNESCO also provides extensive support through equipping training centres, such as Divine World University, with funding to purchase modern, up-to-date technology, especially for entry-level schooling.

There is a strong desire among professionals for training opportunities and skills upgrading, not just amongst journalists but technicians and other communication professionals in the NGO sector.

Media Training and Support: Entry Level Training

Journalism training across the 14 Pacific countries varies for entry-level programs. PNG, Fiji, Solomon Islands, Samoa, Vanuatu, Cook Island and Tonga have in-country institutions of higher learning where school leavers can study journalism and in PNG's case, technicians training (see Table 7). Kiribati, Marshall Islands, Nauru, Tuvalu, FSM, Palau and Niue do not have media journalism programs at post-secondary school level. Across the 14 countries, access to external opportunities is available via foreign scholarship schemes, government scholarships and some company sponsorships. This is, however, limited by selection criteria and national priorities set by the

35 http://www.pmc.aut.ac.nz/pmw-nius
36 http://www.laici.va/content/laici/en/sezioni/associazioni/repertorio-delle-associazioni/repertorio/associazione-cattolica-mondiale-per-la-comunicazione.html
37 see WACC media and gender monitor, http://waccglobal.org/en/resources/media-and-gender-monitor.html

government. For example, in Nauru, scholarships for media studies are not prioritised. For countries that have entry-level journalism training programs, enrolment is dominated by women, especially in Samoa, Tonga and PNG. Solomon Islands is a notable exception with more male enrolments.

Most of the institutions follow a standard format for certificate (1 yr), diploma (2 yrs) and bachelor (4 yrs) program structure. Institutions in Tonga and Vanuatu have one and two year courses. Work experience or industrial training is factored into the curriculums. For Samoa, a response to the industry's call for quality graduates has resulted in the addition of another year to diploma level to adequately prepare students for entry-level journalism.

A noticeable level of dropouts from these programs has been noted in some countries. The Tonga Institute of Higher Education is recording an increasing attrition rate in its media program, which is experiencing a number of challenges, especially around qualified trainers and resources. The National University of Samoa's increased attrition levels are largely attributed to recruitment issues (i.e. the program not being a first preference for intakes). Inability to pay fees is also a barrier to completion. Heads of departments at the Solomon Islands National University (formally SICHE) report a dropout rate of between 10 to 15 per cent.

An increase in tertiary level qualifications amongst Fijian journalists has been noted in the last decade as comparison of two previous surveys indicate. According to Singh's (2012) survey,[38] although 51 per cent do not have any tertiary qualifications or any other formal qualifications, of those who do (49 per cent), 18 per cent held diplomas, 17 per cent degrees, 11 per cent certificates, and three per cent held postgraduate qualifications. In comparison Robie's (2003) survey, indicates only one-third of Fiji journalists had a degree or diploma a decade ago.[39] One of the contributing factors to this increase in formal qualifications is the increased availability of journalism courses at certificate and diploma levels at universities and training institutions in Fiji and the region. Prior to that, journalism courses were offered only by three institutions in the Pacific – USP in Suva, Fiji; and UPNG and Divine World universities in Port Moresby and Madang in PNG, respectively.

Course Accreditation

Course accreditation for some countries is clearly in place. The Australian Technical College (ACT) accredits the Vanuatu Institute of Technology media program. The National University of Samoa has an Industry Advisory Panel (IAP) that participates in curriculum development and it collaborates with the Samoan Government (Cabinet) to endorse any changes to the course.

The Solomon Islands National University curriculum, as well as National University of Samoa (NUS), is based on the Pacific Media Communication Facilities (PMCF) course design developed by PINA. Industry professionals also provide input into the curriculum design. The delivery of their TVET programs is done in close consultation with the National Apprentice Board, where participants have to sit for a particular test. Their Course Advisory Committees are comprised of media professionals.

For universities in PNG, quality assurance through academic audit is mandatory (government directives) and the government's recent move to raise PNG universities to international standards has resulted in academic restructure for some institutions. An academic audit is usually conducted with participating external auditors (comprising members of foreign universities). The National Education Department of PNG also has a TVETs office that solicits education specialists to train technical college staff on curriculum development, management and leadership.

Training Programs

In terms of institutional capacity, the opportunities and challenges vary both regionally and within countries. On the one hand there is Fiji National University (FNU), which has received a lot of international support through AusAID to equip its training facilities. On the other hand there is Kiribati, Nauru and Niue, which do not have local access to (or an entry point for) journalism or media training.

A major challenge for all the countries, but especially the smaller island states, is funding for training. Reliance on external aid-related funding, often through regional media associations, often results in training that is not locally relevant. In-country training for professionals is preferred for countries such as Niue, Tuvalu and Marshall Islands, due to staff shortages on the ground. It becomes problematic to maintain operations when one person leaves for

38 Singh, Shailendra. 2013. Responsible conflict reporting: Rethinking the role of journalism in Fiji and other troubled Pacific Societies. Pacific Journalism Review, 19 (1), pp111-131.

39 Robie, David. 2005. Mekim Nius: South Pacific Media, Politics and Education. University of the South Pacific Book Centre, Fiji and AUT University.

training. The Solomon Islands case is unique because of the presence of the Solomon Islands Media Assistance Scheme (SOLMAS), which has been actively involved in capacity building across media platforms. SOLMAS, in collaboration with the former Soloman Islands College of Higher Education, and industry representatives, developed the media program.

PNG has the largest availability of training opportunities, in terms of access to entry-level and professional training through institutions of higher learning, workshops, internships and in-house training. This is the result of a diverse media industry - the biggest in the region - and a fairly open media environment that creates demand for media and communication skilled professionals.[40]

Industry Response to Training

Response from the industry on the quality of graduates from media training courses varies but tends to indicate that improvements can be made, especially in regards to language skills. In Samoa, Tonga and Solomon Islands, there is disillusionment with the level of graduates coming into the industry. Consistent reference is made to a lack of basic journalism skills, such as grammar, spelling and literacy. This has been attributed to the curriculum offered at the journalism training schools.

In Samoa, respondents consistently identified major issues with the quality of the course, including the issue of recruitment. This indicates that journalism is not a first preference career path for the cohort of mostly female participants. The University of Samoa merged with the Samoa Polytech in 2006 and the media curriculum is based on the PMCF course design developed by PINA, and implemented across other TVETS in the Pacific (Fiji, Vanuatu, and Tonga). Some additional courses are developed by the local instructors and through workshops with industry representatives.

The Solomon Islands industry is also expressing concern over the quality of graduates. There is however an understanding that the program is only two years old, with one cohort of graduates at the time this research took place.

Table 7: Comparison of Media and Communications Training

COUNTRY	TVET	UNIVERSITY	OTHER	NOTES
Cook Islands	Tereora College - Media Studies	None listed	Pitt Media Group training on radio news and TV production	
Fiji	None listed	Fiji National University University of South Pacific	UN Agencies South Pacific Commission	
FSM	Listed TVET does not offer media, journalism or communications	None listed	Catholic Communications Association (Oceania) Oceania Television Network (funded by PACMAS) training for television producers	Hawaii is listed as the preferred media training destination
Kiribati	Listed TVET does not offer media, journalism or communications	None listed	Broadcasting and Publications Authority (BPA) UNDP training UNICEF training	
Marshall Islands	None listed	None listed	South Pacific Commission Media Centre	Students intending on taking up journalism go to the USP campus in Suva.

40 Papoutsaki, E., McManus, M., Matbob, P. 2011. Communication, Culture and Society in Papua New Guinea, Yu tok wanem? DWU Press, Madang and Pacific Media Centre, Auckland.
41 See http://www.ausaid.gov.au/HotTopics/Pages/Display.aspx?QID=701

Nauru	None listed	None listed	No current listing	AusAID supported Nauru Media Unit employs 30 people, trains reporters and production staff[42]. Some travel for formal training at DWU (PNG) and USP (Fiji)
Niue	None listed	None listed	UNESCO Media Training SREP Media Training on climate change	New Zealand is listed as the preferred media training destination.
Palau	None listed	None listed	None listed	Employed journalists have received training in Hawaii (USA), the Philippines, Guam and USP (Fiji)
PNG	Don Bosco Technical Institute Port Moresby Technical College	Divine Word University (DWU) - Communication Arts (Journalism) University of PNG (UPNG) - Journalism and Media Studies Strand University of Technology (UNITECH) - Communication for Development University of Goroka (UOG) - Centre for Social and Creative Media (postgraduate)	Media for Development Initiative (MDI-AusAID funded) UNESCO training Commonwealth Press Union (CPU) training	Pathways include communication research / journalism degrees overseas (Australia, UK, New Zealand). Communication graduates do short internships in other Pacific Island countries like Cook Islands.
Samoa		National University of Samoa (NUS) - Media and Journalism Program (1-year certificate and 2-year diploma)		Bachelor degrees acquired in NZ and China scholarships have been given.
Solomon Islands	Don Bosco Technical Centre - Media Training	Solomon Islands National University - Certificate Media Studies	Commonwealth Press Union (CPU)	Pathways include DWU for a BA in journalism or USP
Tonga	Tonga Institute of Higher Education - Journalism (certificate & diploma program)	None listed	Commonwealth Broadcasting Association (CBA) Pacific Islands Media Assistance Scheme (PACMAS) Pacific Institute for Broadcasting Development	
Tuvalu	None listed	None listed		Media students are sent to USP (Fiji)
Vanuatu	Vanuatu Institute of Technology	None listed		Plans includes pathways for Undergraduate Bachelor degrees at USP, DWU and UPNG

Media Content

The PACMAS MEF includes three outcomes under Media Content. There are two long-term outcomes that are partially within the scope of PACMAS:

- The public has access to informative and innovative media content (from all providers) that supports achievement of the Millennium Development Goals (MDGs); and,
- The public has increased access to media production capacity (voice) through the development of community media or through increased access to public or commercial media.

There is one short-term outcome that is within the scope of PACMAS:

- Innovative media content is produced that addresses themes associated with governance and the MDGs across all media (PSBs, Commercial and Community).

This section of the PACMAS baseline report discusses these three outcomes in relation to the research findings. It focuses on the production of media content in the 14 Pacific Island countries of this study.

Of particular interest is the media's role in strengthening governance and democracy in the Pacific and its ability to contribute to development outcomes. This requires both public access to media and increased access to media production in order for citizens to tell their stories or voice their concerns. This section discusses trends and challenges in access to media content, access to and participation in content production and presents examples of media content across the region.

Access to Media Content

Access to media content can be challenging in the Pacific. Access is determined by geographical constraints, access to infrastructure and services, and the availability of local production within each country. Because radio stations provide the furthest reach, they are regarded as most important content providers. The mandate of providing citizens with relevant information often lies with the state broadcasters. Newspapers reach literate, predominately urban communities and provide a large variety of content from daily news to sports, women's issues and feature stories.

Television signals are more limited than radio. Local broadcasters make a commitment to screening local content (e.g. local news), but to survive many broadcasters must rely on foreign content, such as from the Australian Broadcasting Corporation's Australia Network. Broadcasters are primarily located in urban centres, the local news reflecting activities in urban areas. Reporting from outer areas is more costly and less immediate.

There are different models for funding content distribution and broadcast in the Pacific. In Tuvalu, for example, organisations and government are required to pay for radio airtime. This is similar with Tonga's broadcaster, TBC. In the Federated States of Micronesia, Island Cable TV (ICTV) Pohnpei's local channels offer free airtime for the promotion of educational content. Similarly, in Nauru, radio airtime for government and NGOs is free, particularly for the communication of climate change and NCDs issues.

Foreign content is widely available either through Pay-TV or pirated DVDs, usually distributed through local shops. Due to increased access to technology, remote communities actively seek out media, through the mobile phone (still relatively costly in most parts of the Pacific) or by communal watching of films, such as in PNG which has seen an increase in village cinemas. However, foreign media content dominates these channels. The challenge for media producers lies in understanding formal and informal distribution systems in order to provide content to communities that is relevant and regarded as important to their lives.

Reaching a range of audiences is of great concern to content producers. Content producers choose different time slots to reach audiences. In Micronesia and Polynesia, radio and television programs are focused on morning and evening time-slots since these times are the most popular. In addition, there are increasing efforts for content sharing across the Pacific, such as the Regional Media Centre at SPC who have in the past, engaged in content distribution across the Pacific. Emerging efforts to distribute content within countries and immediate regions is exemplified via a new TV company in Palau which is producing and airing content from across Micronesia. Considering the technological developments in the Pacific and their impact on content production and reception, sharing across countries and platforms is on the rise, particularly where content relates to shared issues and a broader Pacific or regional identity.

While media content producers say they regularly assess their immediate audiences, there have only been a small

number of extensive audience studies undertaken by public broadcasters in the Pacific to assess access to media, including PNG[1] (2012) and Vanuatu[2] (2013). Other audience studies include monitoring and evaluation reports by organisations assessing message retention around media messages such as ***Wan Smolbag's*** evaluation of the ***Love Patrol*** series. The evaluation report demonstrates the effectiveness of the edutainment model in the Pacific. Other studies have found that personal character stories can be effective in bringing health messages across[3]. However, such studies are often limited in scope and do not necessarily reflect on the access to such content at a national or regional level.

Access to Content Production

In many Pacific countries the capacity to produce media content is linked to the size of its media industry. Some countries such as Nauru and Niue have a relatively small media industry and, by extension, less capacity to produce media content than larger countries such as PNG or Fiji. All countries produce content across various platforms including print, radio, TV and mobile and online media. State broadcasting plays a crucial role in the Pacific and government departments are regularly involved in producing content. Due to the increased availability of technology and lower costs associated with this, there is an increase in content producers. Content sharing is also becoming more popular among audiences rather than relying on traditional broadcast media.

While state broadcasters are concerned with development issues, their content production is often directly influenced or limited by the government's directive. Smaller state broadcasters produce government programs, such as the state-run radio station in FSM where the Department of Education is the most active content producer. Commercial stations and commercial broadcasters operate more freely and produce a variety of content, including content around development issues.

Apart from government departments, NGOs and churches often produce regular content. Churches produce regular content in Samoa. In countries like Tuvalu, a few churches are taking a leading role in informing people on the issue of climate change. In PNG, church organisations continue to lead by introducing technological infrastructures, such as radio transmitters. NGOs also produce media around development issues in the Pacific. State radio broadcasters work with NGOs who produce content to air on radio. For example ***Wan Smolbag*** in Vanuatu works with VBTC to broadcast radio dramas, and NGOs in Niue take turns to host radio programs.

Commercial companies also produce development media financed by development funding or NGO commissions. For example, OneLook is a Samoan multimedia production company that has run several projects involving producing videos to assist with more appropriate and effective communication of planned infrastructure developments with local villages.

Whether governments, churches, NGOs or commercial companies undertake production, a common concern raised is the high costs associated with broadcasting material with educational and development content. Not-for-profit organisations and companies are often required to pay for airtime. In Vanuatu, one research participant commented, *'We have quite a lot of ideas, we have quite a lot of thinking of getting these things out in a sort of education form to the public. But we are having a problem with again, the budget that we don't have it. So the airtime for our radio programs are quite expensive here - very, very expensive.'* (VANUATU09)

Apart from structural factors around media content production in the Pacific, there has been discussion around how content is being produced to suit Pacific audiences. In regards to journalism, David Robie (2008) has discussed the idea of development journalism in the Pacific[4]. The idea is that journalists have a responsibility to consider the communities' need for information in order to positively change their lives and for development to take place. This goes beyond objective reports around an issue or an event, but seeks to provide further information to audiences in simple terms, including introducing potential solutions for change. Development journalism is part of the debate around content production in the Pacific, however the realities of Pacific media present challenges in its practical application. More in-depth research and reporting of stories can at times be challenging to journalists in the Pacific as resources are often limited. However, one example of production of

1 Intermedia Europe (2012). Citizens Access to Information in Papua New Guinea: Citizen Survey, June 2012, Melbourne. Available at: http://www.abcinternationaldevelopment.net.au/wp-content/uploads/2012/09/ABC-PNG-Report.pdf.

2 Intermedia Europe, (2013) Citizens Access to Information in Vanuatu: Citizen Survey, February 2013, Melbourne. Available at: http://www.abcinternationaldevelopment.net.au/activities/citizen-access-information-vanuatu-study

3 Thomas, V; Iedema, R; Britton, K; Eggins, J; Kualawi, M; Mel, M; Papoutsaki, E (2012) Komuniti Tok Piksa - Integrating Papua New Guinean Highland Narratives into visual HIV prevention and education material. Sydney: UTS Centre for Health Communication & UOG Centre for Social and Creative Media.

4 Robie (2008) Media and Development in the Pacific: Reporting the why, how and what now in Singh, Prasad (eds) (2008) Media and Development: Issues and Challenges in the Pacific Islands, Fiji Institute of Applied Studies, Pacific Media Centre.

content that suits Pacific audiences and that is in line with Pacific storytelling is One TV's approach to storytelling. One TV in Solomon Islands makes a commitment to telling local news stories, which are generally longer in duration than 'Western' news stories. When it comes to development issues, more information is provided to give audiences background information around a certain issue and their reports advocate for people to make a change where possible.

The language of media content also represents a constraint, one that usually affects those living outside urban areas. Fiji enjoys a rich multi-lingual content scene with broadcasting in Fijian, Hindi and English for large audience groups. In Vanuatu broadcast is mainly in English, Bislama or French. Despite its many indigenous languages, content production in local PNG dialects is rare and broadcasting is mainly in English, Tok Pisin and Motu. The Cook Islands has four spoken languages but mass media is in either English or Rarotongan. English is being increasingly used in Palau and most media is in English in FSM. There is also a trend to use English in programming, which will enable content producers to distribute their product regionally.

Participation in Media Production

Active involvement in media production by Pacific Islanders is important for giving voice to local people and issues, ensuring appropriate representation and the plurality of media. The most common form of participation through electronic media is talkback radio, which is widely used by government and commercial radio stations. Talkback radio allows people from outer regions to express their opinions and participate in radio discussions. Fiji has a lively radio talkback culture on commercial stations. In Tonga, members of the Women and Children's Crises Centre and organisations such as Tonga Health have regular programs on radio and TV with a discussion and interview format including health workers and doctors.

Social media has also changed the way Pacific Islanders participate in debates around issues that affect them. Social media, especially Facebook, has generated political and social debates such as PNG-based Sharp Talk, and Vanuatu's Yumi Tok Tok Stret. Walsh (2010) describes political blogging in post-coup Fiji as an alternative source of information to mainstream media[5]. Most political bloggers in Fiji publish anonymously, and according to Walsh rumours often circulate and it is difficult to establish the reliability of information. Cave (2012) agrees that some Fiji-focused blogs have lacked editorial discipline which can diminish their usefulness, but finds that overall in the Pacific, 'The blogosphere has been a key sphere for exposing corruption and unlike traditional media, most of these online media provide forums to discuss and debate these reports'[6]. Indeed, Cave (2012) reports a case where a well known blogger in PNG has been quoted in international newspapers, and given a weekly slot on PNG's national radio station NBC.

The University of Goroka, through the Yumi Piksa project, has investigated community-responsive ways of filmmaking in Melanesia. The process of filmmaking as a space for exploring community relations and practices and challenging stereotypical media representation of PNG communities has been an important dimension of this activity[7].

Social media and other grassroots communication and participation have been assisted by the availability of technologies, and the Pacific is experiencing an increase in ideas being voiced via online forums. This also offers opportunities for grassroots communication to contribute to some of the content of the national broadcasters, although the promise of digital media must be tempered by an understanding of its actual reach (see Table 4 on internet penetration rates).

Examples of Millennium Development Goals Content

Public broadcasters, commercial and community media have been most active producers of content in the areas of health, education and youth. Climate change programs and programs focusing on gender are also frequently mentioned. When asked about content production around MDG themes, Panel of Expertise members did not regard 'poverty' as a significant theme for content production in the Pacific. This section provides examples of content produced relating to the MDGs, especially climate change and NCDs. Some other examples at the end of the section reflect the diversity of development content and platforms in the Pacific.

5 Walsh, C., 2010. Political blogs on Fiji: A "cybernet democracy" case study. Pacific Journalism Review, 16(1), pp.154–177.
6 Cave, D., 2012. Digital Islands; How the Pacific's ICT Revolution is transforming the region, Available at: http://www.lowyinstitute.org/publications/digital-islands-how-pacifics-ict-revolution-transforming-region, p. 12
7 Thomas, V. (2011) Yumi Piksa – Developing a community-responsive approach to filmmaking in Melanesia. Pacific Journalism Review, 17(2), 27-49.

Climate Change

Climate change often affects people living in low land and remote areas, as well as women and people with disabilities, but reporting on climate change in remote areas is difficult and costly. Journalists in Fiji commented on the importance of reporting 'from the field' whether that was showcasing the work of scientists or community efforts in response to issues around climate change. However, resources are not always available and reporting on an event in the urban centre is often cheaper and faster. Organisations also commented that inviting a journalist to an event is free and will provide them with a news story; however, longer and more in-depth stories incur higher costs. The language of reporting was also noted as a common issue, especially around the documentation of climate change. Almost all respondents across countries pointed out that the translation of scientific terms into local languages or a language that communities understand is challenging. Pacific journalists are making an effort to report more in-depth stories but this hinges upon the resources that are available to them.

Paton and Fairbaine-Dunlop (2010) look at how and where grassroots communications have enabled participation in climate change adaption debates[8]. They found that NGOs are a key forum for debating climate change, and where women are most likely to participate. They found that Tuvaluans also wanted to be involved in climate change decision making throughout the whole process, not just implementation. Participatory communication is regarded as essential in effectively addressing communities' needs in regards to climate change[9]. There have been a number of participatory community workshops around climate change in the Pacific to identify the specific challenges that communities are facing. Some countries have begun to include traditional knowledge and traditional warning systems as well as prevention methods into the response to climate change. In addition programs work across platforms to allow for increased participation by audiences. A key example in FSM is the NGO-operated radio station, Paradise Media Pohnpei, which is a website with an events section and some basic updates. It also has a Facebook page, where audiences are invited to comment on content, and a Sound Cloud (audio sharing/networking) account.

In some countries, such as Kiribati and Palau, people report information fatigue in regards to climate change. This might be attributed to the difficulty of translating climate change issues into local stories that are relevant to people who might not see climate change as an immediate threat to them. While general awareness has been raised, journalists express difficulties in reporting interesting and new stories around the 'same' issues.

NGOs are very active in regards to climate change and contribute to the production of media content around climate change. In some countries such as Fiji and FSM, participants observed a disconnect between various groups, including government, media and NGOs, which have different agendas and strategies for communicating issues of climate change. In countries including Fiji, national teams have been set up to coordinate the response and information around climate change and bring stakeholders together. While Tuvalu has received extensive coverage of climate change in overseas media, there is much less in Tuvalu itself.

NCDs

In Niue, advertisements about NCD prevention (quit smoking, increase physical activity) are often played during big TV sporting events such as rugby games. Some of these advertisements are locally produced, but the associated costs are an inhibiting factor to local content production. In the Marshall Islands, the Health Department hosts a weekly radio program and writes information for inclusion in the newspaper, and some NCD programs have been aired on the local TV channel. The Youth-to-Youth program engages youth as peer-educators and has a weekly 30-minute radio show on V7AB. Tonga is active in providing information around NCDs via television sports programs, TV, radio and newspaper coverage of events and messages placed in ads, billboards and newspapers. Facebook is also being used to share stories about individuals coping with NCDs.

Other Examples

Regional - A number of organisations and programs are involved in the production of content for development; these programs and organisations are distributed within countries and regionally. For example, the Regional Media Centre at the Secretariat of the Pacific Community (SPC) based in Fiji has in the past, produced a television show called 'the Pacific Way' exploring 'developments in the Pacific that deal with and relate to, the culture, heritage and traditions of its people'[10]. The program sees itself as providing a voice to Pacific Islanders and

8 Paton, Kathryn & Fairbaine-Dunlop, Peggy (2010) "Listening to local voices: Tuvaluans respond to climate change" in Local Environment: The International Journal of Justice and Sustainability Vol 15 (7) pp 687-698

9 Mercer, Jominey-Howes, D. Kelman, I. & Lloyd, K (2009) "'The potential for combining indigenous and western knowledge in reducing vulnerability to environmental hazards in small island developing states"' Environmental Hazards Vol 7 (4) p 245-267.

10 http://www.spc.int/rmc/pacificwaymenu

delivers educational and informative content in a magazine style format. The program is broadcast on the ABC's Australia Network and distributed to 20 television stations in the region.

Marshall Islands - Women United Together Marshall Islands (WUTMI) is a significant contributor to C4D communication content. A core goal is to revive Marshallese customs, culture and language. Content produced by WUTMI includes posters, newspaper advertisements, radio programs, DVDs, YouTube videos, and a Facebook page with information and photos. WUTMI primarily focuses on women's empowerment in the Marshall Islands.

Vanuatu - Social messages are the focus of the production of ***Wan Smolbag*** Theatre Company (WSB), which started producing theatre and drama in Vanuatu before adding radio and television production to its activities. WSB produces a local soap opera series that is distributed through the Pacific. The series, ***Love Patrol,*** revolves around a police station and often includes social messages about health and domestic violence. An evaluation report showed that the edutainment show has been successful in raising audiences' awareness around getting tested for HIV and changing attitudes towards risky behaviours.[11]

Papua New Guinea - Appropriate Technology (AT) Projects is a social enterprise that works on developing and implementing technologies for communities in Papua New Guinea. The project realised the need to document its projects in order to showcase it to other communities and funders. After trying to collaborate with the government and freelancers, they decided to start their own media department through which they now produce radio dramas, films and various media for development. Smaller NGOs are now able to produce content internally and often work with broadcasters for distribution.

Governments and organisations are using a range of platforms to communicate and share information about MDG topics. Within this suite of activities, face-to-face consultations within the more traditional communication spaces of Pacific Islanders remain vital parts of this ecology. Participation is important for individuals and communities to understand how health and climate change issues might affect them and how they themselves can play a role in social change.

Cross-Cutting Issues: Disability, Gender and Youth

How the cross-cutting issues of disability, gender and youth engage with and are represented within the media and communication environment across the 14 countries, is revealed through an analysis of responses to interview questions about media content and capacity development. Issues raised by research participants in relation to gender and youth were often complex. Further research, specifically looking at some of the gender and youth issues related to media and communication, and in particular disability, (which received an extremely low level of response in this study) would help to deepen understanding of differences and similarities across the region.

Gender and Youth

A number of programs have been centred on the active participation of under-represented or marginalised groups, including women and youth. For example, femLINKpacific (based in Fiji) engages women and people with disabilities in radio production and in running community radio stations in various parts of the country. WUTMI in Marshall Islands also focuses specifically on the representation of women and produces radio stories for the local broadcaster. UNICEF has run workshops with youth and children with disabilities to produce one-minute stories on video in some Pacific countries.

Across the countries, gender was discussed in relation to various themes including NCDs, and the varied levels of risk for different diseases, for men and women. In some countries such as FSM and Palau there was little or no discussion of specific gendered content, or targeting of content. However in others there were examples of significant gender-based work in this area. For example, Nauru's Department of Women's Affairs is an active government department with a regular program on Radio Nauru; the Tonga Family Health and the Government Centre for Women and Children - ***Ma'a Fafine mo e Famili*** – which provides information and awareness about NCD issues and in Fiji, the Women's Action for Change NGO has been active in NCDs awareness through community theatre.

Awareness and advocacy around gender-based violence has become stronger in recent months in PNG, including a national ***haus krai*** (house of mourning) recently staged at the Sir John Gaius Stadium in Pt. Moresby.

11 Love Patrol: Series 1 Evaluation report (2008) PRHP & SPC.

In Tonga, as radio stations experienced a number of distressed women calling in to talk-back radio programs, TBC organised a discussion with key stakeholders on key women's issues.

The dominance of men in national and local politics and major decision making processes was noted across a number of countries including the Cook Islands, *' we have this situation in our parliament where there are only two women members ...'* (COOKS12). FemLINKpacific in Fiji draws attention to how women are often left out of the formal discussions and decision making process for dealing with disasters, and yet are responsible for household level disaster risk management strategies. The Women and Children's Crisis Centre in Tonga provides informal media training for NGOS and works to raise social issues with members of parliament, heads of ministries and department town offices. The centre produced a 15-minute video of citizens expressing opinions on climate change and the rights of Tongan women before the 2010 election. Paton and Fairbaine-Dunlop[12] suggest that family Falekaupule (the traditional governance structure), and churches are the most relevant spaces for discussion of climate change in Tuvalu, even though women and youth are essentially excluded from such discussions. In Vanuatu, women remain under-represented in political leadership, but are often actively involved through church groups.

Within the media industry, women may outnumber men. However, as one research respondent from Cook Islands noted, the higher representation of women in the media does not mean that gender issues are therefore adequately addressed. Technicians are overwhelmingly male. Women outnumber men at the Tuvalu Media Department, with 15 women and five men. Four of those men are technicians. In PNG a research participant from a news organisation reports that more women choose to stay in mainstream media while men tend to take up public relations jobs (PNG11). In Samoa, the media industry is dominated by women who are reportedly more likely to have bachelor degrees from overseas, than men. Conversely, journalism students in Solomon Islands are predominantly male.

Young people are innovatively engaged in a range of ways across a number of media and communication initiatives in the region. For example, in Vanuatu young people participate in workshops and activities encouraging them to discuss various issues that affect them, through the Wan Smolbag Youth Centres. Young people are also widely recognised as an important target group for advocacy around NCDs and particularly climate change. The Conservation Society of Pohnpei, FSM, has youth initiatives around conservation and climate change, and includes Twitter and Facebook pages promoting the Youth Environmental Ambassadors Club. The Catholic Communications Centre in Kiribati invites young people to create talk shows on youth issues. The Kiribati Climate Change Action Network (KIRICAN) uses drama to communicate the impacts of climate change through song, dance and folktales, leading to youth activism. In Niue, a key issue is migration of young people, going abroad for education and economic mobility. The Niue Youth Council has a Facebook page where young people overseas can keep in touch with what is happening at home.

In PNG, Kundu 2 TV has been working with the National Youth Commission and the Media for Development Initiative to produce programs for young people. There are a number of organised youth groups in PNG, the most-well known is Voice Inc., a network to increase the voice of young people in PNG and encourage young people to participate in public dialogue expressing their opinions. In Samoa, a new TV station, EFKSTV wants to include youth participation in its programming.

Communication with young people is also key to disaster awareness activities. In Solomon Islands, the Commonwealth Youth Program develops youth leadership skills, media training, and training for young people in disaster management. The program has an online magazine called Pacific Youth Voices. Across countries there is a lot of work on climate change in schools. In Tonga, community radio stations routinely report on topics addressing youth problems, and broadcast interactive talk-back programs around spirituality, climate change and health issues. In Tuvalu, young people are a key focus of climate change advocacy and government planning for awareness activities.

Disability

Across all of the countries, disability was rarely mentioned by research participants in comparison to gender and youth. In FSM disability was not mentioned as a prominent issue among those interviewed, except in relation to chronic illnesses such as diabetes. In Kiribati, only the NCD Office touched on issues of disability, discussing the high rate of amputees due to diabetes. Amputees were also mentioned in Solomon Islands. Overall, there

12 Paton, Kathryn & Fairbaine-Dunlop, Peggy (2010) "Listening to local voices: Tuvaluans respond to climate change" in Local Environment: The International Journal of Justice and Sustainability Vol 15 (7) pp 687-698

were no reports of disability initiatives using media and communication platforms. In some countries there was mention of national policies on disability, but generally low levels of knowledge and awareness of them. There was one mention in Tuvalu of disability as a consideration in relation to attendance at climate change awareness activities, and one mention in Samoa of disability as a consideration in disaster planning and preparedness. Also in Samoa, a research participant described a situation where a blind applicant for the journalism program at NUS was rejected on the grounds that the university did not have appropriate resources, but the Dean intervened, to ensure the applicant was enrolled.

This section of the report has provided an overview of the regional state of media and communication across through the lens of PACMAS key components; Media Policy and Legislation, Media and Communication Systems, Media Capacity Building and Media Content. The second section of this report provides detailed and specific analysis of the media and communication landscape of the 14 Pacific Island countries included in PACMAS.

Part II: Methodology

Research Objectives

This methodology, which guided the PACMAS State of Media and Communication Study, was designed to provide baseline measures on the key evaluation questions developed by PACMAS across its four components – media policy and legislation; media and communication systems; media capacity building; and media content. It explores these four components through six strategic activities – Technical and Vocational Education Training (TVETs); Pacific Emergency Broadcasting System (PEBS); Pacific Communication Technicians; Non Communicable Diseases (NCDs); Strengthen National Media and Communication Associations; and, Climate Change. These six long-term strategic activities were announced by PACMAS during the planning stage of the research. The six strategic activates are each related to more than one PACMAS component, but their main alignment to the four components is considered to be as follows:[1]

PACMAS Component	PACMAS Strategic Activity and main alignment with PACMAS component
Media Policy and Legislation	(Strategic Engagement and Media Communications Initiative)[1]
Media and Communication Systems	Technicians PEBS
Media Capacity Building	Media Associations TVETs
Media Content	Climate Change NCDs

In addition, three 'cross cutting' themes were included in the research design– gender, disability and youth. By exploring these activities and components, the study provides information on the current state of media and communication in the Pacific. The study will act as a baseline for PACMAS.

The aim of the State of Media and Communication Study is to support the development of diverse, independent and professional media that promotes informed and meaningful public discourse throughout the region and thereby supports better governance in the Pacific. To support such development, the research aims to be ***relevant*** and ***useable*** by PACMAS and all people and organizations working towards the same goals across the region.

Background

There is a body of previous work that informs the PACMAS State of Media and Communication Report, and upon which it builds. That work includes:

1. The 2005 Situation Analysis and Needs Assessment (SANA) report, ***Informing Citizens: Opportunities for Media and Communications in the Pacific***;
2. Various PACMAS documents such as the ***PACMAS Program Design Document*** (PDD), which includes the Monitoring and Evaluation Framework (MEF); and,
3. Other reports and studies undertaken about media and communications in the Pacific (desk based review).

1. SANA (2005)

The ***Informing Citizens*** report is a situation analysis and needs assessment of the capacity of the media, government and civil society 'to produce information on good governance'[2] across the same 14 Forum Island countries that PACMAS and the baseline research is concerned with. It was the major outcome of the first year of the Pacific Media and Communications Facility (PMCF), a three-year project, and precursor to PACMAS. ***Informing Citizens*** reports on each country's legal and regulatory frameworks, cultural contexts and training institutions and infrastructure for media and communications. It reports on the media, government and civil

1 Strategic Engagement and Media Communications Initiative was designed and implemented after the final design and commencement of fieldwork for this research study. Therefore, this initiative is not included as part of the study.

2 Page ix. PMCF (2005) Informing Citizens: Opportunities for Media and Communications in the Pacific. PMCF/AusAID, Canberra. http://www.humanrightsinitiative.org/programs/ai/rti/articles/informing_citizens_report.pdf

society sectors. It provides extensive and rich information, and includes 14 country reports covering the legislative environment, media sector, government sector and civil society sector.

What is notable reading the SANA report today, is the fast rate of change. This study is different to the SANA report. It is not a needs analysis. It describes the situation as found. Mindful of the often fast pace of change, and the desire to ensure the research is useable and relevant, the State of the Media and Communication Study is designed in such a way that it can be added to over time. It is also hoped that the baseline will be added to as new, emerging and interesting activities and changes take place, and as new research happens. This will make it a far more relevant and useable resource for immediate application. Program adjustments can be made as and when required, in an ongoing, learning based way. For example, the baseline can inform the development of projects funded through the PACMAS innovation funds, and the evaluation work undertaken on each of those activities can in turn be added to the knowledge bank, to inform further activities. This does not take away from the ability to demonstrate and use a fixed set of data collected at a point in time (the baseline). It merely provides a basis for using the data, adding to it, and taking a flexible, adaptable and evidence based approach.

2. PACMAS PDD & MEF (2011)

The PACMAS Program Design Document (PDD) from July 2011 sets out the strategic framework for PACMAS. It sets out the Program goal, objectives and a series of long and short-term outcomes across the four components of Media Policy and Legislation, Media and Communication Systems, Media Capacity Building, and Media Content. The PDD stipulated that PACMAS would develop at least one strategic activity in each of the four component areas, and these are the six strategic activities that have been incorporated into this study.

The PDD also integrates a Communication for Development (C4D) approach into PACMAS, for a number of reasons. These include: C4Ds adoption by a number of bilateral and multilateral agencies; the emphasis C4D places on communication for improved development outcomes; C4Ds role in improving media plurality and diversity; and, the potential of new information and communications technologies. C4D principles are said to drive the relevance and effectiveness of PACMAS activities. The methodology of this baseline research is underpinned by C4D principles and approach, including its determination to be relevant and useable.

The PACMAS PDD adopted four guiding principles, based on findings of an earlier review of PACMAS. These guiding principles are to ensure that it:

- Remains relevant to stakeholder needs;
- Encourages engagement and ownership of the program by stakeholders;
- Is flexible and able to respond to new issues and challenges; and,
- Enables long term sustainability

The PDD establishes a three-tiered approach to monitoring and evaluation. Strategic Research is one tier that includes state of media research– the the study fits into this tier, researching the state of the media. The other two tiers are: Monitoring, which includes innovation fund and strategic activities monitoring; and, Evaluation, which also includes innovation fund and strategic activity evaluation. The PDD sets out the PACMAS Monitoring and Evaluation Framework (MEF) to incorporate these three tiers. Building upon the principles above, another set of PACMAS MEF principles are set out:[3]

- The need for accountability and learning for continuous improvement
- Working with partners (where possible) to gather performance data, adjust performance where necessary and regularly report on it
- Building on existing collection of data and analyses, rather than developing new ones;
- Providing channels through which partners can disseminate findings and discuss the impact of their work
- A focus on disaggregating monitoring and evaluation data by age, gender and disability

The study responds to and works with these principles, which have informed the methodology. The methodology is adaptive and iterative, but linked back to the PDD and MEF throughout the research period at key stages, and in relation to specifying appropriate outcomes. ABC ID and PACMAS inputs have been especially useful in this regard. It should provide a strong basis for the remaining first tier, and second and third tier activities.

3 PACMAS Programme Design Document, 2011-12 to 2014-15 (2011), page 35.

3. Desk based review

Desk research was used at various points in the research process. At times this was a snowball process of searching and verifying information, particularly as the draft reports were being written, but there were three distinct phases of focused literature review.

Initially, a country summary was written for researchers prior to their departure drawing on available statistics, national policies and reports, industry reports and general web searches. The key documents and websites accessed were the SANA report, Skuse's (2011) report on TVETs[4], Perrottet & Robies' (2011)[5] report on media freedom in the Pacific, Freedom House country reports, UN and US statistics databases, government websites of Pacific countries, SPC and SREP websites and reports, World Health Organisation, and the Asia-Pacific Gateway for Disaster Risk Management & Development (DRR Gateway)[6].

A second phase centered on identifying relevant legislation for each of the Pacific countries. The SANA report provided legislation up to 2004, and two online databases were used to find any new or missing media and communications legislation. The two databases were the Pacific Islands Legal Information Institute, (http://www.paclii.org/) and the Lexadin World Law Guide (http://www.lexadin.nl/wlg/). Just prior to completing the final reports, a summary document of policy and legislation and the media communications environment was created for each of the countries based on the available desk research. This document was sent to the members of the Panel of Expertise (see below) for correction and verification.

A third phase involved key word searching in academic databases. Using a cross search, multiple searches were performed using a key word plus either 'Pacific' or the name of a Pacific country included in this study. The key words used were 'media' 'communication*' 'climate change' 'NCD' 'non-communicable diseases' 'disaster' 'DRR'. The results were exported to bibliography management software (Mendeley) and those not relevant were excluded. The ***Pacific Journalism Review*** was considered a particularly relevant publication and thus was reviewed more closely. Similarly ***South Pacific Islands Communication: Regional Perspectives, local issue*** and ***Communication, Culture & Society in Papua New Guinea*** (both co-edited by one of the Baseline Study core team members) were also included.

Each of the academic articles and chapters seen as holding relevance were summarized, and for the purposes of collaboration these summaries were made accessible to the research team through a project blog. Each of the summaries was tagged to enable ease of access. Members of the broader team sourced full papers and reports as required. In writing the final reports, data from each of these phases were integrated, from the early country summaries based on desk research, as well as all relevant academic work that had been found.

Conceptual framework

Framework for evaluating media and communication for development[7]

In line with the PACMAS principles and MEF principles as set out in the PDD, the conceptual and methodological framework that guides the baseline research is Tacchi and Lennie's framework for evaluation specifically developed for communication for development[8]. This framework consists of seven interrelated key components – participatory, holistic, complex, critical, emergent, realistic and learning-based. It is based on systems and complex thinking and maintains a focus on power, gender and other differences. It understands social change as unknowable in advance. Social change is emergent and something to learn from and adapt to, as well as influence. This approach to social change recognises that technological and media changes may have complex, and often contradictory effects on different communities and groups, such as women, young people and people with disabilities (PACMAS cross-cutting themes).

Changing media and communication technologies and infrastructures can help enable continuity in social orders and social transformations, and at the same time contribute to disruption. The approach taken for the study is designed to capture what is interesting and emergent, while maintaining a clear focus on key MEF questions. This study in turn contributes to evolving and refining these evaluation questions.

4 Skuse, A., 2011. PACMAS Journalism Training Study - February 2011, Adelaide.
5 Perrottet, A. & Robie, D., 2011. Pacific Media Freedom 2011 : A status report. Pacific Journalism Review, 17(2), pp.148–186. http://www.pjreview.info/sites/default/files/articles/pdfs/PJR17_2_pacific media freedom2011.pdf
6 http://www.drrgateway.net/
7 Lennie, J. and Tacchi, J. (2013), Evaluating Communication for Development: A Framework for Social Change. Oxford: Earthscan, Routledge, page 143.
8 Lennie, J. and Tacchi, J. (2013); Tacchi, J. & Lennie, J. (forthcoming, 2014) 'A framework for researching and evaluating communication for development and social change' In Wilkins, K, Tufte, T & Obregon, R. Handbook on Development Communication & Social Change. Oxford: Wiley Blackwell.

Communicative ecologies approach

This study is influenced by the communicative ecology concept. Communicative ecologies are the everyday, complex networks of information and communication in individual and community lives. In any place, and among any group of people, there will be different ways in which communication and information flows. Some people use media like television and radio to learn about what is happening in their village, town, city, country or region, or in the wider world. Other people do not have access to these communication channels, and depend on face-to-face communication. Understanding and describing how information flows, who uses what communication technologies, what for and why, is an important part of understanding how PACMAS can best achieve its goal and objectives. A communicative ecology approach, where all forms of communication and mediation are relevant, also helps to ensure consideration and inclusion of new media infrastructures, platforms and devices in the analysis, including broadband, social media and mobile phones.

Communication networks are complex and based on individual decisions and choices about how to use various media platforms, as well as broader issues of access. Understanding how information flows and how communication takes place is particularly important when it comes to understanding media and communication for development. People trust certain platforms more than others, and are therefore more likely to accept information via certain channels. While this baseline study does not map communicative ecologies of audiences, the approach undertaken pays attention to existing communication spaces, such as the airport runway in Tuvalu and Facebook in Niue, that might otherwise be overlooked by a study that only considers traditional media platforms.

At the same time, social change must be understood in context, and comparative analysis is essential when considering the place of media, communication and social change across Pacific Island countries. These fourteen Pacific Island countries included in the study require individual attention before comparison can be made. The research design and report structures acknowledge and respond to this. Understanding media and communication environments and social change also requires consideration of broader political, economic, geographic, demographic and cultural dimensions[9], as well as patterns of migration and diaspora.

Communication for Development (C4D)

As detailed above, recent communication initiatives in the Pacific, including PACMAS, emphasise Communication for Development principles to achieve development outcomes. Research plays a crucial part in designing C4D initiatives and ensuring that the needs of citizens are being addressed and understood. This is in line with Pacific understandings of research, and indigenous approaches to research, which outline the need for participants to be involved in the research process and benefit from it.

The baseline encompasses all forms and modes of communication, including community radio, information and communication technology (ICT) initiatives, and processes such as community dialogue along with the more traditionally understood mass media. C4D initiatives put the communities and participants at the centre of their projects. Similarly the Baseline Study set out to involve Pacific Islanders as researchers, as research participants and experts to ensure that the study can be beneficial to Pacific media as experienced by Pacific Islanders.

Research Design

The research design is guided by the PACMAS MEF and the principles, framework and approach set out above. It was developed in collaboration with and in response to advice and guidance from ABC International Development, PACMAS and industry experts and advisers. The research was undertaken from June 2012 to May 2013, from initial set up of the project to the delivery of the final outputs.

The primary outputs of the study include:

- 14 Country reports that include assessment of the PACMAS strategic activities in each country
- Comparative, thematic overviews of the PACMAS components
- Secondary research outputs included capacity building of Pacific researchers and capacity building of the institutional consortium partners to continue to undertake research in the Pacific.

9 Wilkins, K. (2009) What's in a name? Problematizing communication's shift from development to social change, Glocal Times 13, Online. Available HTTP: <http://webzone.k3.mah.se/projects/gt2/viewarticle.aspx?articleID=173&issueID=20> [accessed 30 May 2012].

Research Methods and Research Questions

The main research methods included desk-based research, stakeholder interviews and a verification of results with media and communication experts (a 'Panel of Expertise'). Desk research was used at various points in the research process, as described above. The process used for the primary data collection is set out below.

Two workshops were held in August 2012 including the consortium research team and ABC ID team. The workshops were held to determine the approach, and design the methods for the study. The design previously proposed by the project brief included: desk based research; a stakeholder interview with 70 respondents; and, a survey for up to 120 respondents. Once the strategic activities had been determined by PACMAS, the study was asked to respond to and align through the strategic activities to the four key components. The design was revisited, and 212 interviews were conducted across the 14 countries, and a verification of results was administered with 28 Panel of Expertise members (see below).

The research questions were developed based on the key aims of the six strategic activities, as set out in their concept notes, and the MEF, which is structured around the four key components. A key consideration was to ensure the study was going to be useful and relevant to PACMAS and media and communication groups across the Pacific. Rather than try and fit the research questions to a pre-determined approach and methods, the relevant questions were first developed and the approach designed based on the most appropriate methods to answer these research questions. Research participants were also determined based on the sets of questions.

Stakeholder Interviews

Six sets of questions were developed to collect information of relevance to the intended outcomes of the strategic activities. Questions were developed according to the core focus and a set of sub themes. For example, the basic questions were first developed for the Strategic Area, TVETs. Five additional sub-themes were then elaborated, as follows: recruitment and delivery; pathways and retention; connections with industry; capacity support and quality; and graduate outcomes. Once the questions were developed for all Strategic Areas, questions appropriate for a desk based method were removed, and nine stakeholder groups were identified to address the remaining questions. Nine questionnaires were developed. Questionnaires were categorised as follows, and were utilised depending on the type of respondent:

- TVETs coordinators and providers
- Broadcast/communications technicians in government, telecommunications companies and broadcast (especially radio) organisations and media/communication technicians.
- Government representatives involved in the planning and management of disasters and crises
- Media managers and professionals in State, private, community, mainstream media
- Communication for Development & ICT and Development Initiatives
- Climate Change Scientists, Government Minister or representative responsible for Climate Change
- NGO/CSOs that have Climate Change as part of their remit, NGO/CSO that focus on youth and have Climate Change as part of their remit
- Health Department Officers/Ministers; Public Health professionals/researchers
- National Media Association representatives

The content of each questionnaire was customised for each area of expertise, with media managers and professionals, communication for development and ICT for development practioners being asked questions around different strategic areas (e.g. Climate Change, NCDs, Media Associations and TVETs). Interview questionnaires for broadcast and communication technicians were more streamlined, focusing particularly upon technician support and emergency broadcast systems.

The questionnaires were administered to 212 research participants across 14 Pacific countries. A/Prof Evangelia Papoutsaki led the recruitment process for research participants, drawing on various networks in the Pacific region. Potential participants were identified from each of the above categories. Researchers then followed up and arranged interviews prior to their fieldwork.

Field researchers spent between two to seven days in-country to undertake face-to-face interviews with participants as well as collect data through documents and reports available in-country. Where research participants were not available at the time of field research, phone or email interviews were conducted at a later date.

PACMAS Key Research Questions

The following table sets out the core questions posed through interview questionnaires to the nine respondent groups. The full questionnaires are available on request. Each question set listed in the right hand column has a sub set of questions associated with it.

Research Participant groupings	Purpose	Question sets
TVET Coordinators and providers	Generate information about TVETs: including how TVETs are delivered, recruitment, graduate outcomes, career paths and teacher training and support.	Availability of TVETS Recruitment Delivery Graduate outcomes Pathways Retention Connections with Industry Capacity and quality of teaching
Technicians	Generate information from technicians about: 1. Areas of technical expertise, connections to other broadcast and communication technicians, availability of resources and training. 2. Public Emergency Broadcast systems; the resources available to broadcast and media technicians and how technicians prepare for, respond to and coordinate with others when disasters and crises happen.	Skill levels Availability of training Networking and support opportunities Resources available PEBS Networks of expertise (preparation) Networks of practice (during and post) Coordination Infrastructure and material resources
PEBS Government Officials	Generate information on the planning and management of national disasters and crisis, how they are communicated, how broadcast and communication plans are resourced and coordinated.	The plans and responses to different kind of disasters and crises. When, how and with whom these plans are communicated. Emergency broadcast plans, resources and the role of different broadcast and communication media. Coordination during disasters and crises. Networks of expertise (preparation) Networks of practice (during and post)
Media managers and professionals	Generate information on: 1. TVETs training in the media industry 2. Broadcast and communication technicians. 3. National and regional media associations and other support networks. 4. The role of the media in crises and disasters 5. The communication of climate change and Non-Communicable Diseases (NCDs).	TVETS; experience, perceptions and connections with industry Technicians and technical support Technical resource availability and training Media associations and professional support networks; Capacity development NCDs – coverage, awareness and training Climate Change – coverage, awareness and training Media and communications role at times of crisis; PEBS networks of expertise and practice, and coordination

C4D and ICT4D practitioners	Generate information on C4D and ICT4D: covering the availability and level of technical support; national and regional media and communication support organizations; communication of NCDs and climate change; national emergencies and disasters.	Communication platforms and technologies utilised Technical networking and support available; resources; training Media and communication professional associations networking and support; resources; training NCD – coverage, awareness and training Climate Change – coverage, awareness and training Media and communications role at times of crisis; PEBS networks of expertise and practice, and coordination
Climate Change experts and officials (Climate Change Scientists, Government Minister or representative responsible for Climate Change)	Generate information about Climate Change issues, policies and communication activities and plans.	Climate change issues Policies Adaptation and mitigation strategies Partnerships Awareness Communication of climate change; communication training Links with media professionals; educators; civil society; communication or media networks
Climate Change NGOs and CSOs (NGO/CSOs that have CC as part of their remit; those that focus on youth)	Generate information about climate change and communicating climate change; communication platforms used and broader perceptions of climate change.	Climate change issues Communication of climate change Links with media professionals and educators Communication or media networks
Public Health Ministers, practitioners and researchers	Generate information about the key issues around NCDs, how they are communicated, issues of awareness and advocacy.	NCD issues Communication of issues Advocacy and awareness Communication training
Media Association representatives	Generate information about the role of Media Associations; activities and support; their role in advocacy; other resources and networks.	Availability of Media associations Mandate, governance, membership and scope Code of Ethics Resources available Links with other organisations Availability of crisis response strategy Advocacy role

Interview durations were between 20 – 80 minutes depending on which questionnaire was being administered, and the availability and interest of the research participant. All interviews were recorded, and transcribed into a Microsoft Word document for analysis.

Data Analysis

The research team developed a coding mechanism (analysis spreadsheets) through which to analyse the interview transcripts. The spreadsheets were organised by the different strategic areas; they included a column with the research questions and a dedicated column for each of the research participant responses. Once the spreadsheets were completed for each country, researchers analysed the responses and developed the first draft of the country reports. These drafts were circulated to field researchers for feedback as appropriate and where possible. Once comments were provided, members of the team began completing the Country Reports. While the Country Reports were being drafted, the research team also began distributing the research questionnaire and a verification document (see below) to Panel of Expertise members. Responses to the questionnaire were gathered via email and/or on the phone. Responses to the verification documents, which focused upon the media

and communication landscape as well as policy and legislation, were integrated into the draft country reports. Final reports were also re-circulated to the in-country researchers and the desk-based researcher. This feedback was, again, integrated into the Country Reports. Regular meetings were held by the consortium: the core team met online weekly or fortnightly throughout the course of the study, and face to face at key points; a training and research planning workshop was held in Goroka early in the process, and a training and analysis workshop in Auckland at the analysis stage. These workshops were attended by the whole research team, members of ABC ID and PACMAS, and included research capacity development along with project planning and design.

Verification Process with Media and Communications Experts

In consultation with researchers, members for a 'Panel of Expertise' were identified, with a goal of two per country from mainstream media and C4D fields, where possible. For two countries it was not possible to recruit two members in the allocated timeframe, so that FSM and Kiribati each have only one member. Niue and Tonga, where those contacted were highly responsive, provide three members each, so that the target of 28 members overall was reached. Once consent was given to identify their names in the final report, Panel members were asked to complete a short questionnaire and verification document via email or phone. The questionnaire was designed to address issues associated with the MEF that were not well covered by the data collected through the stakeholder interviews. The verification process was more clearly useful and useable for the State of Media and Communication Report, as the verification document focused upon legislation and the media and communication environment in each country. This provided a mechanism for checking on whether data sourced through desk based research was up to date and accurate.

The responses received have been incorporated into the country reports and the sections on policy and legislation, media and communication systems, capacity building and content. The Panel of Expertise can be thought of as a resource, or 'Brains Trust', that can be consulted further for research, monitoring and evaluation purposes, or other PACMAS development activities. All members have agreed to be contacted again as required. This is envisaged as a way to maintain a connection with key expertise across all of the 14 countries in which PACMAS works, and the Panel can be developed further if appropriate.

Limitations of the study and approach

The idea behind this study is that it will capture situations at a specific point in time that will form a baseline for PACMAS. A baseline is a situation analysis that defines a starting point for a program or project. It needs to provide replicable, useful and useable data. AusAID provides guidelines on how to undertake baseline studies[1], but insists they are not prescriptive, 'ultimately the key partners in an Activity must decide how to proceed and what form the Baseline Study will take' (AusAID 2003:2). This study was developed and implemented through a consultative and participatory process. The study does not include content analysis or audience considering the scale and scope of this research.[2].

The challenge was to develop and operationalise a baseline that supports unpredictable media and social change in complex contexts and bridges the divide between an emergent adaptive evaluation approach and the more linear results-based management approach. It is important for the baseline to be considered as retaining flexibility, to be open to incorporating emerging data and data collected in the future that can contribute to understanding the changing dynamics of media and communication landscapes across Pacific Island countries. In some cases, the availability of research participants, or their willingness to take part in the research may have limited the perspectives reflected in the country reports. It is understood and acknowledged that the views of the research participants and the Panel of Expertise members are particular and cannot be assumed to be representative. However, the recruitment process used as many networks and recommendation processes as could be incorporated, and the Panel of Expertise members in particular are people considered to be 'experts' in their respective countries.

A representative or blanket quantitative survey would have achieved a different set of data, and would have missed the textured details that were considered important to this study. The cost would have been disproportionate, hard to justify, and the study would not have been easily replicable (all criteria that AusAID consider important in baseline studies).

1 AusAID, 2003. Baseline Study Guidelines. http://www.ausaid.gov.au/Publications/Documents/baseline_guidelines.pdf Accessed April 2013
2 http://www.pacmas.org/wp-content/uploads/2012/02/PACMAS-Baseline-Research_Call_for_EOI1.pdf

PACMAS Research Summary

Field Research by Country	Field Researcher and Dates	Interviews Completed	Panel of Expertise Verifications & Questionnaires Completed
Cook Islands	Naomi Strickland November 2012	12	2
FSM	Marion Muliaumaseali'i January 2013	19	1
Fiji	Usha Harris September 2012	15	2
Kiribati	Marion Muliaumaseali'i October 2012	11	1
Marshall Islands	Sandra Kailahi October 2012	19	2
Nauru	Sandra Kailahi, November 2012	12	2
Niue	Sandra Kailahi September 2012	19	3
Palau	Martha Ginau November 2012	11	2
PNG	Joys Eggins, Josephine Mann & Lawrencia Pirpir November 2012 & January 2013	19	2
Samoa	Marion Muliaumaseali'i Sandra Kailahi, Shorley Mariner & Faumuina Felolini Maria Tafuna'i October 2012, March & May 2013	12	2
Solomon Islands	Joys Eggins October 2012	19	2
Tonga	Sandra Kahlahi October 2012	16	3
Tuvalu	Marion Muliaumaseali'i October 2012	11	2
Vanuatu	Martha Ginau & Sandra Kailahi December 2012 & February 2013	17	2
Totals	10 researchers	212 Interviews	28 POE Responses

Appendices

A. PACMAS State of Media and Communication Study Bibliography[1]

Anderson, K., 2007. Whither Pacific "traditional" media? Internet technology in political education and participation. ***Pacific Journalism Review***, 13(2), pp.94–111. Available at: http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=27185448&site=ehost-live.

AusAID, 2003. Baseline Study Guidelines. http://www.ausaid.gov.au/Publications/Documents/baseline_guidelines.pdf

Batton, A., Guoy, J. & Duncan, R., 2009. Papua New Guinea Economic Survey: from boom to gloom? ***Pacific Economic Bulletin***, 24(1), pp.1–27.

Bhagwan Rolls, S. & Narayan, D., 2008. ***Empowering Communities, Informing Policy: The Potential of Community Radio***, Suva.

Bhim, M., 2010. A case for Fiji's grassroots citizenry and media to be better informed, engaged for democracy. ***Pacific Journalism Review***, 16(2), pp.127–146.

Cass, P., 2011. Fr Francis Mihalic and Wantok Niuspepa in Papua New Guinea. ***Pacific Journalism Review***, 17(1), pp.210–226.

Cass, P., 2004. Media ownership in the Pacific: Inherited colonial commercial model but remarkably diverse. ***Pacific Journalism Review***, 10(2), pp.2004–2110.

Cave, D., 2012. ***Digital Islands; How the Pacific's ICT Revolution is transforming the region***, Available at: http://www.lowyinstitute.org/publications/digital-islands-how-pacifics-ict-revolution-transforming-region.

Chambers, A. & Chambers, K.S., 2007. Five Takes on Climate and Cultural Change in Tuvalu. ***Contemporary Pacific***, 19(1), pp.294–306.

Cullen, T., 2010. Reporting HIV in Papua New Guinea: Trends and omissions from 2000 to 2010. ***Pacific Journalism Review***, 16(2), pp.163–177.

Douglas, B., 2002. Christian citizens: women and negotiations of modernity in Vanuatu. ***The Contemporary Pacific***, 14(1), p.1(39).

Duffield, D.L., Watson, A.H.A. & Hayes, D.M., 2008. Media and Communication Capacities in the Pacific region. ***Ejournalist***, 8(1), pp.20–34. Available at: http://ejournalist.com.au/v8n1/Duffield.pdf.

Dumaru, P., 2010. Community-based adaptation: enhancing community adaptive capacity in Druadrua Island, Fiji. ***Wiley Interdisciplinary Reviews: Climate Change***, 1(5), pp.751–763. Available at: http://onlinelibrary.wiley.com/doi/10.1002/wcc.65/abstract.

Dutt, R.R., 2010. The Fiji media decree: A push towards collaborative journalism. ***Pacific Journalism Review***, 16(2), pp.81–98.

Eggins, J., 2008. Community Development and Church-Based Radio Broadcasting in Papua New Guinea. In E. Papoutsaki & U Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 206–218.

Farbotko, C. & Lazrus, H., 2011. The first climate refugees? Contesting global narratives of climate change in Tuvalu. ***Global Environmental Change***, 22(2), pp.382–390. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0959378011002019.

Foster, S., 2007. Who let the blogs out? Media and free speech in post-coup Fiji. ***Pacific Journalism Review***, 13(2), pp.47–60. Available at: http://www.pjreview.info/issues/who-let-blogs-out.

1 This bibliography is made up of all references cited in the study, plus references suggested as important and relevant for the bibliography by team members, and reviewers.

George, N., 2011. Pacific Women Building Peace: A Regional Perspective. ***Contemporary Pacific***, 23(1), pp.37–72.

Global Media Monitoring Project, 2010. ***Pacific: Global Media Monitoring Project 2010***, Available at: http://www.whomakesthenews.org/images/reports_2010/regional/Pacific_Islands.pdf.

Halligan, L. & Cronin, C., 2009. ***Status of the right to information in the Pacific Islands of the Commonwealth***, New Delhi. Available at: http://www.humanrightsinitiative.org/publications/rti/status_of_rti_in_pacific_island_of_cw.pdf.

Hayes, M., 2008. On Being a Tuvaluan Tino Tusitala: Reporting from the frontlines of global warming. In E. Papoutsaki & S. H. U., eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian media Information and Communication Centre, pp. 254–273.

Herman, F., 2010. The Pacific right to know in the Digital Age. F. Herman, ed. ***Pacific Journalism Review***, 16(2), pp.51–55.

Himelboim, I. & Limor, Y., 2008. Media perception of freedom of the press A comparative international analysis of 242 codes of ethics. ***Journalism***, 9(3), pp.235–265. Available at: http://jou.sagepub.com/cgi/reprint/9/3/235.

Intermedia Europe, 2012. ***Citizens Access to Information in Papua New Guinea: Citizen Survey, June 2012***, Melbourne. Available at: http://www.abcinternationaldevelopment.net.au/wp-content/uploads/2012/09/ABC-PNG-Report.pdf.

Intermedia Europe, (2013) Citizens Access to Information in Vanuatu: Citizen Survey, February 2013, Melbourne

International Telecommunications Union, 2012. ***Measuring the Information Society***, Geneva.

Iroga, R., 2008. Local Media's Role in Peace Building in Post-Conflict Solomon Islands. In E. Papoutsaki & U Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 152–174.

Kaufer, L. et al., 2010. Evaluation of a "Traditional Food for Health" Intervention in Pohnpei, Federated States of Micronesia. ***Pacific Health Dialogue***, 16(1), pp.61–73. Available at: http://www.pacifichealthdialog.org.fj/volume16_no1/Evaluation of a Traditional Food.pdf.

Kelly, S., Cook, S. & Truong, M., 2012. Freedom of the Net 2012: A Global Assessment of Internet and Digital Media. ***Freedom House***. Available at: http://www.freedomhouse.org/sites/default/files/resources/FOTN 2012 - Full Report_0.pdf.

Korauaba, T., 2012. ***Media and the politics of climate change in Kiribati: a case study on journalism in a "disappearing nation"***. AUT University. Available at: http://aut.researchgateway.ac.nz/bitstream/handle/10292/4503/KorauabaT.pdf?sequence=3.

Lata, S., 2012. Misperceptions of climate-change risk as barriers to climate-change adaptation: a case study from the Rewa Delta, Fiji. ***Climatic Change***, 110(1-2).

Lefale, P.F., 2009. Ua 'afa le Aso Stormy weather today: traditional ecological knowledge of weather and climate. The Samoa experience. ***Climatic Change***, 100(2), pp.317–335. Available at: http://www.springerlink.com/index/10.1007/s10584-009-9722-z.

Leh, A.S.C. & Kennedy, R., 2004. Instructional and Information Technology in Papua New Guinea. ***Educational Technology Research and Development,***, 52(1), pp.96–101. Available at: http://www.jstor.org/stable/30220380.

Lennie, J. and J. Tacchi. 2013. ***Evaluating Communication for Development: A Framework for Social Change***. Oxford: Eartscan, Routledge.

McNamara, K.E. & Gibson, C., 2009. "We do not want to leave our land": Pacific ambassadors at the United Nations resist the category of "climate refugees". ***Geoforum***, 40, pp.475–483. Available at: http://www.sciencedirect.com/science/article/pii/S0016718509000335.

Mercer, J. et al., The potential for combining indigenous and western knowledge in reducing vulnerability to environmental hazards in small island developing states. ***Environmental Hazards***, 7(4), pp.245–256. Available at: http://dx.doi.org/10.1016/j.envhaz.2006.11.001.

Moala, K., 2008. Media and Conflict in the Kingdom; the case of Taimi 'o Tonga. In E. Papoutsaki & U. Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian media Information and Communication Centre, pp. 175–185.

Molnar, H., 2008. Informing Citizens: Opportunities for media and communications in the Pacific. In E. Papoutsaki & Usha Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***.

Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 34–58.

Molnar, H. et al., 2006. ***Informing Citizens: Opportunities for Media and Communications in the Pacific***, Available at: http://www.humanrightsinitiative.org/programs/ai/rti/articles/informing_citizens_report.pdf.

Pacific Disability Forum, 2008. Pacific Disability Forum - Document Library. Available at: http://www.pacificdisability.org/publications.aspx.

PACMAS 2011. ***PACMAS Program Design Document, 2011-12 to 2014-15,*** http://www.pacmas.org/wp-content/uploads/2011/11/PDD_v31.pdf.

Papoutsaki, E., McManus, M. & Matbob, P. eds., 2011. ***Communication Culture & Society in Papua New Guinea; Yu tok wanem?***, Madang & Auckland: DWU Press & Pacific Media Centre.

Papoutsaki, E. & Sundar Harris, Usha, 2008. Unpacking "Islandness" in South Pacific Islands. In E. Papoutsaki & Usha Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 1–14.

Papoutsaki, E. & Rooney, D. eds., 2007. ***Media, Information and Development in Papua New Guinea.***, Madang, PNG: Divine World University Press.

Paton, K. & Fairbairn-Dunlop, P., 2010. Listening to local voices: Tuvaluans respond to climate change. ***Local Environment***, 15(7), pp.687–698. Available at: http://dx.doi.org/10.1080/13549839.2010.498809.

Perrottet, A. & Robie, D., 2011. Pacific Media Freedom 2011: A status report. ***Pacific Journalism Review***, 17(2), pp.148–186. Available at: http://www.pjreview.info/sites/default/files/articles/pdfs/PJR17_2_pacific media freedom2011.pdf

PMCF 2005. ***Informing Citizens: Opportunities for Media and Communications in the Pacific***. PMCF/AusAID, Canberra. http://www.humanrightsinitiative.org/programs/ai/rti/articles/informing_citizens_report.pdf

Rahman, M.H. & Naz, F., 2006. Digital Divide within Society: An Account of Poverty, Community and E-Governance in Fiji. ***E-Learning and Digital Media***, 3(3), pp.325–343.

Reporters Without Borders, 2013. ***World Press Freedom Index 2013***, Paris. Available at: http://fr.rsf.org/IMG/pdf/classement_2013_gb-bd.pdf.

Robie, D., 2011. The campus and the newsroom: Papua New Guinean media in education profile. In E. Papoutsaki, M. McManus, & P. Matbob, eds. ***Communication, Culture and Society in Papua New Guinea: Yu tok wanem?*** Madang & Auckland: Divine Word University Press; and Pacific Media Centre, pp. 205–217.

Robie, D., 2008a. Changing Paradigms in Media Education Aid in the Pacific. In E. Papoutsaki & Usha Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 59–81.

Robie, D., 2010. Pacific freedom of the press: Case studies in independent campus-based media models. ***Pacific Journalism Review***, 16(2), pp.99–126.

Robie, D., 2008b. South Pacific Notions of the Fourth Estate; A collision of media models, culture and values. In Evangelina Papoutsaki & Usha Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 102–116.

Robie, D., 2005. ***Mekim Nius: South Pacific Media, Politics and Education***, Suva: USP Book Centre, AUT Media & South Pacific Books.

Robie, D., 2003. Wansolwara, convergence and culture: A South Pacific communication case study. ***Communication Journal of New Zealand***, 4(1), pp.1–18.

Secretariat of the Pacific Community, 2010. ***NCD Statistics for the Pacific Islands Countries and Territories, Healthy Pacific Lifestyle Section***, Available at: http://www.spc.int/hpl/index.php?option=com_docman&task=doc_download&gid=67.

Scheyvens, R., 2003. Church Women's Groups and the Empowerment of Women in Solomon Islands. ***Oceania***, 74(1/2), pp.24–43. Available at: http://search.proquest.com/docview/222382862?accountid=13552.

Sharp, S. & Papoutsaki, E., 2008. Two models for Pacific Islands Journalism Education. In E. Papoutsaki & U. S. Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 82–101.

Shen, S. & Gemenne, F., 2011. Contrasted Views on Environmental Change and Migration: the Case of Tuvaluan

Migration to New Zealand. ***International Migration***, 49(S!), pp.e224–e242. Available at: http://doi.wiley.com/10.1111/j.1468-2435.2010.00635.x.

Singh, S., 2013. Responsible conflict reporting: Rethinking the role of journalism in Fiji and other troubled Pacific Societies. ***Pacific Journalism Review***, 19(1), pp.111–131.

Singh, S. & Prakash, S., 2008. Storms in the Pacific; The volatile mix of democracy, Politics and the media in three island states. In Evangelina Papoutsaki & Usha Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 117–132.

Singh, Shailendra, 2010. Life under Decree No. 29 of 2010: The Fiji Media Development Decree. ***Pacific Journalism Review***, 16(2), pp.147–162.

Skuse, A., 2011. PACMAS Journalism Training Study - February 2011, Adelaide.

Smith, L. T. 1999. ***Decolonising methodologies: research and indigenous peoples***. London, New York: Zed Books.

Sundar Harris, Usha, 2007. Community informatics and the power of participation. ***Pacific Journalism Review***, 13(2), pp.2007–2045.

Sundar Harris, U., 2008. Video for Empowerment and Social Change; A case study with rural women in Fiji. In E. Papoutsaki & U. Sundar Harris, eds. ***South Pacific Islands Communication: Regional Perspectives, Local Issues***. Singapore, Aotearoa, Suva: Asian Media Information and Communication Centre, pp. 186–205.

Tacchi, J. & Lennie, J. (forthcoming, 2014) 'A framework for researching and evaluating communication for development and social change' In Wilkins, K, Tufte, T & Obregon, R. ***Handbook on Development Communication & Social Change.*** Oxford: Wiley Blackwell.

Thomas, V. & Eby, M., Haus Piksas: Using informal media distribution for HIV and AIDS communication in Papua New Guinea. In ***IAMCR Conference Dublin 2013***. Dublin.

Thomas, V. et al., 2012. ***Komuniti Tok Piksa - Integrating Papua New Guinean Highland Narratives into visual HIV prevention and education material***, Sydney.

Thomas, V., 2011. Yumi Piksa – Developing a community-responsive approach to filmmaking in Melanesia. ***Pacific Journalism Review***, 17(2), pp.27–49.

Thomas, V., Papoutsaki, E. & Eggins, J., 2010. Visual dialogues, community action & social change: A south Pacific islands HIV/AIDS project application. ***Paper presented at the Annual Conference of the Asian Media Information and Communication Centre, Singapore***.

Uppal, C., 2009. The Blogopshere in Fiji: Social Disruption and Social Media. C. Uppal, ed. ***Conference Papers -- International Communication Association***, p.1.

Wallace, H., 2011. Paddling the Canoe on One Side: Women in decision-making in Vanuatu and the Solomon Islands. ***Development***, 54(4), pp.505–513.

Walsh, C., 2010. Political blogs on Fiji: A "cybernet democracy" case study. ***Pacific Journalism Review***, 16(1), pp.154–177.

Watson, A.H.A., 2010. Tsunami alert: the difference a phone makes. In ***Journalism Education Association Annual Conference***. Sydney: University of Technology Sydney.

Wilkins, K. 2009. ***What's in a name? Problematizing communication's shift from development to social change,*** Glocal Times 13, Online. Available HTTP: <http://webzone.k3.mah.se/projects/gt2/viewarticle.aspx?articleID=173&issueID=20> [accessed 30 May 2012].

Woods, J., 2010. Cook Islands: The Cook Islands News and the genesis of FOI. ***Pacific Journalism Review***, 16(2), pp.15–23.

World Association of Community Radio Broadcasters, 2013. Pacific Community Broadcasters and Advocates Call for Legislative Reform. Available at: http://ap.amarc.org/node/80.

World Bank Group, 2012. Worldwide Governance Indicators. ***World Bank***. Available at: http://info.worldbank.org/governance/wgi/mc_countries.asp.

Wrighton, N. & Overton, J., 2012. Coping with participation in small island states: the case of aid in Tuvalu. ***Development in Practice***, 22(2), pp.244–255. Available at: http://www.tandfonline.com/doi/abs/10.1080/09614

524.2012.640983.

Yeo, S.W. & Blong, R.J., 2010. Fiji's worst natural disaster. ***Disasters***, 34(3), pp.657–683. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1467-7717.2010.01163.x/abstract.

Young, D.W., 1997. Nonviolent alternatives among the Enga of Papua New Guinea. ***Social Alternatives***, 16(2), pp.42–45. Available at: http://search.informit.com.au/fullText.

Zimmet, P., Jackson, L. & Whitehouse, S., 1980. Blood pressure studies in two Pacific populations with varying degrees of modernisation. ***The New Zealand medical journal***, 91(657), pp.249–252.

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D. Research Participants Summary

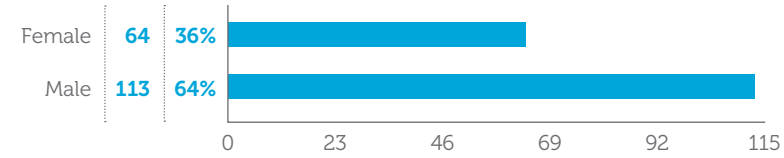
The following information was gathered from information on background questionnaires filled out by interviewees participating in the study. Interviews took place between September 2012 and March 2013.

Prior to their interview, participants in the study were asked to complete a background questionnaire that requested information on gender, employment details, age, country of birth and residence, education and other details. They were also asked if they would be willing to participate in additional aspects of the study.

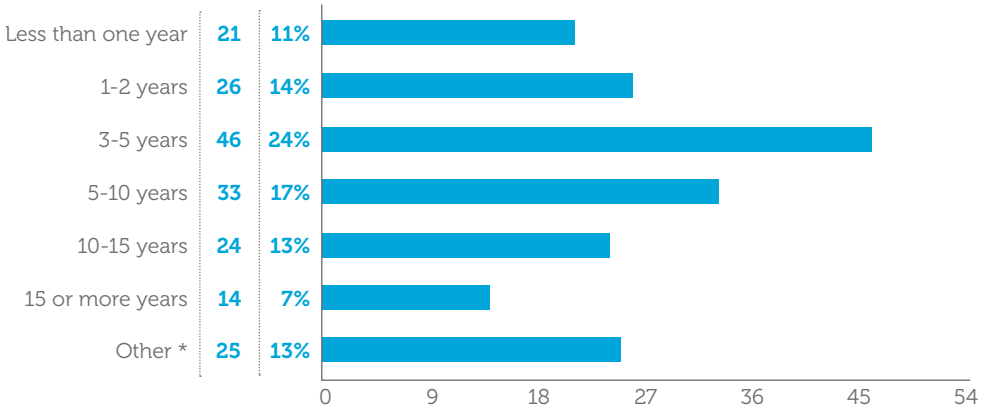
The completion of the questionnaire, like the interview, was voluntary and participants were not compensated for their time. Not all interviewees completed the questionnaire or answered all questions.

The results are represented in graphics and in percentage lists below.

Gender

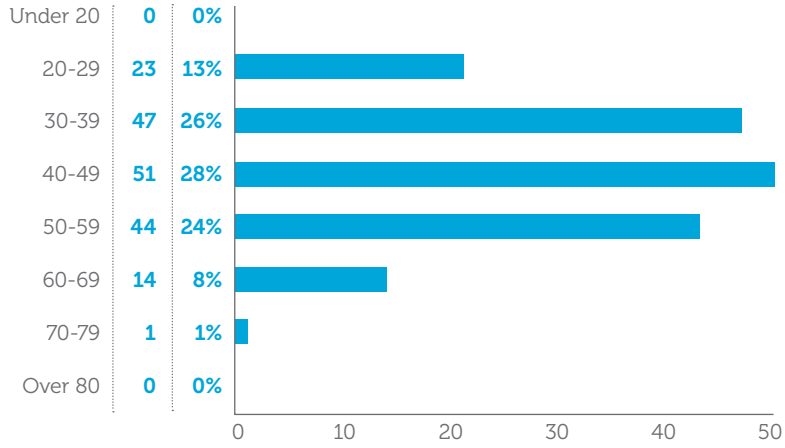


Length of time in job

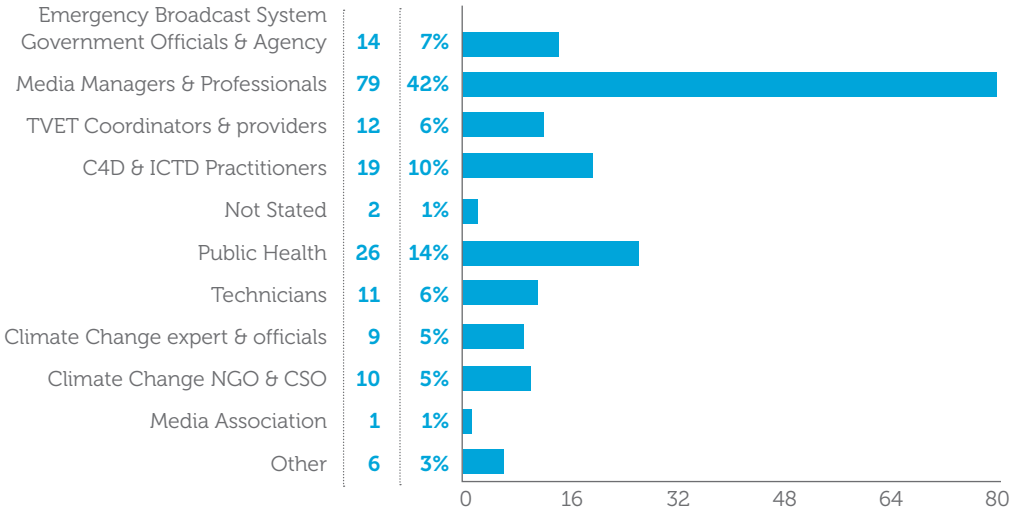


* respondent gave text-based answer about former or current positions but no details of duration.

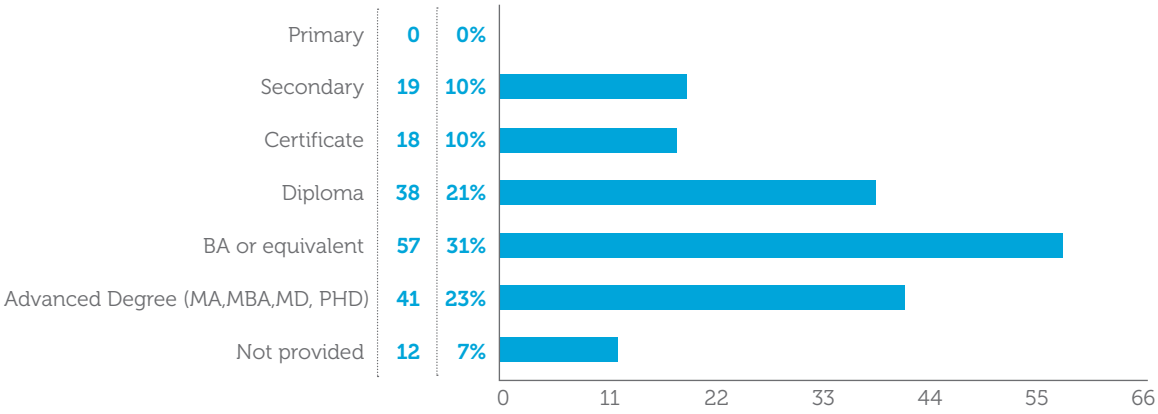
Age



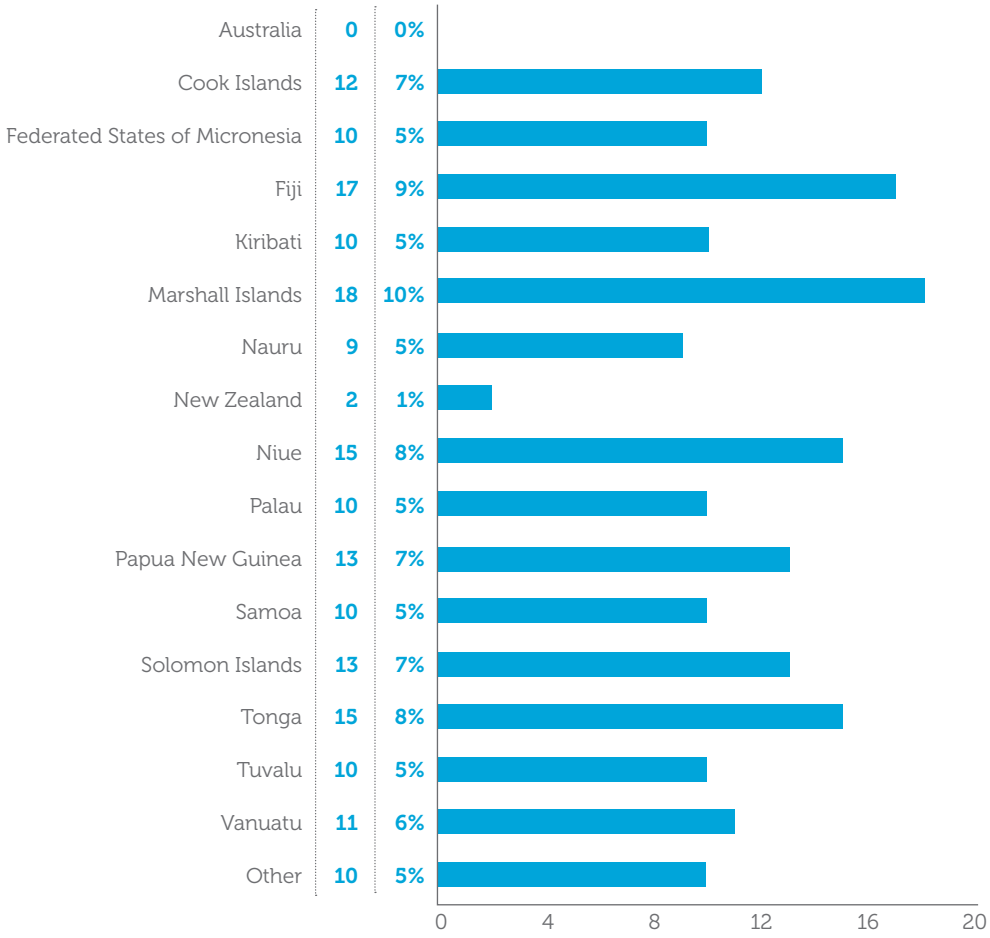
Sector of employment



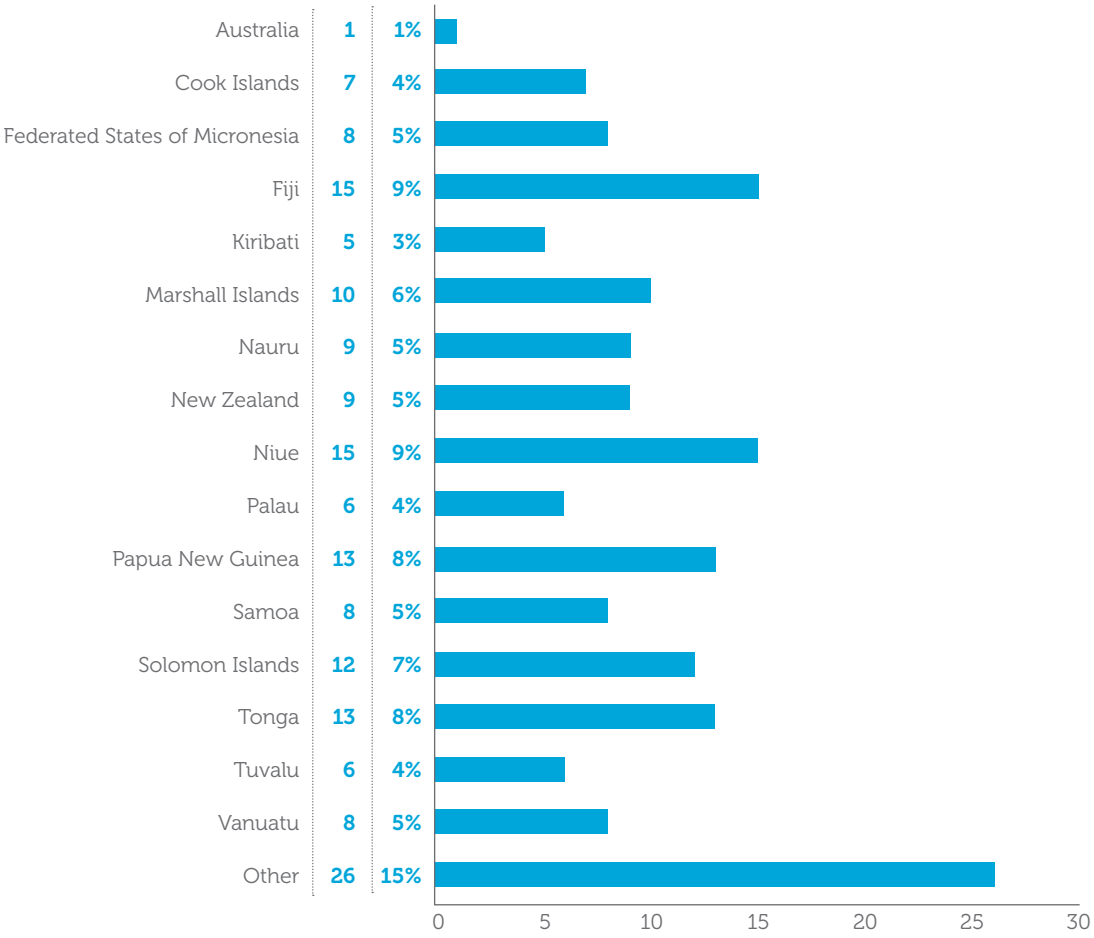
Education



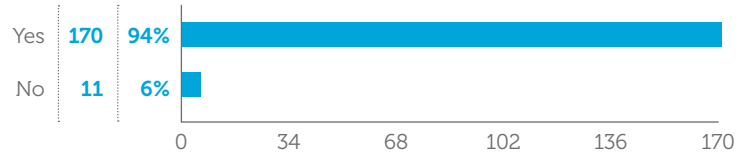
Usual country of residence



Country of birth



Would you be willing to be contacted again for follow up questions and/or further research?



E. Panel of Expertise Members

Name	Organisation(s)	Position	Country
Jeane Matenga	Elijah Communications Ltd	CEO	Cook Islands
Ngara Katuke	The Cook Islands Civil Society Organisations	President	Cook Islands
Sharon Bhagwan Rolls	FemLINKpacific	Executive Director	Fiji
Ricardo Morris	Repúblika Publishing	Publisher	Fiji
Bill Jaynes	The Kaselehlie Press	Managing Editor	Federated States of Micronesia
Mr Tibwere Bobo	Kiribati Newstar	Editor	Kiribati
Giff Johnson	Marshall Islands Journal	Editor	Marshall Islands
Kathryn Relang	Women United Together in Marshall Islands	Executive Director	Marshall Islands
Dominic Appi	Nauru Public Service, Ministry of Home Affairs, Nauru Media Bureau - Radio Nauru	Manager, Radio Nauru FM 105	Nauru
Julie June Olsson	Nauru Island Association of Non Government Organisations	Co-Ordinator	Nauru
Emani Fakaotimanava-Lui	RockET Systems Ltd, Internet Nuie	Director	Niue
Trevor Tiakia	Broadcasting Corporation of Niue	General Manager	Niue
Birtha Lisimoni Togahai	Department of Education	Curriculum	Niue
Jeffrey T. Barabe	Oceania Television Network / Roll'em Productions Inc.	President / CEO	Palau
Moses Uludong	Tia Belau Newspaper	Publisher	Palau
Alexander Rheeney	Papua New Guinea Post-Courier	Editor	Papua New Guinea
Patrick Matbob	Divine World University	Lecturer	Papua New Guinea
Laufaleaina Lesa	OneLook Communications	Media Specialist	Samoa
Tuiasay Petaia	EFKS TV	Manager	Samoa
Walter Nalangu	Solomon Islands Broadcasting Corporation (SIBC)	Head of News & Current Affairs	Solomon Islands
Tina Lemazi	Gud Nius Radio	Station Manager	Solomon Islands
Kalafi Moala	Taimi Media Network (TMN)	Publisher - CEO	Tonga
Nanise N L Fifita	Tonga Broadcasting Commission	General Manager	Tonga
'Emeline Siale 'ILOLAHIA	Civil Society Forum of Tonga (CSFT)	Executive Director	Tonga
Tafue Molu Lusama (Reverend)	Ekalesia Kelisiano Tuvalu	General Secretary	Tuvalu
Melali Taape	Tuvalu Media Department	Director	Tuvalu
Michael Taurakoto	Wan Smolbag Theatre	CEO	Vanuatu
Olivia William	Vanuatu Broadcasting & Television Corporation	News Editor	Vanuatu

Research Partners







Further information:

http://www.pacmas.org/

http://www.abcinternationaldevelopment.net.au/