





AUSTRALIA (Assisting State) Disaster Management Reference Handbook

August 2020

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Front Cover

In this photo, Australia delivered aid to Palu, Indonesia, after the 2018 Sulawesi earthquake and subsequent tsunami. An Australian Defence Force (ADF) C-130 aircraft carried humanitarian supplies between Balikpapan and Palu and evacuated people from affected areas. ADF C-130 flights also delivered humanitarian supplies and equipment from Darwin to Balikpapan, including tarpaulins, family tents, generators and water purification supplies. In addition, an ADF C-17 aircraft delivered pre-positioned Australian and ASEAN Humanitarian Assistance on Disaster Management (AHA Centre) supplies from Subang, Malaysia to Balikpapan.

https://twitter.com/davidlipson/status/1048430025773441024

Disclaimer

This handbook has been prepared in good faith based on resources available at the time of publication. Information was gathered from the public domain, from local and government sources, as well as from subject matter experts. Where possible, a link to the original electronic source is provided in the endnote (reference) section at the end of the document. While making every attempt to ensure the information is relevant and accurate, the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) does not guarantee or warrant the accuracy, reliability, completeness, or currency of the information in this publication. Each handbook is a working document and will be updated periodically as new and significant information becomes available. We hope that you find these handbooks informative, relevant, reliable, and useful in understanding disaster management and response. We welcome and appreciate your feedback to improve this document and help fill any gaps to enhance its future utility. For feedback, comments, or to request a printed copy please email *cfe.dmha.fct@pacom.mil*. Please visit our website to download copies of this publication and other products (*https://www.cfe-dmha.org*). All parts of this publication may be reproduced, stored in retrieval systems, and transmitted by any means without the written permission of the publisher.

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Letter from the Director

This guide serves as an initial source of information for those individuals preparing for disaster risk reduction activities or immediate deployment with Australian partner responders in crisis. Additionally, it highlights the important role Australia plays in preparing for, mitigating, and responding to, and recovering from a natural disaster or regional crisis particularly in the Indo-Pacific region. This reference book also provides disaster management decision makers, planners, and responders greater insight into Australian Disaster Management (DM) capabilities, thereby enhancing regional civil-military response.

Discussion of Australian DM includes key areas such as their organizational structure for domestic and foreign disaster management, international DM agreements, regional training programs and exercise support. An in-depth understanding of Australian and other partner nation capabilities improves collaboration before, during and after a disaster response. Therefore, this handbook focuses on highlighting partnerships and a review of the country's recent regional responses and efforts and is not an assessment of Australia's capabilities.

The U.S. and Australia coordinate biennially in a bilateral, combined U.S.-Australian military training exercise called Exercise Talisman Saber. The exercise allows the two countries an opportunity to demonstrate the ability of their defence forces to work together with the highest levels of interoperability.¹ In addition, Exercise Cope North is an annual joint/combined, tri-lateral Field Training Exercise (FTX) designed to increase interoperability of the U.S. Air Force, the Royal Australian Air Force (RAAF), and Japan Air Self-Defense Force (JASDF). Cope North 2020 was the first year a Multi-National Task Force (MNTF) was stood up and incorporated a "whole-ofgovernment" approach to the Humanitarian Assistance and Disaster Relief (HADR) scenario and exercise execution. CFE-DM participated in all three of the planning conferences to set the scenario and Master Scenario Events Lists (MSELs). During the exercise, CFE-DM Staff manned a desk in the HADR EXCON to represent U.S. government injects, respond to RFIs, attend training audience meetings, provide training audience assessments, and provided assistance and advice to the U.S. Deputy MNTF Commander. The primary objective of Cope North 2020 was to create an HADR scenario in which the U.S., Japan, Australia, and other allied countries and agencies work together to establish airbases and deliver personnel, equipment and cargo into a simulated disaster area. These are just a couple of the exercises that highlight the importance of the U.S.-Australia alliance as well as the historical partnership between nations.



Sincerely

Joseph D. Martin, SES Director

About the Center for Excellence in Disaster Management & Humanitarian Assistance

Overview

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a United States (U.S.) Department of Defense (DoD) organization comprised of nearly 30 subject matter experts that provide academic research, civil-military coordination training, and operational insights to support decision making before, during, and after crises. The Center is designed to bridge understanding between humanitarians, civilian, and military responders. CFE-DM partners with a diverse group of governmental and nongovernmental actors, as well as academic institutions to increase collaborations and capabilities in humanitarian assistance and disaster response. While maintaining a global mandate, the Indo-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice. The Center is a direct reporting unit to U.S. Indo-Pacific Command (USINDOPACOM) and is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii.

Vision

The Joint Force, allies, and partners are fully prepared to conduct and support foreign humanitarian assistance.

Mission

CFE-DM builds crisis response capacity, enhances coordination and collaboration, and strengthens relationships to save lives and alleviate human suffering before, during, and after humanitarian crises.

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EXECUTIVE SUMMARY

Australia plays a critical role in the Indo-Pacific Region, leading efforts for regional civilmilitary security, economic stability and growth, and disaster risk, response, and recovery in the region. These efforts include providing disaster management and humanitarian assistance to neighboring nations, as well as financial support.²

In addition, Australia takes part in several humanitarian related training and other exercises aimed at strengthening international relationships and interoperability with partner and host nations in the region. Exercises and engagements ensure that partner nations understand each other's capabilities and systems and have trust in one another before conducting combined operations during a crisis.³

The area surrounding Australia is highly susceptible to disasters such as cyclones, earthquakes, volcano eruption, natural and man-made disasters, as well as pandemics. Australia is well positioned to respond to many disasters affecting the surrounding Pacific Island Countries (PICs). Recently, Australia provided disaster assistance to affected countries after Cyclone Harold (Solomon Islands, Vanuatu, Fiji, and Tonga, 2020), the Sulawesi Earthquake and Tsunami (Indonesia, 2018), Cyclone Gita (Tonga, 2018), the Volcano Response (Vanuatu, 2017 & 2018) and during Cyclone Winston (Fiji, 2016).⁴ Australia is also providing support to neighboring PICs facing challenges due to the COVID-19 pandemic. Australia's COVID-19 partnerships and aid focuses on the Pacific and Southeast Asia, with the Pacific, Timor-Leste and Indonesia as their closest neighbors being their highest priorities.⁵

The Australian Department of Foreign Affairs and Trade (DFAT) is responsible for leading the Australian Government's response to international humanitarian crises. DFAT, in coordination with other relevant Australian Government agencies, monitors the performance of the humanitarian aid program to maximize outcomes. Australia has a range of specialist capabilities to respond to humanitarian crises. This includes Australian personnel deployed to provide humanitarian expertise; providing lifesaving humanitarian relief supplies; and involves partnerships with local and international humanitarian organizations that have capacity to deliver support in line with Australia's humanitarian priorities.⁶

Australia faces natural hazards including bushfires, drought, cyclones, and others. The Department of Home Affairs leads the disaster emergency management response through Emergency Management Australia (EMA). EMA delivers programs, policies, and services that strengthen Australia's national security and emergency management capability. During a national emergency in Australia, state and territory governments manage emergency responses for their jurisdictions. When all other jurisdictional capability or capacity has been exhausted, non-financial assistance from the Australian Government under the Commonwealth Government Disaster Response Plan (COMDISPLAN) can be requested. EMA, through the Australian Government Crisis Coordination Centre (CCC) develop wholeof-Australian Government response options for disasters or emergencies within Australian jurisdictions.7

Recently Australia has responded to domestic deadly bushfires as well as a pandemic. During the 2019-2020 fire season, 21% of Australia's forested area burned⁸ and it triggered a national crisis. As a result Australia called on its Defence Force who supported state fire and emergency services across the country.⁹ In response to the spread of COVID-19, the Australian Government activated a National Coordination Mechanism (NCM) which is operating through a coordination node with the Department of Home Affairs and together with the states and territories are coordinating the whole-ofgovernment responses to issues outside the direct health management of COVID-19.¹⁰

INTERNATIONAL FRAMEWORK

The goal of Australia's humanitarian action is to save lives, alleviate suffering and enhance human dignity during and in the aftermath of conflict, disasters and other humanitarian crises, and to reduce risks from and strengthen preparedness for the occurrence of such situations.¹¹ Australia has a range of response options available when responding to humanitarian crises, in particular in the Indo–Pacific region. The type of response will depend on the scale and nature of need and how best Australia can make a difference to broader international efforts.¹²

Australia's specialist capabilities to respond to humanitarian crises include:¹³

- 1. Australian personnel deployed to provide humanitarian expertise; and
- 2. Lifesaving humanitarian relief supplies; and
- 3. Partnerships with local and international humanitarian organizations that have capacity to deliver support in line with Australia's humanitarian priorities.

Guidelines and Plans for International Assistance

As a developed country, Australia accepts humanitarian responsibility for providing aid to countries in need. This responsibility extends to provision of assistance to countries affected by disasters. The following policies and plans are all important pieces in Australia's Disaster Relief and Humanitarian Assistance response strategy.

AUSASSISTPLAN 2018

The Australian Government Overseas Assistance Plan 2018 (AUSASSISTPLAN) explains the coordination arrangements for providing physical assistance following a disaster or emergency in another country.¹⁴

Assistance is provided by the Australian Government only if it has been requested and/ or accepted by the government of the disaster affected country. The provision of emergency

Australian Government led physical assistance to overseas countries will be dependent on domestic requirements and capacity at the time. Emergency Management Australia (EMA) will work with jurisdictions and capability owners to determine the ability and capacity to deploy a technical team offshore. The Department of Foreign Affairs and Trade (DFAT) leads and coordinates the whole-of-government response to an international crisis that has affected, or threatens to affect. Australians or Australian interests overseas; and leads and coordinates the response to an international humanitarian crisis. DFAT may delegate its roles and responsibilities under this plan to another agency in certain circumstances.15

AUSASSISTPLAN has three (3) phases; STANDBY, ALERT, and ACTIVE. Based on a request from DFAT, the Director General, Emergency Management Australia (DGEMA) will authorize a phase change between STANDBY and ALERT. DGEMA will also authorize a phase change from ALERT to ACTIVE following authorization from DFAT and a tasking being issued to and accepted by EMA. A Crisis Coordination Team (CCT) may be activated to facilitate EMA's role in the event and undertake planning with other relevant stakeholders. EMA may also deploy an Emergency Management Australia Liaison Officer (EMALO) for in-country support of the deployed capability as part of the Mission Coordination Team (MCT). For command, control, and coordination arrangements, the MCT is made up of the Mission Coordinator, EMALO, and other relevant officers as required. DFAT, through Head of Mission (HoM), will provide mission direction to the MCT to ensure that mission outcomes are met. The MCT ensures the response meets the Australian Government intent and expectations and that the deployed resource has appropriate tasking and support from the Australian Government incountry. Coordination and control of a deployed

capability is managed by the MCT. Command remains with the team leaders of the deployed capabilities.¹⁶

The Protection Framework

The Protection in Humanitarian Action Framework for the Australian Aid Program (the Protection Framework) was released in 2013 by the former Australian Agency for International Development (AusAID), now absorbed into DFAT, and which continues to guide DFAT's commitments toward improving the safety of crisis-affected people.

The key strategies presented in the Protection Framework are:¹⁷

1. Australia supports protection in preparedness for, response to and recovery from humanitarian crises by funding and advocating for:

a. protection to be mainstreamed into humanitarian action; and

b. dedicated protection programs as part of humanitarian action.

2. Australia supports and advocates for improved global capacity for protection. Priority areas are:

a. being accountable to affected populations; and

b. preventing and responding to genderbased violence; and

c. protecting people with disability.

The Guidelines on the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance (IDRL)

In 2007, the International Red Cross Red Crescent Movement and the States Parties to the Geneva Conventions, including Australia, adopted the *Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance* (IDRL Guidelines).¹⁸ The IDRL Guidelines provides best practice guidance on legal preparedness for international humanitarian assistance, addressing common legal and operational problems for incoming and outgoing international aid, and can assist governments to avoid unnecessary delays in providing humanitarian relief while ensuring good coordination and quality of aid.¹⁹

The core principles of the IDRL Guidelines are as follows:

- Domestic actors have the primary role to respond to disasters within their territory;
- International relief providers have responsibilities;
- International actors need legal facilities; and
- Some legal facilities should be conditional.

In 2017, the IDRL Checklist was developed as a supplemental tool to assist states in making use of the IDRL Guidelines.²⁰ The International Federation of Red Cross and Red Crescent Societies (IFRC) and United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) have also developed the Model Act (together with Inter-Parliamentary Union) and Model Emergency Decree for the Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance, which provide suggested legal text intended to assist states to strengthen their legal preparedness for international disaster cooperation and/or be used as a reference tool for voluntary use by states faced with a major disaster and the possibility of a large influx of aid providers.²¹ The IDRL Guidelines and Checklist can be used for preparedness planning, simulation exercises, law drafting and law reform, and to inform operations of common legal barriers to international humanitarian assistance. It can also be used as a stand-alone guide for discussions and consultations by all international disaster response actors.

Since 2007, over 30 countries have adopted new laws and/or procedures based on the IDRL Guidelines. In addition, National Red Cross and Red Crescent Societies have provided support to over 100 countries with regard to best practices for international humanitarian assistance.²²

Humanitarian Strategy

The Humanitarian Strategy was released by DFAT in 2016, providing the framework for Australia's humanitarian action. Effective preparedness and response, coupled with disaster risk reduction, builds resilience in community and government. This reduces casualties, minimizes economic losses, limits rebuilding efforts, and allows countries to focus on economic and social growth. Humanitarian strategy goals alongside Australian aid is helping communities and governments to be better prepared for and respond to natural disasters. They invest in disaster risk reduction in order to reduce the impact of a crisis, save lives and limit the economic costs of a disaster. Risk reduction activities include improving warning systems, ensuring buildings are constructed stronger to withstand extreme weather events, and supporting vulnerable communities to gain access to insurance.23

There are four strategic objectives:²⁴

- Strengthen International Humanitarian Action: Australia will support reform and innovation within the international humanitarian system to ensure that it is fit for purpose, particularly in the Indo-Pacific.
- Reduce Disaster Risk: Australia will invest in a safer future by supporting countries to reduce disaster risk. Australia will promote effective disaster risk reduction in the Indo-Pacific region, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030.
- Support Preparedness and Effective Response: Australia will support countries to better prepare for disasters. Australia will provide effective humanitarian assistance and protection in response to rapid and slow onset crises, with a focus on the Indo-Pacific.

• Enable Early Recovery: Australia will support the transition from humanitarian relief to longer-term recovery and development.

DFAT's approach to delivering on its humanitarian strategic objectives is informed by thematic priorities. These thematic priorities are integrated throughout the design, implementation and evaluation of DFAT's humanitarian policy and programming.²⁵

The thematic priorities include:²⁶

- Gender Equality and Women's Empowerment
- Disability Inclusiveness
- Protection
- Private Sector Engagement
- Monitoring, Evaluation, Accountability and Learning

Figure 1 shows Australia's development program.²⁷

CONTEXT AND RESULTS			
TIER 1	TIER 2	TIER 3	
Indo-Pacific development context	Australia' contribution to development	Operational and organisational effectiveness	
Stability	Health Security	 Planning Effectiveness Responsiveness Gender equality and social inclusion Transparency 	
 Fragility in the region Political rights and civil liberties Fiscal sustainability 	 Health systems and preparedness Infectious disease outbreak response Medical products Immunisation Sexual and reproductive health Emergency assistance 		
Prosperity	Stability		
 Poverty in the region Export volumes Economic growth in the region Education Remittances Tourism 	 Improved governance Social protection measures Violence against women School enrollments Food security 		
Resilience	Economic Recovery		
 Pandemic spread Health Disaster risk reduction Climate change adaption Violence against women 	 Economic policy support Economic empowerment Supply chain support Budget support 		

Figure 1: Australia's Development Program

APC MADRO

The Asia-Pacific series of Conferences on Military Assistance to Disaster Relief Operations (APC-MADRO) that took place over a fiveyear period, were organized with the aim of developing collaborative guidelines to assist the planning of foreign military assistance in support of disaster response operations in the Asia-Pacific region. At the end of this process, the Asia-Pacific Regional Guidelines for the Use of Foreign Military Assets in Natural Disaster Response Operations ("APC MADRO Guidelines") were finalized and endorsed.²⁸

Australia was heavily involved in the development of the APC MADRO which helps to guide civil-military response in the region.²⁹ The APC MADRO Guidelines are a reference guide for Member States who plan and execute foreign military support for international disaster response, as well as humanitarian entities, in order to establish the basic framework for the effective and efficient use of foreign military assets in international disaster response operations in support of an affected State (s) in the Asia-Pacific region. They have been developed between numerous regional Member States and organizations who have gained invaluable experience and lessons learned in deploying and receiving military assistance when answering to international disaster response requests.30

The overarching principles guiding the use of foreign military assets in disaster response operations in the Asia-Pacific region are:

- The sovereignty, territorial integrity and national unity of States must be fully respected in accordance with the Charter of the United Nations. In this context, humanitarian assistance should be provided with the consent of the affected country and in principle on the basis of an appeal by the affected country.
- Foreign military assets involved in international disaster response operations remain under their own national command and control, operating in support of the Affected State. In addition, foreign military

assistance should be provided at no cost to the Affected State.

In line with the Oslo Guidelines, foreign militaries will normally not be used in the direct delivery of assistance and their involvement in this regard should be carefully weighed on a case-by-case basis. However, in the Asia-Pacific region, military actors are often required to provide direct assistance. When required to become involved in direct assistance, military responders should seek advice from, and work closely with the national authority of the Affected State, as well as the humanitarian community. The humanitarian community has the necessary expertise and experience to ensure that this is done effectively and without violating the aforementioned principles.³¹ The Australian Defence Force utilizes the Multi-National Force (MNF) Standard Operating Procedures (SOP) when deploying on international disaster response operations.³²

Australian Agencies/ Programs Involved in International Humanitarian Response

The following are involved in response efforts in other countries.

Department of Foreign Affairs and Trade (DFAT)

The Department of Foreign Affairs and Trade (DFAT) is responsible for leading the Australian Government's response to international humanitarian crises. DFAT will respond to humanitarian crises and ensure that humanitarian investments and policy engagements align with and support Australian government policy, including Australian aid. DFAT, in coordination with other relevant Australian Government agencies, also monitors the overall performance of the aid program to maximize outcomes.³³

DFAT manages a network of 109 overseas

posts in five continents and has 6,078 staff located in Canberra, state and territory offices, and overseas posts. DFAT provides foreign, trade and development policy advice to the Australian Government, negotiates international agreements, delivers an aid program, and provides consular assistance. DFAT also works with other government agencies to ensure that Australia's pursuit of its global, regional and bilateral interests is coordinated effectively.³⁴

Emergency Management Australia (EMA)

When the Australian Government responds to foreign disasters the Department of Home Affairs, through Emergency Management Australia (EMA), works closely with the Department of Foreign Affairs and Trade (DFAT) to facilitate Australian assistance and response efforts. EMA maintains key partnerships in the region and across the globe to better equip Australia and its partners to be able to respond to disasters both at home and abroad.³⁵ EMA has significant roles and response.

Australian Defence Force

The Australian Defence Force (ADF) has capabilities that the Australian Government can draw on for major crises in the region. The ADF, commanded by the Chief of the Defence Force (CDF), consists of the Royal Australian Navy, the Army, and the Royal Australian Air Force (including Reserves). The ADF is constituted under the Defence Act 1903. The mission of the ADF is to defend Australia and its national interests. In fulfilling this mission, the ADF serves to efficiently and effectively carry out the Government's defence policy.³⁶ The ADF deploys military capabilities, including personnel, logistics, medical capability, transport, evacuation and protection.³⁷

Australian Federal Police

The Australian Federal Police provides disaster victim identification (DVI) and other policing services. Australia's DVI planning and coordination is managed by the Australia New Zealand Policing Advisory Association (ANZPAA) Disaster Victim Identification Committee (ADVIC), of which all jurisdictions are represented. ADVIC's incident response is governed by the ANZPAA DVI Activation and Response plan and follows INTERPOL DVI processes, including the use of INTERPOL 'pink' Post Mortem and 'yellow' Ante Mortem forms. By following international standards, the AFP and ADVIC are able to quickly deploy internationally.³⁸

Australian States and Territories

States and territories may deploy specialists that provide technical, medical, engineering, communication, and search and rescue support. This is coordinated by Emergency Management Australia and the Department of Health (medical assistance).³⁹

Australian Medical Assistance Team (AUSMAT)

The Australian Medical Assistance Team (AUSMAT) is formed from qualified professionals from Australian state and territory health services to provide emergency medical care in the aftermath of a disaster. AUSMAT has a specialized medical response capability and it has a flexible capability structured to meet the health needs of disaster-affected countries. DFAT, and the Department of Health and Department of Home Affairs Emergency Management Australia work closely with State and Territory Governments to prepare and deploy AUSMAT in response to international disasters. For example, AUSMAT provided emergency medical care for more than 1,700 people in Fiji as part of Australia's immediate response to Tropical Cyclone Winston.40

Disaster Assistance Response Teams (DART)

The Disaster Assistance Response Teams (DART) provide a range of capabilities to save lives following disasters and can deploy quickly to conduct search and rescue activities, and help communities recover. The teams are drawn from Fire and Rescue New South Wales, and Queensland Fire and Emergency Services. They can also conduct structural assessments, manage hazardous material accidents, and provide general emergency management assistance. A DART deployed alongside a New Zealand Urban Search and Rescue Team to conduct structural assessments of over 340 buildings damaged by Cyclone Gita in Tonga in 2018.⁴¹

Note, this is not to be confused with U.S. DARTs, as the U.S. lead federal agency for foreign disaster relief, the United States Agency for International Development (USAID)'s Bureau for Humanitarian Assistance (BHA), also deploys Disaster Assistance Response Teams (DART) internationally.

Crisis Response Team (CRT)

DFAT maintains a Crisis Response Team (CRT). In response to a crisis, DFAT CRT's highly trained officers can be deployed overseas very quickly to provide essential humanitarian support in affected countries. The CRT has been deployed to Nepal, Vanuatu, Philippines, Solomon Islands, Myanmar, Fiji, and Tonga since November 2013.⁴² The CRT provides coordinated humanitarian response operations, diplomatic and consular services, and may also help to evacuate Australians from the affected country.⁴³

Urban Search and Rescue

Urban Search and Rescue (USAR) teams locate, care for and extract people trapped or affected by structural collapse. The teams are made up of highly trained firefighters, paramedics, doctors, engineers, hazardous materials experts, police, and dog handlers. While domestically, all states and territories maintain USAR capabilities, internationally accredited USAR capabilities are kept on standby in New South Wales and Queensland to assist other countries, in which case EMA coordinates with the DFAT to deploy USAR teams.⁴⁴

Pacific Maritime Security Program

Australia's Pacific Maritime Security Program is the successor to the original Pacific Patrol Boat Program in which Australia gifted vessels to Pacific Island nations (PNG, Fiji, Federated

States of Micronesia, Tonga, Solomon Islands, Cook Islands, Kiribati, Marshall Islands, Palau, Samoa, Tuvalu, and Vanuatu) and Timor-Leste. The new vessels replace the former Pacific Patrol Boats and are designed to assist nations to combat a wider range of maritime security issues, including transnational crime and illegal fishing. The Pacific Maritime Security Program includes the gifting of 21 vessels to Pacific Island Nations, as well as region-wide fixed wing aerial surveillance, ongoing sustainment and training support, the continuation of Australia Defence's maritime adviser network, and infrastructure upgrades. The most recent vessel gifted was to Tuvalu in April 2019, and the last will go to Timor-Leste in October 2023. When the United Nations Convention on the Law of the Sea took effect in 1982, it created 200 nautical miles of exclusive economic zone (EEZ) to the territories of all nations with an ocean coastline. Many Pacific Island Countries looked to the governments of Australia and New Zealand for help in policing and regulating an area of ocean that was beyond their maritime capability. As a result, the Australian government created the Pacific Patrol Boat Program to design and provide adequate patrol boats to the countries.⁴⁵

Relief Supplies and Logistics

Australia has prepositioned stockpiles of relief items in Australia and overseas. These relief items include water purification tablets, shelter supplies, hygiene kits, mosquito nets and blankets. Australia has the capacity to provide supplies within 48 hours of a request for assistance by a partner government. They will also fast-track procurement of other supplies, so the right type of relief is provided quickly.

Australia has a standing agreement with an international logistics company to support all aspects of humanitarian logistics; procurement, freight and personnel. The first deployment of Australian-funded prepositioned supplies was delivered to affected communities within 24 hours after Tropical Cyclone Gita struck Tonga in 2018.⁴⁶

Pacific Step-up

Australia is working with their Pacific partners on sovereignty, stability, security, and prosperity of the Pacific region. The Pacific Step-up is one of Australia's highest foreign policy priorities, highlighted in Australia's 2017 Foreign Policy White Paper and 2016 Defence White Paper. The Step-up was first announced at the Pacific Island Forum Leaders' Meeting in September 2016 as a 'step-change' in the way they engage in the region. On 8 November 2018, Prime Minister Morrison announced Australia would take their engagement to a new level.⁴⁷

Under the Australian Government's Pacific Step-Up, Defence is investing more in the region, including:⁴⁸

- In key facilities in PNG, Fiji, Timor-Leste, Vanuatu and Solomon Islands; and
- Establishing a new dedicated Pacific Support Team; and
- Undertaking Army Mobile Training Team engagements; and
- Convening annual Joint-Heads of Pacific Security events in Australia and the region; and
- Reinforcing alumni and sporting networks in the security sector and expanding health engagements.

The Office of the Pacific was established in DFAT to support Australia's deepening engagement with the Pacific, to enhance wholeof-government coordination and to drive implementation of regional activities, consistent with the priorities of Pacific countries.⁴⁹

Disaster Management Partners Involved in International Humanitarian Response

Disaster management is a complex process involving international, national and local organizations each with a distinct role to play. To respond to disaster situations a coordinated effort is required. DFAT has partnered with the following six Australian NGOs and their consortium partners to deliver humanitarian assistance:⁵⁰

- CARE Australia
- Caritas Australia
- Oxfam Australia
- Plan International Australia
- Save the Children Australia
- World Vision

These six partners and DFAT have formed the Australian Humanitarian Partnership (AHP). AHP is a strategic five-year (2017-2021) partnership which assists Australia in utilizing the networks and access of Australian NGOs to respond to natural disasters and crises in the region. Through the AHP's Disaster READY program, investments build the capacity of local organizations across the region to manage disasters more effectively.⁵¹

DFAT also has humanitarian partnerships with Australian non-government organizations (NGOs), Australian Red Cross (ARC), and international multilateral humanitarian agencies such as the World Food Programme (WFP), United Nations High Commissioner for Refugees (UNHCR), the International Committee of the Red Cross (ICRC), and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), where multiyear agreements are in place to provide partners with funding quickly and efficiently in an emergency.⁵²

Australian Council for International Development (ACFID)

The Australian Council for International Development (ACFID) is the peak body for Australian NGOs involved in international development and humanitarian action. Founded in 1965, ACFID has over 130 members working in 90 developing countries and supported by over 1.5 million Australians. ACFID's work is focused on driving positive change towards sustainable and inclusive development; peace and human security; and strong and effective civil society. ACFID and DFAT have a partnership agreement that promotes a robust and effective Australian international development sector. ACFID works in partnership with the Australian Civil Military Centre (ACMC), with an NGO Advisor seconded to the Centre. ACFID also works with the Australian Charity and Not-for-Profit Commission (ACNC).⁵³

Australian Red Cross (ARC)

The International Red Cross and Red Crescent Movement (the Movement) comprises the International Federation of Red Cross and Red Crescent Societies (IFRC, or the Federation), National societies in 191 countries, and the International Committee of the Red Cross (ICRC). The Federation regularly leads the Movement's relief response in situations of natural disasters occurring outside of conflicts. National Societies, such as the Australian Red Cross (ARC), are independent national humanitarian organizations that are auxiliary to its public authorities in the humanitarian field, providing relief and support to vulnerable people during emergencies, conflict and in peace time. In Australia, DFAT has an agreement with the Australian Red Cross that supports disaster preparedness, crisis response, community resilience and the dissemination of international humanitarian law.54

The Australian Red Cross (ARC) acts as an auxiliary to the Australian Government by delivering humanitarian services to vulnerable people in need, both nationally and internationally, and is one of Australia's partners in disaster preparedness, response and recovery.55 ARC is nominated in each Australian state and territory emergency management plan as the provider of Register Find Reunite, a reunification service for families separated by disaster. This service is provided on behalf of the Australian Government, and state/territory governments. Red Cross in Australia also provides psychosocial support under these arrangements and continues to be prominent in strengthening community resilience and supporting long-term recovery for communities that have experienced major disaster. Red Cross in Australia contributes and leads upon improvements in disaster policy

and practice.⁵⁶ The ARC also works to promote and strengthen international humanitarian laws and values.⁵⁷

Australia supports the following investment in the ARC: $^{\rm 58}$

- Strengthen disaster preparedness and emergency response capacity of partner governments and National societies in disaster-affected countries, particularly across the Pacific, to enable timely, effective, and appropriate responses to disasters; and
- Build resilience of targeted national societies and communities in the Indo-Pacific to cope with and recover from crises and disasters; and
- Increase public awareness of international humanitarian law and values, in an effort to reduce violence, conflict, discrimination and stigma.

ARC aid workers are part of the ongoing 2020 COVID-19 response, supporting pandemic preparedness, emergency operations and emergency health services. The ARC is amplifying the efforts of the Australian Government as they tackle the pandemic in their region by supporting Palau, Marshall Islands, Solomon Islands, Vanuatu, Tuvalu, Papua New Guinea and other Pacific countries in their efforts to prepare communities for COVID-19. They are also supporting efforts to contain the pandemic in Cox's Bazar in Bangladesh, where millions of people live in crowded refugee camps.⁵⁹

RedR Australia

RedR Australia manages the Australia Assists program. This is an Australian Government funded program that deploys Australian specialists to work with governments, multilateral agencies and communities to prepare for, respond to, and recover from natural disasters and conflict.⁶⁰ RedR Australia maintains a roster of more than 750 technical experts across a range of skill profiles including disaster risk reduction, emergency preparedness, and recovery. During a humanitarian crisis, a global network of Standby Partner organizations, including RedR Australia, provides additional support to UN response efforts. RedR Australia also builds resilience in disaster prone countries through disaster preparedness training activities and strategic collaboration with National Disaster Management Offices (NDMOs) in many countries.⁶¹

United Nations

Australia promotes and supports the leadership, coordination and delivery role of the United Nations through a range of its agencies such as the World Food Programme (WFP), United Nations High Commissioner for Refugees (UNHCR, also known as the UN Refugee Agency), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), the United Nations Office for Disaster Risk Reduction, and the World Health Organization (WHO). The coordination is both through the Office for the Coordination of Humanitarian Affairs (OCHA) and the cluster system.⁶²

Australian members on OCHA's roster of the United Nations Disaster Assessment and Coordination (UNDAC) team can be deployed to support an affected state in crisis response. In addition, the Protection Standby Capacity (ProCap) and Gender Standby Capacity (GenCap) can provide experts on short notice.⁶³

International Disaster Response Operations

Australia has provided humanitarian assistance and disaster response to several countries. This section highlights some of those efforts over the last ten years.

Australia's Response to the COVID-19 Pandemic in the Pacific

The COVID-19 pandemic threatens to profoundly affect the economic growth, poverty reduction and political stability gained over the past two decades. Its impact most severely effects the developing world, including small island

countries in the Pacific. Australia has many partnerships in place with neighboring countries in the Pacific and responded quickly to provide assistance and relief in the Pacific and to Timor-Leste supporting national and regional health measures. In response to the crisis, Australia deployed health experts to support the World Health Organization (WHO) regional offices in Fiji and the Solomon Islands Ministry of Health. Australia's COVID-19 partnerships and aid focused on the Pacific and Southeast Asia, with the Pacific, Timor-Leste and Indonesia as their closest neighbors being their highest priorities. The recovery of these neighbors and partners is critical to the region's security and economic stability.⁶⁴ Figure 2 shows the aim of Australia's focus in the Indo-Pacific with regard to its COVID-19 response.

Many Pacific Island Nations are still recovering from the devastating effects of Cyclone Harold. Adding a pandemic only further added to the strain on their economies. Ten Pacific Island nations declared states of emergency due to projected economic impacts with the global travel restrictions and resulting stall in tourism. The most tourism dependent economies are Fiji (17% of GDP), Samoa (23%), Vanuatu (40%), the Cook Islands (73%) and Tonga (10%).65 Australia is the largest aid donor to the Pacific islands. To assist in immediate relief efforts, the Australian Government provided AUD\$100 million in economic support. Papua New Guinea received the most (\$20.5 million) due to need, followed by Solomon Islands and Vanuatu who both received \$13 million. Fiji, Samoa and Tonga each received \$10.5 million, Nauru and Kiribati received \$4.5 million and Tuvalu received \$3 million.⁶⁶ Along with the World Health Organization (WHO), the U.S. and New Zealand, Australia provided COVID-19 rapid diagnostic kits to Fiji, Kiribati, Papua New Guinea, Nauru and nine other Pacific Island countries who have struggled with in-country testing capacity. The kits enabled the Pacific health departments to achieve faster and more effective testing as well as provide results in under an hour.67



Figure 2: Australia's COVID-19 Development Response

In addition, Australia's Market Development Facility was implemented to assist smallholder farmers and the private sectors in the Pacific to increase productivity and bolster food availability to combat food insecurity during the COVID-19 pandemic.⁶⁸

Australia is also working with the WHO to support food security assessments for Fiji, Vanuatu, Solomon Islands, Tonga and Samoa to address bottlenecks to the shipping supply chain and aid in uninterrupted food supplies. As a result, Australia partnered with New Zealand to maintain an 'Australia-Pacific Corridor" which served as a humanitarian corridor to the Pacific and Timor-Leste to ensure the continued supply of essential medical and testing equipment, critical personnel, food, and essential supplies are available in spite of strict border controls and reduced commercial flights. This regional connectivity was critical to saving lives and jobs. Photo 1 depicts a Royal Australian Air Force (RAAF) C-17 aircraft delivering urgent humanitarian supplies including medical, shelter, hygiene kits, and water buckets to Vanuatu.⁶⁹

Australia has published, 'Partnerships for Recovery: Australia's COVID-19 Development **Response**', which details the country's efforts to address the challenges of COVID-19 with neighbors in the Indo-Pacific region, specifically in the Pacific, Timor-Leste and Indonesia. Building on the Foreign Policy White Paper, the document focuses on building up health security, maintaining social stability, stimulating economic recovery and providing for vulnerable populations including women, and girls, persons with disabilities and those living in poverty who are dealing with multiple layers of challenges in light of their previous challenges and the additional impacts of the pandemic.

This framework will guide the whole-ofgovernment development efforts in response to COVID-19.

The strategy details the Australian Government's immediate focus on emergency health and humanitarian assistance and prioritizing collaborations with partner governments to contain the spread of the virus, conduct public awareness campaigns, support local health systems with equipment and training and facilitate the supply of essential goods. Australia has also provided WASH services and worked with local organizations to combat gender-based violence and deliver essential sexual and reproductive services which have been disrupted due to the COVID-19 crisis.



Photo 1: RAAF Delivers Humanitarian Provisions to Vanuatu during COVID-19 Response



Photo 2: Australian Medical Team Research in Infectious Disease in Timor-Leste

Additionally, Australia's lead scientists and medical research institutions are involved in global efforts toward identifying a vaccine.⁷⁰

Photo 2 depicts an Australian doctor from the Menzies School of Health Research leading a team to find solutions to complex infections disease problems posing risks to the health security and economy of Timor-Leste.⁷¹

Australian Response to the COVID-19 Pandemic in South/Southeast-Asia

Australia and Indonesia's Partnership for Economic Development (PROSPERA) is driving rapid responses during the pandemic by supporting Indonesia's economic response to the pandemic, work on impact assessments, economic stimulus, and longer-term financial recovery. Australia is also working with the International Financial Institutions (IFIs) to advocate for strong and timely support to Pacific Island countries. The Australian Infrastructure Financing Facility for the Pacific (AIFFP) was established to provide grants and loans for vital infrastructure projects in the Pacific and Timor-Leste. This facility will form an integral part of Australia's COVID-19 recovery efforts in the region by funding climate resilient infrastructure projects that support sustainable economic growth and local employment.

Australia aims to pivot over AUD\$280 million of existing regional health, education, humanitarian, and social protection programs to support national responses to COVID-19 and specifically working with Indonesia to respond to the immediate health and humanitarian needs impacting the country and work on a comprehensive strategic partnership to assist in its recovery, including support for the institutional, economic social reforms necessary for recovery and sustainable growth. Australia is also a key responder to the Rohingya crisis in Cox's Bazar Bangladesh, partnering with the United Nations Refugee Agency (UNHCR) to improve access to clean water, hygiene supplies and waste disposal in the refugee camps.⁷²

Australia also partnered with the World Bank Group to provide \$AUD 5 million to support Vietnam's economic recovery and protect the country from the negative impacts of the COVID-19 pandemic. These funds are additional funds provided by Australia and administered by the World Bank toward the ongoing Australia-World Bank Group Strategic Partnership - Phase 2 which aims to support Vietnam's development agenda through knowledge sharing and advising policy making. The activities funded include efforts to strengthen social safety nets with more efficient and effective delivery of social security payments and narrowing human capital gaps for ethnic minorities and improving gender equality in legal frameworks. Funds will also go toward economic recovery activities including the

acceleration of the execution of the investment program and reducing transaction costs for the government, people and businesses. The program is part of a \$AUD10.5 million commitment from Australia toward Vietnam's COVID-19 recovery efforts intended to benefit millions of Vietnamese people and assist the Southeast Asian country goal of becoming a high-income economy by 2045.⁷³

Australia's Response to Tropical Cyclone Harold (Solomon Islands, Vanuatu, Fiji, Tonga, April 2020)

Cyclone Harold caused significant damage across Solomon Islands, Vanuatu, Fiji, and Tonga in April 2020. The Tropical Cyclone first hit the Solomon Islands on 2-3 April 2020, before progressing to Vanuatu on 5 April, where it escalated. The cyclone went on to impact the south of Fiji on 8 April, before reaching Tonga early on 9 April, having re-intensified.⁷⁴

In the Solomon Islands, 27 people lost their lives and widespread damage was reported to agricultural crops, food gardens, homes, buildings and roads across Honiara, Western Province, Guadalcanal, Makire, Rennell and Bellona. In Vanuatu, more than 159,000 people were affected by the cyclone. The northern islands were affected the worst. There was significant damage to schools, agricultural crops, buildings, power, telecommunications, and the local boat fleet. 75 The cyclone struck Vanuatu with winds up to 285 kph. More than 17,000 houses were severely damaged or destroyed, leaving around 87,000 people without homes.⁷⁶ Photo 3 shows the impact of those winds in Sanma province in western Vanuatu.77

In Fiji, the Cyclone caused 3 deaths, ⁷⁸ more than 180,000 people had their homes and livelihoods affected, 917 homes were completely destroyed, and an additional 2,629 homes severely damaged. The agriculture sector was severely impacted, with widespread damage to infrastructure, schools, and health centers. In Tonga, the western coast of Tongatapu and 'Eua coastal communities were particularly impacted.⁷⁹ In responding to Cyclone Harold, Australia partnered with Pacific island governments, the Red Cross, United Nations agencies and NGOs. Through the FRANZ trilateral disaster relief arrangement, Australia often teams with New Zealand and France to support relief efforts to affected countries.⁸⁰

Australia has pledged more than 600 million vatu (approximately \$U.S. 5.1 million) in assistance to Vanuatu.⁸¹ Australia also supported Vanuatu's NDMO to undertake aerial surveillance to assess

the scale of impact as well as supported the Red Cross and non-government organizations to release locally pre-positioned relief items. Following a request from the Government of Vanuatu, Australia also provided a package of assistance including: ⁸²

- Humanitarian relief supplies and support for logistics in-country; and
- Support for the Government of Vanuatu's response operations, including essential public services to include health, education, and community safety; and
- Assistance to international and local NGOs to support the Government's efforts to provide immediate and medium-term support to affected communities in livelihoods, shelter, protection for women and children and psychosocial services.

In addition, four Australian flights delivered humanitarian relief supplies to Vanuatu on 13, 21, 26 April and 16 May 2020 which were provided by the Australian Government, the UK, UN, Australian NGOs and the Red Cross. ⁸³

For the Solomon Islands, Australia provided the National Disaster Management Office

Photo 3: Tropical Cyclone Harold Destruction on Vanuatu supported the ent organizations ed relief items. (NDMO) with immediate emergency funding to support damage assessments and an initial clean up. The NDMO identified immediate needs such as food security, shelter, health, and water and

> sanitation.⁸⁴ In response to Fiji's request for international assistance, Australia provided the following: ⁸⁵

- Humanitarian relief supplies made-up of shelter kits and tents, kitchen utensils, water containers and personal hygiene items, and;
- Funding for the Fiji Red Cross and nongovernment organizations to provide community services such as rebuilding, safe access water and sanitation, and counseling support to address specific needs of vulnerable people, and;
- Support to the UNFPA Regional Prepositioning Initiative to distribute 250 prepositioned dignity kits to directly benefit vulnerable women and girls in the southern islands; and
- Initial response efforts and is prioritizing the rehabilitation of core services, such as schools and health clinics.

In addition, four Australian flights delivered humanitarian relief supplies on 18, 22 and 30



April and 1 May 2020. Australian relief supplies included shelter, hygiene kits, kitchen kits, bed nets, and solar lanterns.⁸⁶ Photo 4 shows the humanitarian relief supplies unloaded from the Royal Australian Air Force in Nadi, Fiji on 22 April.⁸⁷ As part of the ongoing recovery in Fiji, Australia is providing longer-term support to assist with agriculture, livelihoods, shelter, hygiene promotion, and counseling services in partnership with Australian Humanitarian Partnership NGOs, the Red Cross and local NGOs. Australia also plans to support the provision of cash transfers to affected communities though the Fiji Government's own social welfare systems.⁸⁸

For Tonga, Australia provided immediate assistance of AUD 100,000 to support Tonga's National Emergency Management Office (NEMO) with procurement of essential supplies for those impacted by TC Harold.⁸⁹

Australia's Response to the Eruption of White Island (2019)

On 9 December 2019, White Island, a volcano in New Zealand's Bay of Plenty erupted while 47 tourists were exploring the island. Australia New Zealand Policing Advisory Agency (ANZPAA) Disaster Victim Identification Committee (ADVIC) processes were quickly enacted and upon acceptance of New Zealand's invite, Australia deployed Disaster Victim Identification specialists from the AFP, Queensland Police, and New South Wales Police.

Forward deployed members provided assistance in Post Mortem activities and compiling Identification Reports through comparison of Post Mortem and Ante Mortem data in accordance with INTERPOL Disaster Victim Identification (DVI) processes. Following established processes was critical in ensuring the successful identification of victims from a number of different countries.

The eruption resulted in a total of 21 deaths including 14 Australians. In Australia significant resources were deployed to victim's next of kin and family members to collect Ante Mortem material for identification purposes and to provide support to families through the New Zealand investigative process. Although the operation was largely completed before Christmas 2019, AFP continued to provide support to Australian families.⁹⁰

Australia's Response to Christchurch Shootings (2019)

In March 2019, a terrorist attack occurred in Christchurch, New Zealand, resulting in the death of over 50 people during prayer services. At the request of New Zealand Police, the Australian DVI Committee deployed to New Zealand a team of National Missing Persons and Victims System (NMPVS) experts from the AFP and Queensland Police to assist in compiling Identification Reports for review



Photo 4: Humanitarian Relief Supplies from Australia to Aid with Cyclone Harold in Fiji

by the New Zealand Coroner. This important collaboration aided in the rapid identification of all victims meeting cultural, public, and political expectations.⁹¹

Australia's Response to the Sulawesi Earthquake and Tsunami (Indonesia 2018)

On September 28, 2018, a series of earthquakes struck Indonesia's Central Sulawesi province. The initial earthquake was a 6.1 magnitude earthquake that was later joined by subsequent aftershocks. Around three hours later, the strongest quake measuring 7.4 magnitude struck at only 10 km beneath the surface and with its epicenter close (48 miles north) to the provincial capital, Palu. The earthquake triggered a 3-meter-high tsunami that struck Talise beach in Palu and Dongala. The earthquakes, tsunami, liquefaction, and landslides caused significant damage and the loss of at least 2,227 lives. Additionally, more than 2,500 others were reported injured and 113 people were missing (as of December 20, 2018). Overall, roughly 1.5 million people were affected, and some 211,000 people were displaced by the disaster. More than 65,000 houses were damaged or destroyed. Most of the displaced were from Sigi, and the disaster cut off much of Palu and Dongala for several days. The airport runway and control tower were both severely damaged and the seaport, which the region relied upon for fuel supplies, lost its crane for cargo.^{92, 93, 94, 95}

On October 1, the Government of Indonesia (GoI), through the Ministry of Foreign Affairs and Indonesia's National Disaster Management Agency (NDMO) Badan Nasional Penanggulangan Bencana (BNPB), welcomed specific offers of foreign assistance. In response to the request, ADF assisted the Indonesian military and joined at least 17 other foreign militaries, including the U.S., in providing assistance to the Government of Indonesia.^{96, 97}

The Australian Defence Force supported the Indonesian Government response with:

- 9 C-130 flights with supplies and equipment from Darwin to Balikpapan; and
- 1 C-17 flight with supplies from Subang, Malaysia to Balikpapan; and

• 1 C-130 delivering supplies from Balikpapan to Palu.⁹⁸

By Oct. 24, 2018, overall, Australia committed AUS\$10.25 million which aimed to help 195,000 people through humanitarian partners and also provided relief supplies to around 30,000 people.⁹⁹

Australia's Response to Cyclone Gita (Tonga, 2018)

Tropical Cyclone Gita made landfall in Tonga on 12 February 2018, causing severe damage to the main island of Tongatapu. Gita destroyed over 800 homes, damaged 4,000 homes, and left more than 80% of homes in Tonga without power. The cyclone caused the evacuation of over 4,500 people and caused US\$164 million in damage.

Australia provided humanitarian support to Tonga that included delivering humanitarian supplies by Australian Defence Force C-17 within 24 hours of the storm hitting. Australia also provided financial assistance to local and Australian NGOs including the Tonga Red Cross, and the Tongan Women and Children Crisis Centre. Cash distributions to the elderly and people with disabilities with Australian funded assistance was disbursed less than four weeks after the cyclone. Australia is also supporting longer-term efforts by the government of Tonga to re-establish schooling, rebuild water supplies and infrastructure support. Australia aided in reconnecting power throughout Tongatapu by deploying a technician team, and provided support to the island of 'Eua, which was also badly affected by the cyclone.¹⁰⁰ Photo 5 depicts the team of technicians deployed to assist with restoring power, along with Tonga Power, the High Commissioner, the National Emergency Management Committee, and the Minister for Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC).¹⁰¹

Australia's Response to Volcano Eruption (Vanuatu, 2017, 2018)

The Manaro Voui volcano on Vanuatu's Ambae Island produced thick ash fall and gas



Photo 5: Australia's Humanitarian Response to Tropical Cyclone Gita, 2018

emissions on three separate occasions beginning in September 2017. Eruptions blanketed the island with ash, and many parts of the island were uninhabitable due to the impact on housing, crops and water sources. The Government of Vanuatu declared a state of emergency on 12 April 2018. On 26 July 2018 the Government of Vanuatu ordered the immediate evacuation of the entire population of Ambae to the neighboring island of Maewo. Evacuations ended on 3 August 2018. This followed a previous episode in September and October 2017, when the entire population of Ambae was evacuated to nearby islands. When initial eruptions subsided most of the population returned to Ambae. Australia livelihoods, shelter, water, sanitation and hygiene (WASH), and early recovery. Australia also provided support to the Vanuatu Police Force to strengthen their capacity to maintain stability on Maewo, as well as Australian Defence Force (ADF) assets to transport humanitarian relief items and personnel. A range of Australiansupported technical experts, deployed under the Australia Assists program, has provided support to the Vanuatu National Disaster Management Office for evacuation and longer-term resettlement.¹⁰² Photo 6 shows the Australian Government providing displaced communities with tents for temporary shelter.¹⁰³

of the population returned to Amba worked with the Government of Vanuatu and FRANZ partners (New Zealand and France) to coordinate assistance to the Government of Vanuatu-led response. Australia provided three packages of assistance to Vanuatu which included logistics support, humanitarian relief supplies, provision of health and education services, infrastructure assistance, and funding through local and Australian NGOs with a focus on protection, psychosocial support,



Photo 6: Australia's Humanitarian Assistance to Vanuatu, Ambae Eruption

Australia's Humanitarian Assistance to Myanmar (August 2017 to present)

Although not a natural disaster, Australia has also provided humanitarian assistance following violence in Myanmar, which has driven more than 700,000 people to flee to Bangladesh since August 2017.104 Australia has provided \$51.5 million thus far, including support for a joint appeal with Australian humanitarian agencies. The funding is helping to deliver essential services, restore safety, and also support the response to an outbreak of diphtheria in Cox's Bazar. Australia has partnered with the World Food Programme (WFP), International Organization for Migration (IOM), Bangladesh Rehabilitation Assistance Committee (BRAC), United Nations Population Fund (UNFPA), United Nations Refugee Agency (UNHCR) and international and Australian non-government organizations for this response.¹⁰⁵

Australia's Humanitarian Assistance to Sri Lanka (2016 landslides)

Sri Lanka was hit by severe weather in May 2016, which caused widespread flooding and deadly landslides, affecting 22 of the 25 districts in the country. More than 100 people were killed and an estimated 360,000 were displaced in the immediate aftermath of the flooding. Sri Lanka requested international assistance. Australia contributed \$500,000 to UNICEF which provided immediate assistance to children in displacement camps, including the provision of clean water and creating child-friendly spaces, assisting approximately 500 children and 2,000 families. The monetary support also included funds to rebuild and refurbish 22 schools that were damaged. This support benefited 4,400 children who attend the schools.¹⁰⁶

Australia's Response to Tropical Cyclone Winston (Fiji, 2016)

Working closely with the Fiji Government, Australia provided \$35 million in assistance to Fiji in response to Tropical Cyclone Winston. Tropical Cyclone Winston caused widespread damage in Fiji from 20-21 February 2016. It caused 44 deaths and affected more than 540,000 people. The ADF deployed assets and personnel to Fiji.¹⁰⁷ Figure 3 represents Australia's response to help Fiji recover.¹⁰⁸

Australia's Response to Tropical Cyclone Pam (2015) (Vanuatu and Solomon Islands)

On the evening of 13 March 2015, Tropical Cyclone Pam (TC Pam) struck Vanuatu as a powerful Category 5 cyclone. The storm affected Vanuatu on March 13 and 14, passing over the central and southern parts of the country, causing widespread damage. Five provinces were affected: Shefa, Tafea, Malampa, Penama and Torba. At least 23 out of 80 islands sustained damages from the cyclone. Strong winds and flooding destroyed or damaged homes, buildings, crops and livestock. Damages were severe and a significant portion of the population was affected. The Government of Vanuatu (GoV) reported 11 fatalities and 188,000 people (out of a total population of 272,000) were affected by the cyclone. The eye of the storm passed close to the capital, Port Vila, with winds around 250 km/ hr and gusts at up to 320 km/hr.¹⁰⁹ An estimated 65,000 people were displaced from their homes and roughly 17,000 buildings were damaged or destroyed including houses, schools, clinics, and medical facilities. TC Pam was the strongest cyclone on record to make landfall in the South Pacific.110,111

Following the devastation from TC Pam, the Government declared a State of Emergency. The devastation from Pam was such that it was the first time that the Government issued its first ever generalized appeal for international assistance.¹¹² The President of Vanuatu, Lonsdale Baldwin, was in Japan for the Third UN World Conference on Disaster Risk Reduction in Sendai, when TC Pam struck, and issued an appeal to the international community.

One of the first actions to be carried out by foreign militaries were aerial assessments of the damage from TC Pam. Assessments were quickly carried out by military aircraft from Australia, New Caledonia (France), and New Zealand to assist the Government with coordination



Figure 3: Australia's Humanitarian Response to Tropical Cyclone Winston, Fiji, 2016

efforts.¹¹³ In addition, Australia, Fiji, France, New Zealand, Solomon Islands, Tonga and the United Kingdom (UK) sent military assets which, with the support provided by the Vanuatu Mobile Force and Police Patrol Boat, proved critical in the initial response phases.¹¹⁴

The ADF assisted with an operation dubbed, "Operation Pacific Assist 2015." For the operation, more than 500 soldiers, sailors, and aircrew deployed to assist. ADF forces delivered 115 tons of humanitarian aid and helped repair key infrastructure and restore basic services. The ADF coordinated response efforts with emergency officials and other nations.¹¹⁵

ADF assets used to support the government of Vanuatu included:

- HMAS Tobruk (heavy landing ship)
- With MRH-90 helicopter
- 2 landing craft
- Engineers for reconstruction

- C-130 airplane
- C17 aircraft
- 2 Kingair B350 aircraft
- AP-3C Orion patrol aircraft
- 3 Blackhawk helicopters¹¹⁶

Initial efforts included the delivery of aid and emergency personnel using Royal Australian Air Force (RAAF) C-17A Globemaster and C-130J Hercules aircraft while AP-3C Orion maritime patrol aircraft provided reconnaissance support. The HMAS Tobruk, an amphibious operations ship, deployed with Army engineers, vehicles, and supplies. The Tobruk became the maritime base for much of the operations in the outer islands. The Tobruk utilized two LARC-Vs amphibious cargo vehicles, two LCM-8 landing craft and an embarked Navy MRH-90 helicopter.¹¹⁷ Three Black Hawk helicopters from the Army's 6th Aviation Regiment, helped move supplies to outer islands. Army engineers from the 3rd Combat Engineer Regiment assisted in aiding the worst affected southern islands of Tanna and Erromango. On Tanna, engineers restored the water supply to the eight major population centers, and repaired four medical centers, four churches and 11 schools. On Erromango, engineers joined sailors from the Tobruk in clearing storm damage from Dillon's Bay and Happy Land, as well as cleared routes, conducted infrastructure repairs and delivered aid.¹¹⁸

In total, the RAAF flew more than 260 sorties. C17-A and C130-J aircraft flew aid and personnel for the ADF, DFAT and other agencies, while RAAF KA-350 King Air tactical aircraft provided transport.¹¹⁹

Photo 7 depicts the crew of HMAS Tobruk farewell members of the community of Dillon's Bay, Taféa province, Vanuatu, during Operation Pacific Assist 2015.¹²⁰

ADF Cyclone Pam response also included assistance to the Solomon Islands: The ADF provided two AP-3C Orions which deployed to Honiara and was supported by two KA-350 King Airs, to provide initial assessments of the damage. Two C-17A Globemasters and a C-130J Hercules delivered relief, USAR personnel and members of the Australian Medical Assistance Team (AMAT) and evacuated Australian citizens.

Australia's Response to the Nepal Earthquake (2015)

On April 25, 2015, a powerful 7.8 magnitude earthquake struck Nepal, leaving over 8,700 people dead, over 21,000 injured and destroying over 600,000 houses. The epicenter was located in Gorkha district, around 81 km (50 miles) northwest of the capital, Kathmandu with a depth of 15 km (9.3 miles). The quake affected 22 out of 75 districts in the country, as well as Kathmandu. On May 12, another strong 7.3 magnitude aftershock struck near Chilankha village in Dolakha District, causing additional damages and leaving at least another 150 people dead. Out of the country's 22 affected districts, the Government of Nepal (GoN) classified 14 districts as being severely affected and in need of urgent assistance.121

Because of the extent of the damage, the Government of Nepal requested international assistance, including foreign military assets (FMA). The ADF was one of 18 foreign militaries who assisted the Nepal-led response effort. The military forces added considerable response capabilities to the Nepalese-led response effort, particularly in the areas of search and rescue (SAR), medical assistance, airlift and engineering support.¹²² It should be noted that the ADF was busy assisting both Vanuatu and Nepal at the same time with the disasters occurring a little over a month apart. Cyclone Pam struck Vanuatu in March 2015.

> For the ADF response, dubbed "Operation Nepal Assist 2015," two Air Force C-17A Globemaster aircraft delivered aid supplied by DFAT, flown into Nepal's Tribhuvan International Airport in Kathmandu. Civilian evacuees were then flown out to Bangkok. Between 29 April and 3 May, 340,517 lbs of cargo and 322 passengers were transported, including Australian and foreign nationals, an Air Force Aero-Medical Evacuation team, and specialist Defence logistic staff.



Photo 7: Operation Pacific Assist 2015, Vanuatu

The aid was delivered in cooperation with Nepalese aviation authorities, who managed the international assistance coming into the Tribhuvan airport. ^{123, 124, 125}

Australia's Response to Solomon Islands Flooding (2014)

Heavy rain from a tropical depression, which later became Tropical Cyclone Ita, caused severe flooding in the Solomon Islands at the beginning of April 2014. The flooding killed 22 people and affected over 50,000. Honiara, the capital, was the worst affected area after the Mataniko River burst its banks. Houses were washed away, and infrastructure was damaged. Approximately 10,000 people were displaced in nearly 30 evacuation centers in the capital city. Over 9,000 households in Honiara, Guadalcanal, and Isabel had lost 75-100% of their food gardens. Drinking water remained a concern for half of the people affected.¹²⁶ Australia provided \$3 million following the floods. This included providing drinking water, emergency shelter, and sanitation and hygiene supplies. Coordination and technical assistance was provided. The ADF also deployed a 12-person Australian Defence Force assistance team, including RAAF assets. The Australian Federal Police and the Regional Assistance Mission to Solomon Islands (RAMSI) Participating Police Force also provided personnel and equipment to the Royal Solomon

and crew on board. From 18 March to 29 April 2014, this search scanned 4.7 million square kilometers (km) of ocean and involved 21 aircraft that conducted 345 individual flights over 3177 hours, as well as 19 ships from eight nations (Australia, New Zealand, China, Japan, Malaysia, South Korea, United Kingdom and the United States). On 30 March 2014, the Prime Minister established the Joint Agency Coordination Centre (JACC) to coordinate all Australian Government support for the search into missing flight MH370. The JACC was also the coordination point for whole-of-Australian Government information, messaging, and stakeholder engagement, including keeping the families of those onboard and the general public informed of the progress of the search. The JACC also coordinated all international engagement with the Government of Malaysia and the People's Republic of China. When the search for MH370 transitioned from a search and rescue operation to an investigation phase the JAAC took over the day to day communications. The Australian Maritime Safety Authority (AMSA) was part of a larger interagency response including the Australian Transport Safety Bureau, Department of Defence, Department of Foreign Affairs and Trade, and the Department of Infrastructure and Regional Development. The surface search was conducted from 8 March 2014 until 30 April 2014. The Malaysian Government

Island Police Force.¹²⁷ Photo 8 depicts an Australian C-17 delivering emergency relief supplies to Honiara on 9 April 2014.¹²⁸

Australia's Response to Malaysian Flight MH370 (2014)

On 8 March 2014, Malaysia Airlines flight MH370 disappeared from air traffic control radar during a flight from Kuala Lumpur, Malaysia to Beijing, China with 239 passengers



Photo 8: Australia's Humanitarian Assistance to the Solomon Islands, 2014

released the final Safety Investigation report on 31 July 2018, which acknowledged that the investigation team were unable to draw definitive conclusions about what happened to flight MH370.¹²⁹

Australia's Response to South Sudan (2014)

A conflict in southern Sudan beginning in December 2013, between supporters of then President Salva Kiir and his former deputy Riek Machar, led to the death of thousands of people and more than one million people were displaced as they fled, some to neighboring countries, to avoid the conflict. By April 2014, approximately 5,000 civilians were still sheltering at a United Nations base in the war-torn town when 350 youth from Bor, in Jonglei state approached the base under pretense that they wanted to present a petition. Instead, when admitted through the gates, they began shooting. UN peacekeepers returned fire and expelled the attackers but dozens of civilians who had been sheltered in the base were killed.¹³⁰ In response to this humanitarian crisis, the Australian Air Force delivered 200 tons of cargo and equipment to the United Nations Mission in South Sudan (UNMISS). From January 3-12, Air Force personnel conducted eight C-17A Globemaster flights and two C-130J Hercules flights, delivering strategic airlift support and transporting staff from the UN.¹³¹

Australia's Response to MH17 (Ukraine, 2014)

On 17 July 2014, a passenger airline carrying 298 people primarily citizens of the Netherlands died when the plane crashed and burned in eastern Ukraine. A Dutch investigation identified the cause of the crash as a result of a Russian made surface to air missile. At the time Russian backed separatists in Ukraine were engaged in combat with government forces. Another plane was also shot down that day though flight elevation restrictions were in place for that area. The plane's wreckage was spread across 20 square miles. Rescue workers responded promptly.¹³² Additionally, DFAT led a response to the disaster, with significant ADF

deployment. The ADF launched "Operation Bring Them Home." The ADF utilized two Air Force C-17A Globemasters, which operated from Eindhoven in the Netherlands, while other aircraft flew support missions between Australia and the Netherlands.¹³³ In July 2014, Sir Angus was appointed as the Prime Minister's Special Envoy to lead Australia's efforts to help recover, identify and repatriate Australians killed in the MH17 disaster. Sir Angus also led the Joint Agency Coordination Center coordinating the Australian Government's support for the search into missing Malaysia Airlines flight MH370 in 2014 previously mentioned in this section.¹³⁴ The AFP played a key role in the Dutch lead, Disaster Victim Identification operation, deploying 200 specialists to the crash scene in the Ukraine and to mortuary facilities in Hilversum, the Netherlands. Further investigators and Family Investigation Liaison Officers were deployed around Australia and internationally to assist. A total of 41 Australian citizens or residents were killed.135

Australia's Response to Northern Iraq (2014)

In 2014, tens of thousands of Yazidis, an ancient and secret religious minority in Iraq, were targeted for persecution and fled to Mt. Sinjar, part of a mountain range 60 miles long along the Iraqi-Syrian border to escape possible genocide by the Islamic State (ISIS).¹³⁶ In response to the humanitarian crisis, the ADF Air Force provided a C-130J Hercules to airdrop humanitarian supplies. The cargo included 150 boxes of high-energy biscuits and 340 boxes of bottled water. The operational airdrop was the first mass air delivery of humanitarian cargo by the ADF since East Timor in 1999.¹³⁷

Australia's Response to Typhoon Haiyan (Philippines, 2013)

Almost 15 million people were affected by Typhoon Haiyan in November 2013, with more than four million people who were left homeless. Those who survived the typhoon remained in desperate need of clean water, shelter and health care. An Australian field hospital was set up in Tacloban in response to the disaster. It was designated as the surgical hub for the region by the Government of the Philippines. The hospital was capable of working around the clock and treating up to 200 patients a day. A team of Australian doctors, nurses, paramedics and other medical specialists provided humanitarian assistance. Australia donated \$3 million to the United Nations Children's Fund to provide clean water and sanitation and rehabilitate damaged schools, \$1 million to the United Nations Population Fund for health and hygiene support and supplementary feeding for pregnant and lactating women, \$2 million to the World Health Organisation to provide emergency health care and help restore the public health system, and \$3 million to Filipino non-government organizations to assist them in providing shelter and livelihoods support.138

Australia's Response to Typhoon Haiyan (Palau, 2013)

Typhoon Haiyan was felt across 12 out of Palau's 16 states. Haiyan struck Palau on the morning of 7 November 2013, before it made its way to the Philippines. It caused extensive damage to homes, schools, the hospital, and water and power services. The Australian Government provided AUD\$100,000 to the Government of Palau to help rebuild a health center and other damaged public infrastructure, including schools.¹³⁹

Australia's Response to Tropical Cyclone Evan (Samoa, Fiji, 2012)

On 13-14 December 2012, Tropical Cyclone (TC) Evan passed over the islands of Samoa as a Category 2 storm destroying almost 700 homes and damaging approximately 1,000 homes. Then TC Evan hit Fiji on 17 December as a Category 4 storm causing destruction of infrastructure and loss of property. The Government of Fiji declared a state of disaster and evacuated approximately 10,000 people to over 150 evacuation centers.¹⁴⁰ As a result of the disasters, the ADF helped provide assistance to both countries. The ADF transported supplies including tarpaulins, blankets, hygiene kits, water containers, Oxfam buckets, shelter kits, water purification tablets and mosquito nets. Around 237,820 pounds of cargo was delivered by C-17A Globemaster and 78,652 pounds was delivered by C-130J Hercules.¹⁴¹

Australia's Response to Christchurch Earthquake (New Zealand, 2011)

A 6.3 earthquake struck the cities of Christchurch and Lyttleton in New Zealand at 12:51pm on 22 February 2011. 185 people were killed and thousands were injured. Due to its timing during the lunch hour, many people were on the street and over 130 people died when the Canterbury Television and Pyne Gould Corporation buildings collapsed. The government declared a state of emergency a day after the earthquake.¹⁴² Approximately 25,000 homes were lost and half of all buildings in the city center had to be demolished.¹⁴³ In response to the disaster, ADF C-130J Hercules and C-17A Globemaster aircraft transported urban search and rescue workers and medical professionals, along with a portable desalination plant and mobile field hospital.¹⁴⁴

Australia's Response to the 2011 Japan Earthquake and Tsunami

On 11 March 2011 a massive 9.0 magnitude earthquake struck 130 kilometers off the coast of northeast Japan, triggering large tsunami waves, and causing widespread devastation. Tsunami waves reportedly reached up to 30 meters high and inundated some 433,000 square kilometers of land. Around 15,891 people were killed and 2,579 people went missing. Around 17,000 homes and buildings were destroyed and another 138,000 were damaged. The disaster forced the evacuation of some 492,000 people in total. According to UNOCHA, the earthquake was the 4th strongest earthquake worldwide since 1900. Economic damages from the disaster have been estimated at US\$228 billion.^{145, 146, 147}

The earthquake and tsunami also damaged three reactors in the Fukushima Daiichi Nuclear Plant, triggering a nuclear crisis, and resulting in an unprecedented "triple disaster." Damages to the nuclear plant and the subsequent leaking of radioactive material forced the evacuation on 12-13 March 2011 of more than 700,000 people living within the 20 km exclusion zone created by the Government of Japan. Another 136,000 people who lived within 20-30 km of the plant were encouraged by Japanese officials to evacuate or stay inside their homes.^{148, 149}

In response to the mega-disaster, an ADF C-17A Globemaster transported USAR personnel from Australia to Japan and also carried out airlift flights in Japan, carrying Japan Self Defense Force personnel, vehicles and supplies. In total, 450 tons of cargo and 135 passengers were transported during relief operations.¹⁵⁰¹⁵¹

Australia's Response to Operation Pakistan Assist II during the (2010 floods)

In late July 2010, record monsoon rains affecting the northwest region of Pakistan caused flash floods in the Khyber Pakhtunkhwa, Punjab, and Balochistan provinces. The rains overwhelmed flood defenses devastating roads, bridges, and large areas of land. Ultimately the floods left approximately 1,200-2,200 people dead; 1.6 million damaged or destroyed homes, 1.4 million homeless, and affected approximately 20 million people due to damaged crops, infrastructure, malnutrition and waterborne diseases. Hundreds of thousands remained in temporary camps for months after the floods subsided with inadequate sanitation and food supply. Small farmers were among those most severely impacted by the floods as an estimated 5.4 million acres of crops were destroyed and approximately 1.2 million head of livestock were killed. The Pakistani government estimated the economic loss from the floods at \$43 billion. In the year following the floods, international aid from countries, humanitarian organizations, and personal donations totaled \$1.3 billion.¹⁵² The Australian Air Force detached a Medical Task Force including active duty and civilian health specialists providing medical, mid-wifery, pathological, pharmaceutical, radiological and

environmental health capabilities, as well as engineering specialists to support the delivery of clean water. Additionally, the engineers provided assistance to the construction of accommodations and other buildings and logistical support. Then, between 13-19, August 2010, members of the task force provided two C-17A loads of relief aid to Islamabad including tents, tarpaulins for 12,000 families, water storage and purification supplies for a month of clean drinking water for over 10,000 families. They also delivered 24 portable generators, medical equipment, and supplies.¹⁵³

Women, Peace and Security

In 2000, the UN Security Council passed Resolution 1325 (UNSCR 1325). This was the first time the UN Security Council formally recognized the unique impact of armed conflict on women and the importance of bringing gender perspectives to the center of all UN conflict prevention, conflict resolution, peacebuilding, peacekeeping, rehabilitation, and reconstruction efforts.¹⁵⁴ The focus on women's security and gender equity has since been further supported through the passing of UNSCRs 1820 (2008), 1888 (2008), 1889 (2009), 1960 (2010), 2106 (2013), 2122 (2013), 2242 (2015), 2467 (2019), and 2493 (2019) resolutions.¹⁵⁵

These resolutions also highlight the important role women can play in preventing, managing, and resolving conflict. The first Australian National Action Plan on Women, Peace and Security 2012–2018 demonstrated the support Australia has for the United Nations Women, Peace and Security agenda. This National Action Plan set out what Australia would do both domestically and internationally to integrate a gender perspective into its peace and security efforts, protect women and girls' human rights, and promote their participation in conflict prevention, management and resolution.¹⁵⁶ The Australian Government is currently finalizing the second Australian National Action Plan on Women, Peace and Security 2020-2030.

The Office for Women is leading Australian Government efforts to design the next National Action Plan.¹⁵⁷

Women, children, and other vulnerable groups are often disproportionately affected and face a heightened risk of violence during a disaster. Ensuring gender and protection considerations are addressed in humanitarian response is a priority for Australia. RedR Australia helps bring this to life by managing the Australia Assists program, funded by the Australian Government's DFAT. In February 2018, a 7.5 magnitude earthquake hit the Highlands Region of Papua New Guinea (PNG), affecting an estimated 544,000 people in Enga, Gulf, Hela, Southern Highlands, and Western Provinces, of which more than 270,000 were in need of life-saving assistance.¹⁵⁸ Through the Australia Assists Program managed by RedR, a Gender and Protection Specialist has been stationed with UN Women in PNG. Throughout her deployment, she provided technical support to the Department of Community Development and Religion (DFCDR), to effectively lead and coordinate the Protection cluster and facilitate mainstreaming of gender and protection considerations in the humanitarian response to the earthquake. RedR has contributed to strategic planning and led the implementation

and coordination of a Learning, Empowerment and Protection (LEP) initiative, which is a joint program of UN Women, UN Population Fund (UNFPA), and UN Children's Fund (UNICEF). The purpose of the program is to ensure women and children, who are among the most vulnerable and marginalized, have access to the support and protection they need following the earthquake that struck PNG's Hela Province in February 2018.¹⁵⁹ Photo 9 is of the Gender and Protection Specialist distributing essential protection and hygiene items to women in Papua New Guinea.160

Australia has placed gender equality and women's empowerment at the

center of their International Aid program, dedicating up to 80% of its development investments toward the implementation of addressing gender issues including efforts to end violence against women and girls, invest in and advocate for women's economic empowerment and enhancing women's voices in decision making, leadership, and peace building both domestically and internationally. One of the programs Australia has supported is Vanuatu's Education Road Map which has been invested in keeping girls and boys in school longer and providing better education since 2009. ¹⁶¹ Australia has also supported the Vanuatu Women's Center to prevent and respond to violence against women and girls for 28 years, reaching 6,574 women and children in 2019.162

Additionally, in October 2016, Australia launched the Third Action Plan of the National Plan to Reduce Violence Against Women and Their Children (2010-2022) which focuses on prevention and early intervention of domestic violence, efforts toward keeping perpetrators accountable and other measures. These measures and the accompanying Women's Safety Package of \$AUD 100 million announced by the Australian Prime Minister progress the 2030 Agenda to empower women and girls internationally and at home.¹⁶³



Photo 9: Australia Assist Program's Gender Protection Activities

TRAINING AND EXERCISES

The U.S. views its alliance with Australia as an anchor of peace and stability in the Indo-Pacific region and beyond. The U.S. works with Australia to sustain a stable security environment and regional order rooted in economic openness, respect for international law and norms, peaceful resolution of disputes, and respect for universal rights and freedoms. Australia takes part in several humanitarian related training and other exercises aimed at strengthening international relationships and interoperability with partner and host nations in the Asia-Pacific Regions. The following includes recent examples of training and exercises that demonstrate examples of civilian-military readiness and interoperability whether it be in HADR training and engagement with Cope North Exercises or Pacific Partnership, or training and exercises that enhance regional security and stability in the Indo-Pacific Region.¹⁶⁴

HADR Focused Engagements

Exercise Cope North (February 2020)

Exercise Cope North is an annual Pacific Air Force (PACAF) sponsored and funded, joint/ combined, tri-lateral Field Training Exercise (FTX) designed to increase interoperability of the U.S. Air Force, the Royal Australian Air Force (RAAF), and Japan Air Self-Defense Force (JASDF). The primary objective of Cope North 2020 was to create an HADR scenario in which the U.S., Japan, Australia, and other allied countries and agencies work together to establish airbases and deliver personnel, equipment and cargo into a simulated disaster area. A key component is to develop "huband-spoke" operations with a "spoke" airfield being geographically separated from the "hub" (central) airfield. HADR operations took place on Guam, Rota, Tinian, and Saipan in the CNMI, as well as Yap (Federated States of Micronesia) and Palau. This was the first year Cope North stood up a Multi-National Task Force (MNTF) and incorporated a "whole-of-government" approach to the HADR scenario and exercise execution. CFE-DM participated in all three of the planning conferences to set the scenario and Master Scenario Events Lists (MSELs). Because a Joint Training Information Management System (JTIMS) was not used, injects were passed by means of message, phone, and courier. During the exercise, CFE-DM Staff manned a desk in the HADR EXCON to represent U.S. government injects, respond to RFIs, attend training audience meetings, provide training audience assessments, and provide assistance/advice to the U.S. Deputy MNTF Commander.¹⁶⁵ Photo 10 depicts members of the U.S. military, RAAF, and JASDF in formation during Exercise Cope North at Anderson Air Force Base, Guam involving more than 2,000 personnel and approximately 100 aircraft.¹⁶⁶



Photo 10: Exercise Cope North 2020, Andersen Air Force Base, Guam

Exercise Cope North (March 2019)

The 2019 Cope North exercise began with a week-long humanitarian assistance and disaster relief training event which then led to the need for a large-force deployment. The exercise's focus on humanitarian assistance and disaster relief provided critical training to U.S. and allied forces that has a direct impact on the militaries' ability to support the region, including Palau and the Federated States of Micronesia.¹⁶⁷

Pacific Partnership (May 2019)

Pacific Partnership is the largest annual multinational humanitarian assistance and disaster relief preparedness mission conducted in the Indo-Pacific. Each year the mission team works collectively with host and partner nations to enhance regional interoperability and disaster response capabilities, increase security and stability in the region, and foster new and enduring friendships in the Indo-Pacific. In addition to participants from the U.S. and each host nation, personnel from partner nations included Australia, Canada, Japan, Malaysia, Peru, the Philippines, South Korea, Thailand, and the United Kingdom. This is the second year that Pacific Partnership incorporated a multinational command and control structure, including a director of mission from the United Kingdom and mission chief of staff from Australia. Participants conducted over 60 HADR preparedness subject matter expert exchanges that included workshops, symposiums, and relevant scenario-based exercises.168

Pacific Partnership (May 2018)

During the Pacific Partnership 2018 mission stops, the Pacific Partnership team conducted 765 host nation engagements covering four lines of effort: medical, humanitarian assistance/ disaster relief, engineering and community relations. The Military Sealift Command hospital ship USNS Mercy (T-AH 19) conducted mission stops in Indonesia, Malaysia, Sri Lanka, Vietnam and Japan while the expeditionary fast transport ship USNS Brunswick (T-EPF 6) made separate mission stops in Yap, Palau, Malaysia and Thailand.¹⁶⁹ Military personnel from the U.S., the United Kingdom, Japan and Australia conducted medical, dental and veterinary services and engineering projects, and humanitarian assistance and disaster relief readiness.¹⁷⁰

Health and Humanitarian Action in Emergencies (HHAE) Course (June 2019)

The Health and Humanitarian Action in Emergencies (HHAE) is a two-week course developed by the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) from Joint Base Pearl Harbor-Hickam, Hawaii, and James Cook University, Australia, College of Public Health, Medical and Veterinary Sciences to improve the management of public health emergencies during a humanitarian crises. Humanitarian public health and disaster response professionals located throughout the Oceania region gathered at James Cook University in Cairns, Queensland, for the HHAE course, 3-14 June 2019.

Throughout the course, group discussions and practical exercises helped bring realism into the classroom on topics such as civil-military coordination, Climate Change Adaptation in the Pacific, Sexual and Reproductive Health, Communicable Disease Control and Prevention, and Health Care Services in Humanitarian Crisis.

Photo 11 is of U.S. Navy Rear Adm. Louis Tripoli, command surgeon for the United States Indo-Pacific Command speaking with participants during the HHAE course at James Cook University, on 10 June 2019.¹⁷¹

HHAE Course (November-December 2017)

The 2017 HHAE course took place in Cairns, Australia. Humanitarian interventions in the Pacific region have become more complex and the constraints in carrying them out increasingly difficult to overcome. In response to these challenges, the CFE-DM, and James Cook University's College of Public Health, Medical and Veterinary Sciences in Cairns, Queensland, Australia have jointly developed the HHAE course to build capacity for professionals working or interested in working in the Pacific Region



Photo 11: Health and Humanitarian Action in Emergencies, Cairns, Australia, 2019

on the principles and practices of humanitarian relief, providing participants a multi-disciplinary vision of humanitarian strategy in the provision of public health and medical interventions in humanitarian crises. The HHAE framework includes military participants and interagency representatives.¹⁷²

Perspicuous Provider Intelligence Exercise (May-June 2017)

The 8th Theater Sustainment Command hosted a two-week exercise from 29 May to 17 June 2017 at Schofield Barracks, Hawaii with Australian military services. Perspicuous Provider is a joint exercise designed to increase sustainment-centric intelligence through a humanitarian aid/disaster relief scenario within the Pacific theater.¹⁷³

Non-HADR Engagements

Exercise Talisman Sabre (July 2019)

Exercise Talisman Sabre is Australia's largest bilateral exercise with the U.S. The exercise was designed to enhance combat readiness and interoperability between the Australian and U.S. armed forces. The exercise involved more than 34,000 personnel from Australia and the U.S., Military Forces from Canada, Japan, New Zealand, and the United Kingdom, who were embedded alongside Australian Defence Force personnel, and delegations from India and the Democratic People's Republic of Korea observed the exercise.¹⁷⁴

Exercise Talisman Sabre (July 2017)

More than 200 joint aircraft exercised on training a Combined Task Force of U.S. and

Australian forces in a mid-intensity, high-end warfighting scenario, incorporating interagency participation, along with a command post exercise involving a transition between a 3 and 4-star Headquarters. U.S. Pacific Command units and Australian forces conducted live and virtual training exercises in multi domains on sea, land, air, cyber and throughout multiple training areas in and around Australia.¹⁷⁵

Exercise Carabaroo (June 2019)

Exercise Carabaroo is a trilateral exercise between U.S. Marines, the Australian Defence Force (ADF), and the Armed Forces of the Philippines (AFP) that focuses on interoperability between the U.S. and partnered nations. Military training operations took place in the Shoalwater Bay Training Area, Queensland, Australia, on 1 June, 2019.¹⁷⁶

Exercise Balikatan (March 2019)

Balikatan is an annual, bilateral, military exercise between the Republic of the Philippines and the U.S., and also involves participation from Australia. Balikatan translates to "shoulderto-shoulder," which characterizes the spirit of the exercise and represents the partnership between the U.S. and the Philippines. Australia's participation in Exercise Balikatan allows the ADF to further build its defence ties and civilmilitary coordination skills with the Philippines and U.S., as well as enhances Asia-Pacific regional security and stability.

2019 marked the fifth time the ADF has participated in Exercise Balikatan. Such exercises strengthen international partnerships and the participating militaries' abilities to rapidly respond to crises throughout the Indo-Pacific region. All events took place in Luzon, Palawan, and Mindoro, Philippines from 1-12 April 2019.¹⁷⁷

Exercise Sea Dragon (January 2019)

Exercise Sea Dragon is an annual, multilateral exercise based out of Andersen Air Force Base, Guam that stresses coordinated anti-submarine warfare prosecution against both simulated and live targets. Participating U.S. units and units from the Royal Australian Air Force (RAAF) took part in the exercise. Exercise Sea Dragon illustrates that the U.S. and Australia stand ready to ensure the freedom of navigation, free flow of commerce, safeguarding of established maritime zones, and safe sea lanes.¹⁷⁸

Exercise Lightning Focus (December 2018)

Exercise Lightning Focus is an Australian training exercise designed around improving, developing and integrating partner capabilities as part of the Enhanced Air Cooperation (EAC) under the Force Posture Initiative between the U.S. Air Force and the Royal Australian Air Force (RAAF). The exercise took place at the Royal Australian Air Force Base in Darwin, Australia, 9 December 2018.¹⁷⁹

Exercise Rim of the Pacific (June-August 2018)

Exercise Rim of the Pacific (RIMPAC) is the world's largest international maritime exercise, occurring biennially during the summer in evennumbered years. It last took place from 27 June to 2 August 2018, in and around the Hawaiian Islands and Southern California.

The 2018 exercise included forces from Australia, Brunei, Canada, Chile, Colombia, France, Germany, India, Indonesia, Israel, Japan, Malaysia, Mexico, Netherlands, New Zealand, Peru, Democratic People's Republic of Korea, Republic of the Philippines, Singapore, Sri Lanka, Thailand, Tonga, United Kingdom, U.S., and Vietnam.¹⁸⁰

Exercise Hamel (July 2018)

Exercise Hamel is an Australian army field training exercise that serves as the Army's culminating event in the unit train-up and certification process before transitioning to a ready brigade. The exercise allowed Australian military planners to test new equipment and capabilities. The exercise is also a coalition joint task force activity which maximizes interoperability training with Australia's Five Eyes partners – the United States, United Kingdom, Canada and New Zealand.¹⁸¹

PARTNERSHIPS, AGREEMENTS, AND MEMBERSHIPS

Australia has a vested interest in investing in enhanced capacities for disaster preparedness, improved risk assessment, and scenario planning through partnerships with Pacific Island countries. Australia has had a long engagement in disaster management, mitigation and preparedness, particularly in the Indo-Pacific region. The Australian Government has invested in a broad range of disaster risk reduction activities in over 30 countries at the regional, bilateral and community level, including:¹⁸²

- Strengthening international leadership and collaboration, including support for the UN International Strategy for Disaster Reduction (UNISDR)'s Asia-Pacific program and the World Bank's Global Facility for Disaster Reduction and Recovery, which are focused on mainstreaming disaster risk reduction in developing countries;
- Funding key regional initiatives, such as the Asian Disaster Preparedness Centre (ADPC), Asian Disaster Reduction and Response Network (ADRRN), IFRC, relevant South Pacific regional organizations and the ASEAN Secretariat, to support government efforts to implement disaster risk reduction strategies and build networks and linkages between organizations to promote coherence;
- Strengthening partner government agencies, including national disaster management offices to prepare for and mitigate disasters, and technical agencies to map risks from hazards such as typhoons, volcanic eruptions and earthquakes;
- Supporting community-based activities such as preparedness programs to improve local response and recovery, and to protect against the loss of livelihoods and mitigate potential hazards.

Australia has produced numerous policies, frameworks and arrangements, and has signed several bilateral and multilateral agreements with its partners and stakeholders in disaster response.¹⁸³

Bilateral Partnerships

Australia regularly responds to disasters abroad. Maintaining strong bilateral partnerships with disaster management agencies from key partner countries enables the Australian Department of Home Affairs to continually improve emergency management capability, learn and share lessons from events, strengthen policy responses to disaster trends, and ensure working relationships exist with partners to enable collaborative response when needed. Australia invests in effective partnerships to maximize the impact of, geographic reach and influence of their development activities as well as share information, avoid duplication of efforts and effectively represent the needs of the Indo-Pacific in an international forum.¹⁸⁴

Australia has formal Bilateral Partnerships with the following countries:

Canada

Australia's DFAT has an MOU with Canada's Department of Foreign Affairs, Trade and Development (DFATD) to partner in strategic efforts to:

- Reduce poverty and improve the quality of lives in developing countries through promoting sustainable economic growth;
- Action on global poverty within the international development architecture and other global developments;
- Pursuing highly effective and efficient development programs;
- Working to improve the effectiveness of multilateral organizations;
- Working together where it is practical and beneficial to do so, including through delegated cooperation and co-financing of development programs; and
- Continuing to build on organizational and shared strengths.¹⁸⁵

European Union

On April 15, 2014, Australia and the European Union formalized their partnership in an agreement entitled the Australia-European Union Delegated Cooperation for Development. The focus of the partnership was to achieve effective, efficient, and sustainable development outcomes for programs in Fiji and South Sudan.¹⁸⁶

France

In 2012, DFAT signed a Partnership Agreement with France's development agency, the Agence Française de Développement (AFD) with regard to Agricultural and Climate Risk Research to Advance Food Security in Africa.¹⁸⁷ The partnership supports joint efforts toward research initiatives for Australian and French scientists in Africa and development of agricultural systems, climate adaptation, and risk management as well as the advancement of agriculture and food security in Africa.¹⁸⁸

Germany

On January 25, 2012 Australia and the Federal Republic of Germany committed to strengthen their bilateral cooperation and multilateral partnerships with a formal agreement called the Berlin-Canberra Declaration of Intent on a Strategic Partnership. This Declaration outlined jointly approved projects for both countries in the areas of:

- Strategic policy dialogue, security, and defence cooperation; and
- Economic relations, trade and investment; and
- Energy and resources, climate change and clean technology; and
- International development cooperation; and

- Education, vocational training, science, innovation and research; and
- Culture, media and people-to-people links; and
- Social and labor policy.¹⁸⁹

Japan

Australia and Japan have a strong and comprehensive relationship spanning both countries' strategic and economic interests. In 2017, Japan was Australia's second largest trade partner, second largest export market, and second largest source of foreign direct investment. The two countries regularly participate in joint defence exercises and frequently consult on security issues facing the region.¹⁹⁰ In December 2011 DFAT and the Japan International Cooperation Agency (JICA) signed an MOU on international development. The MOU commits the two agencies to collaborate to increase effectiveness with regard to aid in the region and to assist developing countries to escape poverty and assist in their development of economic growth.191

In 2014 the countries elevated their relationship formally to a 'Special Strategic Partnership'. They partner in regional forums, such as Asia Pacific Economic Cooperation (APEC) and the East Asia Summit (EAS). In 2011, Australia provided extensive assistance to Japan following the Great East Japan earthquake and tsunami, including specialized personnel, defence aircraft, and a donation of AUD\$10 million.¹⁹²

Democratic People's Republic of Korea

On March 5, 2009, DFAT and the Ministry of Foreign Affairs and Trade of the Democratic People's Republic of Korea committed to work together toward promoting achievement of the Millennium Development Goals and improving aid effectiveness with an MOU. Additional areas of focus include contributing to capacity building on disaster preparedness and sustainable development through country level cooperation and promoting an effective, efficient and representative multilateral system of aid.¹⁹³

New Zealand

Due to their close geographical proximity and shared British colonial heritage, Australia and New Zealand have a close and important relationship. The countries work together in most areas of government, including trade, economic issues, defence, security, and foreign policy. They also partner in international forums such as the United Nations and the World Trade Organization as well as cooperate in aid and development work in the Pacific and Southeast Asia regions. As long-term development partners in the Pacific, they share in efforts to improve the quality of aid delivery, coordination, transparent donor practices and good governance in the region. Examples of joint aid and development work in the Pacific include:

- The Tonga Police Development Programme which aims to increase public trust and confidence in Tongan Police; and
- The France-Australia-New Zealand (FRANZ) Arrangement, which shares information and coordinates responses to natural disasters in the Pacific; and
- New Zealand manages Australia's annual aid contribution to the Cook Islands (AU\$ 2.2 million); and
- Australia manages New Zealand's annual aid contribution to Nauru (NZ\$ 2 million).¹⁹⁴

On August 20, 2009, Australia and New Zealand pledged a partnership for integrated development assistance activities to build upon the effectiveness of aid programs and improve progress toward the achievement of the Millennium Development Goals in the Pacific. The partnership signified the first step in implementing the Cairns Compact on Strengthening Development Coordination, which was established to improve the effectiveness of using development resources and contributing to better livelihoods for all Pacific peoples.¹⁹⁵

Singapore

On June 26, 2015, The Government of the Commonwealth of Australia and the Government of the Republic of Singapore signed a Partnership Arrangement on International Development. The Arrangement set forth the following objectives:

- Promoting sustainable economic growth for development and poverty reduction in the Asia-Pacific region;
- Pursuing effective and efficient development and technical assistance programs;
- Learning from their respective experiences working with third countries in the region;
- Championing environmental and social safeguards;
- Promoting increased opportunity for women in third countries in the region;
- Engaging with other development stakeholders;
- Consulting on development assistance issues of shared interest; and
- Seeking further opportunities for cooperation.

There are additional clauses in the agreement for the protection of children and prevention of financing terrorism. The agreement was signed with a three-year duration intent.¹⁹⁶ In 2016, the two governments began a ten-year plan to enhance their partnership with regard to strategy, trade, economic, defence and peopleto-people links. In particular, the countries aim to accelerate their collaboration in innovation, science, research and technology, and capitalizing on each other's strengths.¹⁹⁷

United States of America

2018 marked the 100th year of "mateship" between Australia and the U.S. since the countries fought side by side at the Battle of Hamel.¹⁹⁸ Australia was also a key ally in World War II, fighting with the U.S. in the Battles of the Coral Sea, Midway, and Guadalcanal, as well as every other significant conflict since World War I. Australia is a vital ally, partner and friend of the U.S. and the two countries have a long-standing alliance based on shared strategic interests and values.

The U.S. and Australia have established cooperation agreements with regard to foreign policy, defense and security, intelligence, development, energy, environment, education, law, and trade and investments. On October 6, 2010, the two countries signed an MOU to extend the partnership of the two countries to specifically include international development cooperation. The MOU formulated a plan for collaboration at the strategic and operational levels for AusAID, now absorbed into DFAT, to partner with USAID to assist developing countries achieve the Millennium Development Goals, make strides toward sustainable and private sector growth, technological change and innovation, and living free from conflict and instability. The two countries put forth specific priorities as a basis for bilateral dialogue on cooperation opportunities. These priorities cover the following areas:

- Maternal and child health and family planning;
- Food security and agricultural water management;
- Malaria prevention and control;
- Climate change adaptation and mitigation;
- Conflict and post-conflict situations;
- Development cooperation in the Pacific;
- Gender equality and empowerment initiatives for women and girls, and ending violence against women, particularly in Melanesia;
- Education initiatives for cooperation on specific initiatives in countries and regions of mutual interest;
- Operational level partnerships; and
- Performance measurements and accountability for these goals.¹⁹⁹

Multilateral Partnerships

Australia is party to multilateral partnerships including:

- The East Asia Summit (EAS);
- Asia-Pacific Economic Cooperation (APEC);
- Indian Ocean Rim Association (IORA);
- Association of Southeast Asian Nations (ASEAN) Preparedness and Response Working Group;
- ASEAN Committee on Disaster Management

(ACDM);

- United Nations Office for Disaster Risk Reduction (UNISDR);
- Organisation for Economic Co-operation and Development (OECD);
- International Organization for Standardization (IOS); and
- Multinational Resilience Working Group.

Emergency Management Australia (EMA), Australia's national disaster management organization, participates with ASEAN and EAS forums. EMA has and will continue to work closely with ASEAN and EAS Member states, most notably Indonesia, to develop disaster management capabilities.²⁰⁰

Australia-Japan-US Trilateral Partnership

On July 30, 2018, Australia, Japan, and the U.S. announced a Trilateral Partnership for Infrastructure Investment in the Indo-Pacific to reaffirm their commitment to working together toward a free, open, prosperous and inclusive Indo-Pacific region. This partnership was operationalized on November 12, 2018 when Australia's Department of Foreign Affairs and Trade (DFAT), Australia's Export Finance and Insurance Corporation (Efic), the Japan Bank for International Cooperation (JBIC), and the U.S. Overseas Private Investment Corporation (OPIC) signed a memorandum of understanding (MOU). The MOU details plans to mobilize investment in efforts that drive economic growth, create opportunities, and foster the original spirit of the Trilateral Partnership, a free, open, inclusive and prosperous Indo-Pacific.²⁰¹ Additionally, the Trilateral Partnership intends to coordinate with governments of the Indo-Pacific to support and encourage infrastructure projects that adhere to international standards and principles for development, including openness, transparency, and fiscal sustainability, while avoiding unsustainable debt burdens for the region.

Specifically, the Trilateral Partnership aims to consult with governments of countries in the Indo-Pacific region to identify projects for potential development and financing. They will evaluate priority infrastructure projects for joint development and financing with investors and infrastructure consultants to identify feasibility of project proposals.²⁰²

Agreements and Memberships

The FRANZ Agreement

The FRANZ Agreement is an arrangement signed by France, Australia, and New Zealand to coordinate response by partner countries for aid in disaster response and relief assistance in the Pacific region. The agreement was signed on December 22, 1992 with the aim of closely coordinating the affected countries with the Pacific Humanitarian Team along with humanitarian and development partners from the UN, the International Red Cross and Red Crescent Movement, NGOs, and other civil society organizations. The FRANZ Arrangement is led by civilians with the support of the countries' defence forces who ensure the sovereignty and leading role of the affected countries requesting the aid. The FRANZ Arrangement has partnerships with the Cook Islands, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuatu.²⁰³

The FRANZ Agreement was enacted during the following regional responses:

- <u>Tsunami Relief September 2009</u>

 A tsunami occurred in September 2009, causing significant loss of life and damage in several Pacific countries. Australia and New Zealand responded by providing assistance to Samoa to enhance their tsunami response, recovery and reconstruction efforts.
 Additionally, France provided military aircraft and a Navy ship to bring personnel, medical supplies and other emergency response equipment from all three FRANZ countries to Tonga.
- <u>Water Shortage Response October 2011</u> In October 2011, several Pacific countries experienced water shortages. FRANZ

partners responded in Tuvalu, delivering a New Zealand army desalination unit and maintenance team.

- <u>Cyclone Evan Response December 2012</u> The FRANZ coalition responded to Samoa and Fiji in December 2012 to assist with the flooding and destruction following Cyclone Evan. France sent personnel and equipment and Australia and New Zealand also provided relief supplies.
- <u>Cycle Ian Response January 2014</u> The FRANZ countries provided relief supplies to Tonga in response to significant damage and destruction to infrastructure. The Tongan Defence Force provided the logistical support for the delivery of supplies.²⁰⁴

Five Power Defence Arrangements (FPDA)

The Five Power Defence Arrangements (FPDA) was instituted in 1971 by Australia, Malaysia, New Zealand, Singapore and the United Kingdom. It was initially formed to provide protection to Singapore and Malaysia following the withdrawal of British troops after their independence and remains the longest standing multilateral security arrangement and regional institution in Southeast Asia.

The FPDA continues to bolster and update its efforts against security challenges with ongoing drills. These drills began with air, land and sea exercises in the 1970s and 1980s and have culminated into a range of drills including Bersama Shield, Bersama Lima, Suman Warrior and Suman Protector. Suman Warrior is an annual exercise among the five countries.

ASEAN Regional Forum (ARF)

The ASEAN Regional Forum (ARF) is a broad-based political and security cooperation platform, which aims to create constructive dialogue on points of interest to ASEAN Member States. The ARF is composed of 27 members including Australia, Bangladesh, Canada, China, the Democratic People's Republic of Korea, the European Union, India, Japan, Democratic People's Republic of Korea, Mongolia, New Zealand, Pakistan, Papua New Guinea, Russia, Sri Lanka, Timor-Leste, and the U.S.²⁰⁵

The ARF meets annually and hosts a biennial disaster relief exercise (ARF DiREx) incorporating the 10 ASEAN Member States with its 17 partners to focus on security and civil-military coordination concerns. The ARF DiREx is held every two years opposite to the ASEAN Regional Disaster Emergency Response Simulation Exercise (ARDEX). The 17th ARF Inter-Sessional Meeting on Disaster Relief was held in 2018 and was co-chaired by the Democratic People's Republic of Korea and Thailand. The meeting centered on efforts to build a society safe from disasters and provide respective policies, strategies, institutions, experiences and relevant cases with regard to disaster response in the region.²⁰⁶

The ARF has put together the Disaster Relief Work Plan 2018-2020, identifying priority areas for ARF disaster management. The priority areas are related to those in the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme 2016-2020. The priority areas are:

- Promote networking and information sharing to enhance the capability of ARF participants for disaster management; and
- Promote rapid deployment and acceptance of assistance in HADR operations; and
- Promote interoperability and civil-military coordination in HADR operations.²⁰⁷

East Asia Summit (EAS)

The East Asia Summit (EAS) is an annual meeting of the 10 ASEAN Member States as well as Australia, China, India, Japan, New Zealand, Russia, Democratic People's Republic of Korea, and the U.S. The meetings are held to address regional strategic cooperation and ongoing challenges and opportunities in the region. The EAS has had steady engagement with disaster response and management in the region since its inception when members signed the Cha-am Hua Hin Statement on EAS disaster management confirming the support of the implementation of the AADMER as the common platform for disaster response mechanisms in the region. Additionally, in 2015, EAS created the EAS Rapid Response Toolkit to provide key contact information to officials in each EAS participating country, a reference guide for DMHA decision makers, and rapid disaster response arrangements for each EAS country. The toolkit also provides necessary procedures and mechanism to support a collective ASEAN response to affected member states in the EAS region.²⁰⁸

Pacific Islands Forum (PIF)

The Pacific Islands Forum (PIF) was established in 1971 to promote regional peace, harmony, security, social inclusion and prosperity for Pacific people to lead free, healthy and productive lives. The PIF is made up of 18 members including: Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. These countries and territories work together to achieve their founding ideals by cooperation between governments, collaboration with international agencies, and representation of the interests of its members. In addition to the 18 members, there are 18 dialogue partners: Canada, China, Cuba, the EU, France, Germany, India, Indonesia, Italy, Japan, Democratic People's Republic of Korea, Malaysia, Philippines, Spain, Thailand, Turkey, the United Kingdom and the U.S. The PIF's regional priorities include:

- Climate Change and Disaster Risk
 Management
- Fisheries
- Ocean Management & Conservation
- Cervical Cancer
- Framework for Rights of Persons with Disability
- Information and Communication Technologies
- Ongoing Impact of Nuclear Testing in the Republic of Marshall Islands
- West Papua (Papua)
- Regional Mobility

Regional policies and initiatives are coordinated through the PIF Secretariat and implemented through the Council of Regional Organisations of the Pacific (CROP). The annual PIF meetings are chaired by the Head of Government of the Host Country.²⁰⁹

Secretariat of the Pacific Community (SPC)

The Secretariat of the Pacific Community (SPC) was established in 1947 by the governments of Australia, France, New Zealand, the Netherlands, Great Britain and the U.S. Formerly the South Pacific Commission, the organization exists to advise on economic, social and health matters affecting South Pacific island territories. Western Samoa joined in 1965, followed by Nauru in 1969 and Fiji in 1971, after legislation allowing membership of nonindependent territories. Equal voting rights among all members was established in 1983. The annual SPC conference hosts two delegates from each member country and approves the budget and determines the work program through local and regional seminars and workshops. Australia, France, Britain, New Zealand, and the U.S. provide 90% of SPC's operational budget.²¹⁰

The SPC is the principal scientific and technical organization in the Pacific region and focuses on the effective and innovative application of science and knowledge, guided by a deep understanding of Pacific Island cultures and contexts. The organization covers over 20 sectors and is known for its expertise and innovation in areas such as fisheries, science, public health surveillance, geoscience and conservation of plant genetic resources for food security.²¹¹

Asia-Pacific Economic Cooperation (APEC)

Australia is a founding member of the Asia-Pacific Economic Cooperation (APEC), established in 1989. APEC partners contribute approximately 70% of Australia's total trade in goods and services. Australia works with APEC to drive economic growth in the region and support economic cooperation and capacity building for developing economies by:

- Funding projects (managed by the APEC Secretariat) that target APEC priorities, including supply chain connectivity and structural reform; and
- Supporting APEC economic policy research and analysis; and
- Supporting project management reforms within the APEC Secretariat to improve APEC effectiveness.²¹²

Association of Southeast Asian Nations (ASEAN) Dialogue Partnerships

The Association of Southeast Asian Nations currently has 10 dialogue partners: Australia, Canada, China, European Union, India, Japan, Democratic People's Republic of Korea, New Zealand, Russia, and the United States.²¹³ ASEAN was formed in 1967 to reduce regional hostilities and to prevent communism from spreading across Southeast Asia to Thailand, Singapore, Malaysia, the Philippines, and Indonesia. Brunei Darussalam, Vietnam, Lao PDR, Myanmar, and Cambodia later joined ASEAN. However, the initial focus has changed to target mitigating the impact of natural disasters.²¹⁴

The ASEAN region is vulnerable to several natural disasters, including typhoons, floods, drought, earthquakes, and volcanic eruption. ASEAN has experienced three catastrophic disasters in the past 15 years. These include the Indian Ocean Tsunami (2004), Cyclone Nargis (2008), and Typhoon Haiyan (2013). The 10 Member States recognized the importance of ensuring the safety of its citizens from challenges and threats.

The need for a coordinated ASEAN response to major disasters in the region gained momentum after the Indian Ocean Tsunami. Because of this, regional cooperation towards addressing the rising frequency of natural disasters is of vital interest to ASEAN. Australia became ASEAN's first Dialogue Partner and is entering its 40th year of strategic partnership.

Australia continues to partner with ASEAN in the political security sector with their active participation in the ASEAN Regional Forum (ARF), the ASEAN Defence Ministers' Meeting Plus (ADMM-Plus), the East Asia Summit (EAS), the Expanded ASEAN Maritime Forum (EAMF), and the Post Ministerial Conferences (PMC). Additionally, ASEAN and Australia have an ongoing partnership to combat trafficking in persons, and signed a Joint Declaration for Cooperation to Combat International Terrorism in July 2006.

Australia is also an important trading partner of ASEAN and their trading relationship amounts to AUD\$93.2 billion, representing approximately 15% of Australia's total trade. The two countries also partner on educational endeavors as well as with regard to development cooperation in the region.²¹⁵

ASEAN Defence Ministers' Meeting (ADMM) Plus

The ADMM-Plus inaugural meeting was convened in 2010 as a platform for ASEAN Member States and the then eight, and now ten Dialogue Partners (Australia, Canada, China, European Union, India, Japan, Democratic People's Republic of Korea, New Zealand, Russia, and the United States) to strengthen security, defence cooperation for peace, stability, and development in the ASEAN region. They focus on five areas of practical cooperation to include maritime security, counter-terrorism, humanitarian assistance and disaster relief, peacekeeping operations, and military medicine.

In order to facilitate cooperation on these areas, Experts' Working Groups (EWGs) were established. Additional priorities have been added, as reflected in the EWG on Humanitarian Mine Action (HMA) and the EWG on Cyber Security. Chairmanship of the ADMM-Plus follows the Chairmanship of the ADMM.

The objectives of the ADMM-Plus are:

• To benefit ASEAN member countries in building capacity to address shared security challenges, while cognizant of the differing capacities of various ASEAN countries; and

- To promote mutual trust and confidence between defence establishments through greater dialogue and transparency; and
- To enhance regional peace and stability through cooperation in defence and security, in view of the transnational security challenges the region faces; and
- To contribute to the realization of an ASEAN Security Community which, as stipulated in the Bali Concord II, embodies ASEAN's aspiration to achieve peace, stability, democracy and prosperity in the region where ASEAN member countries live at peace with one another and with the world at large; and
- To facilitate the implementation of the Vientiane Action Programme, which calls for ASEAN to build a peaceful, secure and prosperous ASEAN, and to adopt greater outward-looking external relation strategies with ASEAN's friends and Dialogue Partners.

The ADMM-Plus has become an effective platform for cooperation between the participating countries' defence establishments. The principles for membership to ADMM-Plus are:

- The Plus country shall be a full-fledged Dialogue Partner of ASEAN;
- The Plus country shall have significant interactions and relations with ASEAN's defence establishment; and
- The Plus country shall be able to work with the ADMM to build capacity so as to enhance regional security in a substantive way in order to promote capacity-building in the region in the fields of defence and security.

Countries under ADMM-Plus are the 10 ASEAN Member States, and eight Plus countries; Australia, China, India, Japan, New Zealand, Democratic People's Republic of Korea, Russian Federation, and the U.S.²¹⁶

NATIONAL FRAMEWORK

Country Overview

Australia, officially named the Commonwealth of Australia is comprised of the mainland of the Australian continent, the island of Tasmania, and numerous other islands. It is located between the Pacific and Indian oceans in the Southern Hemisphere. Australia is separated from Indonesia to the northwest by the Timor and Arafura seas, from Papua New Guinea to the northeast by the Coral Sea and the Torres Strait, from the Coral Sea Islands Territory by the Great Barrier Reef, from New Zealand to the southeast by the Tasman Sea, and from Antarctica in the far south by the Indian Ocean. (Figure 4).²¹⁷ The country has a wide variety of landscapes, with desert in the center, tropical rainforests in the north-east, and mountain ranges in the southeast, south-west and east.²¹⁸

Australia has an ethnically diverse population of approximately 25 million (as of December 2019).²¹⁹ New South Wales and Victoria are and Western Australia (WA), and two major mainland territories which include the Australian Capital Territory (ACT) and the Northern Territory (NT). Australia has a federal form of government, with a national government for the Commonwealth of Australia and individual state governments (those of New South Wales, Victoria, Queensland, South Australia, Western Australia, and Tasmania).²²¹ In regard to its legal system, Australia follows a Westminster system of government and law inherited from the British who originally colonized the country. Australia has two main political parties and a number of minor parties, which make up the Commonwealth Parliament and each state and territory has its own government.222

Disaster Overview

Australia has experienced a number of large-scale and devastating natural hazards, including bushfires, flooding, storms, drought,

Australia's most populous states, with their respective capitals, Sydney and Melbourne, being the largest cities in Australia. The country's population is concentrated along the coastal region from Adelaide to Cairns, with a small concentration around Perth, Western Australia. Located roughly halfway between Sydney and Melbourne is Australia's capital city of Canberra with a population of approximately 427,000 people.220

Australia has six states, New South Wales (NSW), Queensland (QLD), South Australia (SA), Tasmania (TAS), Victoria (VIC)



Figure 4: Map of Australia

and others that have caused widespread damage. Historically, bushfires, floods, landslides and cyclones have caused loss of life and significant damage to property and infrastructure in Australia.²²³ Climate change is creating less predictable and more extreme weather patterns. Disasters can have personal, social, economic and environmental impacts that take many years of recovery.²²⁴

Hazards

Australia experiences the following natural hazards:

Bushfires

2019/2020 Bushfires

Due to the Australian climate being mostly hot, dry, and prone to drought, bushfires and grassfires occur often. All of Australia is prone to bushfires, particularly during the fire seasons, which vary across the continent due to different weather patterns. For South Queensland and Northern NSW the danger period is the during spring and summer. For most of southern Australia, including NSW and Victoria, summer and early autumn are the highest risk seasons.²²⁵ The 2019/2020 bushfire season in Australia has proved very devastating. Between September 2019 and early January 2020, around 5.8 million hectares (ha) of forest was burned in Australia by a series of mega fires.²²⁶ Figure 5 shows the affected areas in south-east Australia from 1 October 2019 to 5 February 2020. Information in this Figure is provided from the Australian Government Crisis Coordination Centre.²²⁷

Many of the fires exceeded 100,000 ha and continued to burn for weeks after their ignition. The Gospers Mountain fire near Sydney burned more than 510,000 ha since ignition by lightning on 26 October 2019; it is the largest forest fire recorded in Australia. During the 2019-2020 fire season, 21% of Australia's forested area burned.²²⁸ The fires claimed the lives of at least 27 people



Figure 5: Map of Southeast Australia Bushfires, 2020

and destroyed over 2,000 homes.²²⁹ This fire season triggered a national crisis, and as a result Australia called on its military to move resources into place and carry people out of harm's way. More than 6500 ADF members, including 3000 reservists, provided support during this fire season. The Royal Australian Navy played an integral role in providing humanitarian assistance vessels, temporary shelter, and heavy vehicle loading during Operation Bushfire Assist.²³⁰

International support to Operation Bushfire Assist included:²³¹

- The New Zealand Defence Force (NZDF) committed a total of 147 members to assist with the bushfire relief efforts in the ACT, VIC, NSW and SA between 6 January and 6 February 2020. NZDF personnel contributions included 25 firefighters, 35 combat engineers, 12 Air Dispatchers, 3 Enviro Health Teams, a Primary Health Care Team and a chaplain. Additionally, the NZDF contributed assets including a C-130H and crew as well as 3x NH-90 helicopters and crew. The last of the NZDF personnel and assets supporting bushfire relief efforts returned to New Zealand on February 6.
- The Republic of Singapore Air Force (RSAF) contributed 40 members and two CH-47 Chinook helicopters on January 6. The RSAF contingent operated as part of the multinational rotary wing task force and supported all JTFs with the movement of firefighters and the delivery of fodder, food and water to inaccessible areas. The RSAF contingent concluded their support on February 6 and returned to Singapore.
- The Japanese Self-Defense Force provided two C-130 Hercules aircraft and 71 personnel, who flew more than 85 hours in support of Operation Bushfire Assist. These aircraft and crew supported transportation of firefighting personnel, delivery of firefighting equipment and transfer of ADF elements across New South Wales, Victoria, South Australia and Tasmania. The contingent was based at RAAF Base Richmond. It began

support to the operation on January 14 and departed Australia on February 9.

- 99 Papua New Guinea Defence Force members – largely engineers – operated as part of JTF 646 in the Omeo region of Victoria. The Papua New Guinea contingent concluded operations and departed Victoria on February 21.
- 4 Republic of Fiji Military Force engineers supported operations in the East Gippsland region in vicinity of Orbost following their arrival on January 18. The contingent supported general recovery efforts with construction engineers and plant equipment operators in the Victorian-affected areas. The contingent departed Australia on February 26.
- 10 United States Air Force members provided two cargo load teams who operated from RAAF Base East Sale. The United States contingent concluded operations and the final personnel departed Australia on February 16.
- 43 engineers from Indonesian National Armed Forces arrived in Australia on February 2. The contingent completed route and debris clearance in the Blue Mountains and departed Australia on March 4.
- The Canadian Air Force (RCAF) provided a C-17 aircraft to deliver fire-retardant to RAAF Base Richmond on January 16. The RCAF further assisted in the redeployment of the New Zealand Defence Force contingent on February 4.

2011 Bushfires

On February 2011, two large brush fires affected the metropolitan area of Perth, in the state of Western Australia. As a result, 68 homes were destroyed, 32 were damaged, and hundreds of people were evacuated from their homes in order to flee from the fires.²³²

2009 Bushfires

In February 2009, deadly bushfires swept through the southern state of Victoria, leaving 173 people dead, 7,562 people displaced, and 2,029 homes destroyed. Approximately 400 bushfires, many of which subsequently joined together over time as larger fire complexes, raged across Victoria, from 5 February to 14 March 2009. Also destroyed were businesses, agriculture, community buildings, and cultural and historic locations. In total, 450,000 ha were burnt, causing the death of almost 12,000 livestock animals.²³³ The Kilmore East fire was the most significant of the fires.²³⁴ During its first 12 hours, 119 people died, 1242 houses and other buildings were destroyed, and more than 100,000 ha of forest and farmland was burned.²³⁵

Flood

While bushfires are the most commonly occurring type of disaster event, based on disaster declaration figures, floods affect the highest number of local government areas (LGAs) and are the most costly.²³⁶ Flood in Australia tends to isolate towns, create major disruptions to road and rail links, and can cause death. Floods cause widespread damage to homes and business, including losses in agriculture. Almost every year there are flood losses, sometimes with devastating consequences. Flash floods in Australia can happen anywhere, including in dry regions which creates a higher risk to those affected by them.²³⁷

Low-lying areas adjacent to streams and rivers suffer from riverine flooding. In the flat inland regions of Australia, floods sometimes spread over thousands of square kilometers. These floods tend to last for several weeks, and flood warnings are sometimes issued months in advance. In the mountain and coastal regions of Australia, flooding can happen rapidly with a warning of only a few hours in some cases.

The Great Dividing Range, which extends along the length of eastern Australia, provides a natural separation between the longer and slower westerly flowing rivers and the shorter, faster easterly flowing coastal rivers. At times, natural blockages at river mouths, including storm surge and high tides, will cause localized flooding.²³⁸

Flooding in October 2016 was estimated to cost approximately \$500 million in damages. Photo 12 depicts flooding in the New South Wales (NSW).²³⁹



Photo 12: Flooding in New South Wales, Australia, 2016

Earthquakes

Australia has experienced few big earthquakes, but some of them have caused great devastation. Approximately every five years Australia experiences a quake of magnitude 6 or greater. The regions where violent quakes occur most often are south-western Australia, the Flinders Ranges in South Australia, and across a wide area from Tasmania to northern New South Wales. The top ten worst Australian earthquakes ranked by cost, magnitude and damage include Newcastle, New South Wales (Magnitude 5.6, 1989), Beachport, South Australia (6.5, 1897), Meckering, Western Australia (6.5, 1968), Ellalong, New South Wales (5.4, 1994), Adelaide, South Australia (5.5, 1954), Warooka, South Australia (6.0, 1902), Meeberrie, Western Australia (6.3, 1941), Tennant Creek, Northern Territory (6.6, 1988), Kalgoorlie-Boulder, Western Australia (5.0, 2010), and Cadoux, Western Australia (6.1, 1979).²⁴⁰

Cyclones

Cyclones in Australia are common. Unfortunately, climate change has increased predicted risk of cyclones in the area. Cyclone Yasi was one of the largest natural disasters to affect Australia in recent history, causing an estimated US\$ 15.9 billion in damages in 2011. Cyclone Yasi caused flooding in Queensland, affecting homes and food supply,²⁴¹ and forced the evacuation of two hospitals in Cairns.²⁴² In March 2017, tropical Cyclone Debbie made landfall near Airlie Beach on Queensland's Whitsunday coast. The cyclone devastated resort islands and caused significant damage to several towns. The cyclone brought major flooding in central and southeast Queensland and northeast New South Wales, resulting in the loss of several lives. Disastrous river flooding caused 20,000 people to be evacuated from the Lismore and Murwillumbah areas. The Queensland Reconstruction Authority estimated damage to infrastructure and industry following Cyclone Debbie exceeded \$1 billion.²⁴³

Tsunami

Australia faces different risks for tsunami depending on the region. The risk from tsunamis ranges from relatively low along the southern coasts to moderate along the western coast of Western Australia. This area is more susceptible because of its proximity to large subduction zones along the south-coast of Indonesia, which is a region of significant earthquake and volcanic activity. Several significant tsunamis have impacted Australia's North West Coast. The largest run-up (measured as elevation above sea level) was from the July 2006 Java Tsunami. The largest reported offshore wave height was near Cape Leveque from the 1977 Sunda Tsunami.²⁴⁴

Hail Storms

Hail storms cause a significant economic loss in Australia. They represent the highest losses for the insurance industry. During the last 35 years, the accumulated losses from hail storms total around AUD\$ 14.8 billion for insured losses and AUD\$ 25 billion for direct economic losses. In November 2014, an intense hail storm affected the Brisbane area. The storm produced hailstones that hit central parts of Brisbane during rush hour, causing damage to an estimated 60,000 cars. Due to the size of the hail, roofs, windows and, claddings of more than 22,000 homes and commercial buildings were damaged. In addition, it is estimated that 30 people were injured.²⁴⁵

Drought

Due to long-term declines in rainfall and drier, hotter conditions in Australia, droughts are becoming more severe. Additionally, these conditions have led to a decline in soil moisture caused by increased water loss from plants and soil and resulting in crop failure. Over the past twenty years, rainfall in Southeast Australia, which includes the major population centers of Brisbane, Sydney, Canberra, Melbourne and Adelaide, has declined by 15% in late autumn and early winter, and 25% in April and May. Hotter conditions due to the reduction in

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rainfall have led to approximately 50% decline in riverine streamflow.²⁴⁶ New South Wales, which accounts for approximately 99% of the Australia's agricultural output by value recorded its fifth driest July on record and is officially declaring drought conditions.²⁴⁷

In January 2019, record-breaking high temperatures across South Australia resulted in thousands of dead fish in the Darling River at Menindee. Additionally, hundreds of feral animals died of thirst and Heritage protected lakes and wetlands went dry emptying not only of water but also of the native birds and fish in the area.²⁴⁸

As a result, of the continuous years of drought, in 2015 the Australian Government implemented the Drought Communities Programme (DCP) to support communities most impacted by drought.²⁴⁹ Additionally, they increased funding to 81 million AUS for 2018 – 2019 enlarging the reach of eligible councils from 60 – 81 to support local infrastructure projects and other drought relief activities for community and businesses affected by drought. The Drought Communities Programme Extension is administered through the Business Grants Hub of the Department of Industry, Innovation and Science.²⁵⁰ Serious and severe rainfall deficiencies over the past 28 months are shown in the map of Australia in Figure 6.²⁵¹

Country Risk Profile

Risk involves exposure to hazards, vulnerability, as well as lack of coping capacity, which are all important factors in Disaster Risk Management. Figure 7 shows the risk profile for Australia from the INFORM Index for Risk Management. INFORM is a global, objective, and transparent tool for understanding the risk of humanitarian crises. INFORM is a composite indicator combining 53 indicators into three dimensions of risk: hazards (events that could occur) and exposure to them, vulnerability (the susceptibility of communities to those hazards)



and the lack of coping capacity (lack of resources that can alleviate the impact). It is a collaboration of the Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission, with technical work on INFORM led by the European Commission's Joint Research Centre. The index results are published once every year.

INFORM gives each country a risk score of 1-10 (1 being the lowest and 10 the highest) for each of the dimensions, categories, and components of risk, as well as an overall risk score. The higher the score the higher the country's disaster risk. The purpose of INFORM is to provide an open, transparent, consensusbased methodology for analyzing crisis risk at global, regional or national level. Australia has an overall 2020 disaster risk of 2.3/10 indicating low risk due not only to its actual risk of disaster but also its high capacity to respond to those risk. The overall risk is comprised of three dimensions – the Hazard and Exposure risk of 2.8/10; the Vulnerability score of 2.2/10; and the Lack of Coping Capacity score of 2.1/10. Under Hazard and Exposure, physical exposures to tsunamis (7.2) and droughts (6.8) have the highest risks.²⁵²



RISK PROFILE

50 Center for Excellence in Disaster Management & Humanitarian Assistance

Pandemics (COVID 19)

On 5 March 2020, the Australian Government activated a National Coordination Mechanism (NCM) in response to the spread of COVID-19. The NCM is operating through a coordination node with the Department of Home Affairs and together with the states and territories are coordinating the whole-of-government responses to issues outside the direct health management of COVID-19. The Department of Health is the lead on the health impacts and health system services such as hospitals, primary care and the aged care sector.²⁵³

On 1 April, 2020, Operation COVID-19 Assist was announced by the Minister for Defence, Senator the Honorable Linda Reynolds. This initiative included nation-wide Defence support to all state and territory governments for contact tracing and planning and supporting law enforcement agencies with mandatory quarantine arrangements. The Australian Defence Force (ADF) also established a COVID-19 task force to coordinate Defence's internal response and

support the whole-ofgovernment effort. ADF is contributing a wide range of contingencies through the Emergency Management Australia (EMA) led response to the COVID-19 pandemic. ADF and Defence personnel have been embedded into various Australian Government agencies to provide support. Additionally personnel are deployed at the National level to aid in efforts as part of **Operation COVID-19** Assist.254

The Tasmanian Government issued a request for assistance and ADF provided personnel as part of the Australian Medical Assistance Team-led Commonwealth response which included 52 ADF personnel supporting clinical hospital duties in the north west of the state. Photo 13 shows members of the medical team, Corporal Nicci Freeman, and RAAF medical technician Corporal Megan Macauslan carrying out a check on emergency trolley in the North West Regional Hospital in Burnie Tasmania.²⁵⁵

At the time of writing this document, the Australian Government launched a specialist aged care response centre to address the surging number of Covid-19 cases spreading through Victorian facilities, as a result of the Victoria's second wave of the virus. The new centre is jointly managed by Emergency Management Australia (EMA) and Victoria Health. In addition, Australian Defence Force (ADF) personnel are assisting with Victoria's Covid-19 response, including knocking on the front doors of Victorians who have not answered phone calls from contact tracers.²⁵⁶



Photo 13: COVID-19 Assist

Disaster Management, Relief, and Recovery Arrangements

Australia's domestic plans, policies, agreements, and strategies reflect a cooperative whole-of-government approach among Australian agencies. The country maintains close collaboration between civil and military entities, to respond to internal hazards such as bushfires, droughts, cyclones, and other natural disasters.²⁵⁷ During a national emergency in Australia, state and territory governments manage emergency responses for their jurisdictions.

A state or territory government may seek federal assistance when all other jurisdictional capability or capacity has been exhausted, and request non-financial assistance from the Australian Government under the Commonwealth Government Disaster Response Plan (COMDISPLAN), in which Emergency Management Australia (EMA), through the Australian Government Crisis Coordination Centre (CCC) develops whole of Australian Government response options for disasters or emergencies within Australian jurisdictions. EMA delivers programs, policies, and services that strengthen Australia's national security and emergency management capability.²⁵⁸

Responding to natural disasters in disaster affected communities is primarily the responsibility of state and territory governments.²⁵⁹ For example, from 2018–19, some 207,445 state and territory volunteer firefighters and 23,796 emergency service personnel attended 387,500 emergency incidents, including fires, storms and cyclones.²⁶⁰ To complement the efforts of state, territory and international governments responding to a disaster or emergency, the Australian Government can also provide physical and financial assistance. The type of help available depends on the impacts of the natural disaster and it may include disaster recovery payment, disaster recovery allowance, joint cost sharing arrangements, and an emergency response fund. The Department of Home Affairs leads

the disaster emergency management response through EMA. Additional information can be found on the Department of Home Affairs emergency management page.²⁶¹

The Australian Government established the Natural Disaster Relief and Recovery Arrangements (NDRRA) to alleviate the financial burden on the states and to facilitate the early provision of assistance to disaster affected communities. The Australian Government through the NDRRA provides financial assistance directly to the states to assist them with costs associated with certain disaster relief and recovery assistance measures.²⁶² Additional information on these agencies is included below.

The Department of Home Affairs

The Department of Home Affairs is the department of the Australian Government responsible for, among other things, Emergency Management, including crisis management and disaster recovery.²⁶³ Their primary goal is to build resilience in Australia to prevent, prepare for, respond to and recover from natural or man-made disasters.²⁶⁴ Additionally, they function to deliver programs, policies, and services to support emergency management capacity in Australia and for coordinating the Australian Government's physical and financial support for disasters and emergencies.²⁶⁵

State and territory governments in Australia are the primary responders for protecting life, property, and environments within their borders. The Australian Government supports disaster and emergency response efforts by providing physical and financial assistance. The Australian Government Disaster Response Plan details the disaster response from the Australian Government with regard to requests for assistance from state and territory governments.²⁶⁶

Emergency Management Australia

Emergency Management Australia (EMA) leads the Australian Government disaster and emergency management response.²⁶⁷ EMA is guided by the National Strategy for Disaster Resilience (NSDR) and works to build a disaster

resilient Australia that prevents, prepares, responds and recovers from disasters and emergencies. The purpose of the Strategy is to provide high-level guidance on disaster management to federal, state, territory and local governments, business and community leaders and the not-for-profit sector. It focuses on priority areas to build disaster resilient communities across Australia. Where an event or disaster is imminent, or has occurred, the Director General Emergency Management Australia (DGEMA) activates COMDISPLAN. The Australian Government Crisis Coordination Centre (CCC) advises appropriate stakeholders via email that COMDISPLAN has been ACTIVATED.268

Crisis Coordination Centre

The Australian Government Crisis Coordination Centre sits inside EMA and is an all-hazards, 24/7 center that provides whole-of-government situational awareness to inform national decision-making during a crisis. Additionally, it coordinates emergency assistance for the Australian Government and manages the National Security Hotline, which monitors Australia's national counter-terrorism efforts.²⁶⁹ The National Security Hotline (NSH) can be reached at 1-800-123-400. Since its establishment in December 2002, the NSH has received over 300,000 communications, many of which contributed to investigations.²⁷⁰

Under ACTIVATED the following activities are undertaken:²⁷¹

- The CCC Crisis Coordination Team is stood up; and
- Request/s for assistance are received by the Australian Government and approved by the Minister with responsibility for emergency management; and
- The CCC provides tasking requests to jurisdictions/agencies; and
- Jurisdictions/agencies in conjunction with the CCC will cooperatively undertake tasking where acceptable; and
- Jurisdiction/agency situation updates provided to the CCC on the agreed basis; and

• The CCC provides stakeholders with regular situational awareness.

Australian Institute for Disaster Resilience

The Australian Institute for Disaster Resilience (AIDR) enhances disaster resilience through leadership, professional development, and knowledge sharing. It works with government, community, research, education and the private sector to share extensive knowledge and experience in Australia and countries assisted by Australia.²⁷²

Australian Tsunami Warning System

The Australian Tsunami Warning System is a national collaboration between the Australian Bureau of Meteorology (Bureau), Geoscience Australia (GA) and the Department of Home Affairs (Home Affairs) which provides a comprehensive tsunami warning system delivering timely and effective tsunami warnings to the Australian population. It also contributes to the facilitation of tsunami warnings for the South West Pacific and is an important element of the Indian Ocean Tsunami Warning and Mitigation System.²⁷³

Emergency Management Australia Podcast

The EMA Podcast conducts interviews with experts in the field and discusses the latest developments in emergency management. Episodes are free to download from podcast apps.²⁷⁴

Australian Defence Force

The primary role of the Australian Defence Force (ADF) is defending Australia against armed attack. However, protecting and advancing Australia's strategic interests with partners and alliances is the second part of the two enduring efforts of the Defence. The Defence consists of three services, the Royal Australian Navy, the Royal Australian Air Force and the Australian Army. The ADF responds to natural disasters, although currently declaring a national state of emergency does not automatically trigger

action such as the deployment of the ADF. Nevertheless, more than 6500 ADF members, including 3000 reservists, provided support during the 2019/2020 bushfires in the largest Defence mobilization for domestic disaster relief in Australia's history.²⁷⁵ The ADF stood up three Joint Task Forces (JTFs) covering Victoria, New South Wales, and South Australia/Tasmania. ADF members worked with emergency services personnel in the State Disaster Coordination Centre (SDCC) of the New South Wales Rural Fire Service Headquarters and the Victorian Country Fire Authority and Metropolitan Fire Brigades to provide ADF assets.²⁷⁶ Photo 14 depicts Soldiers from the 7th Battalion, the Royal Australian Regiment load the net from an animal feed drop to the waiting Australian Army CH-47 Chinook helicopter at the completion of the task in the area of Jackson's Crossing and north along the Snowy River, Victoria.²⁷⁷

Australian Maritime Safety Authority (AMSA)

The Australian Maritime Safety Authority (AMSA) was established under the Australian Maritime Safety Authority Act of 1990. The AMSA falls under the Department of Infrastructure, Regional Development and Cities. The AMSA is Australia's regulatory body for maritime safety, marine environment protections and search and rescue for maritime aviation. Its vision and mission promote 'Safe and clean seas and saving lives' as well as ensuring safe vessel operations, combating marine pollution and rescuing people in distress. The AMSA collaborates with stakeholders through MOUs, intergovernmental and interagency agreements. They have an extensive bilateral and regional program to ensure the minimization of maritime incidents in Australian and neighboring waters.²⁷⁸

The AMSA is the lead at the International Marine Organization (IMO), which is the United Nations' agency responsible for setting and maintaining international ship safety standards. The IMO additionally develops and maintains regulatory framework for shipping and the compliance to safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping. The AMSA works with the IMO to work



Photo 14: Australian Defence Force Support to Operation Bushfire Assist 2019-2020

for Australia's wider strategic and economic maritime interests.²⁷⁹

Under AMSA, a search and rescue response system coordinates with the Joint Rescue Coordination Centre (JRCC) for aviation and maritime response incidents. The JRCC also manages the operational and management structures for Australia's civil search and rescue operations. The JRCC operates 24 hours a day using the most advanced distress and communications technology for coordinating and responding to USAR operations.²⁸⁰

Australia's search and rescue region covers approximately 53 million square kilometers covering the entire Australian continent as well as large areas of the Indian, Pacific and Southern Oceans, and the Australian Antarctic territories. Figure 8 shows a map of the Australian Search and Rescue Region.²⁸¹

Urban Search and Rescue

Urban Search and Rescue teams locate, care for and extract people trapped or affected by structural collapse. The teams are made up of highly trained firefighters, paramedics, doctors, engineers, hazardous materials experts, police, and dog handlers. Domestically, all states and territories maintain USAR capabilities. Additionally, internationally accredited USAR capabilities are kept on standby in New South Wales and Queensland to assist other countries, in which case Emergency Management Australia (EMA) coordinates with the Department of Foreign Affairs and Trade (DFAT) to deploy USAR teams.²⁸²

Australian Medical Assistance Team (AUSMAT)

The Australian Medical Assistance Team (AUSMAT) is a group of doctors, nurses,



Figure 8: Map of Australian Search and Rescue Region

paramedics, and non-medical skilled professionals such as fighters and logisticians who are drawn from states and territories to form a team to assist local emergency response teams when services are overwhelmed both nationally and internationally. The team members are trained to not only provide skilled assistance during a disaster but also to establish sustainable solutions for local communities when resource providers leave so communities are set up for ongoing success.

Some key elements to AUSMAT deployments include:

- Respect for the roles and views of the locals; and
- Clearly identified objective of being there to support and teach, not to take over; and
- An operational philosophy that does not impose views and plans where possible; and
- An ongoing awareness of the issues around long-term sustainability of the situation after support is withdrawn; and
- A principle of empowering the local people to be part of the immediate solution as well as the long-term management; and
- A recognition of the importance of maintaining the AUSMAT members' own physical and psychological health and wellbeing at all times.²⁸³

AUSMAT members are expected to deploy from their various state and territory health services agencies on short notice with groups as small as 4 to as large as 80 to staff a full field hospital.²⁸⁴

Australian Government Disaster Recovery Committee (AGDRC)

The AGDRC is a working group chaired by the Department of Families, Housing, Community Services and Indigenous Affairs who work to provide advice to support the Australian Government's efforts to prepare for and respond to the social and community impacts of disasters. They coordinate specialized recovery assistance to Australian citizens, families and communities negatively affected by disasters or critical events. Additionally, the AGDRC provides advice on recovery assistance for offshore disasters and events in a support role to the Department of Foreign Affairs and Trade who lead offshore response.²⁸⁵

Australian Red Cross

As auxiliary to government, the Australian Red Cross has a duty to seriously consider any request from government to supplement or substitute public humanitarian services.²⁸⁶

The Australian Red Cross has helped Australians through disasters, emergencies, and the other challenges for over 106 years.²⁸⁷ For example, financial assistance is available for people impacted by the summer bushfires. This is in the form of various emergency grants. The Red Cross Disaster Relief and Recovery Fund is allocated for on-the-ground disaster services, immediate assistance grants, and mid- to longterm support.²⁸⁸ As of 22 June 2020, \$118m has been spent or disbursed. This includes \$107m paid in grants to 4,322 people, as well as the cost of teams on the ground supporting communities during emergencies this year (\$5m) and administrative support costs (\$6m).²⁸⁹

In response to the recent COVID-19 pandemic, the Australian Red Cross is working with federal and state governments, volunteers across the country, and others to help those most vulnerable, and support Australians maintain their wellbeing and cope with emergencies. Australian Red Cross aid workers are part of this response, supporting pandemic preparedness, emergency operations and emergency health services.²⁹⁰ Photo 15 depicts Red Cross volunteers in Cairns delivering relief packages full of food, water and personal care items to people in need.²⁹¹

Australian Civil Military Centre (ACMC)

The ACMC engages with government departments and agencies, non-government organizations and international partners, including the United Nations, to improve the outcomes of civil-military-police crisis responses to conflict and disaster management in the



Photo 15: Australian Red Cross Response to COVID-19

Asia and the Pacific as well as other areas. The Centre's portfolio responsibility resides with the Minister for Defence. The ACMC is responsible for the management of whole-of-government lessons learned from civil-military-police coordination in conflicts and natural disasters overseas.²⁹²

ACMC is a founding member of the Regional Consultative Group (RCG) on Humanitarian Civil-Military Coordination for Asia and the Pacific which was formed in 2014 as a regional forum to unite humanitarian, civilian and military actors in planning and responding to regional disasters. It was formed to provide a forum to discuss response preparedness with a focus on coordinating operational planning in priority countries in the region, namely, Bangladesh, Nepal, Indonesia, Myanmar, and the Philippines.²⁹³ The RCG also supports the development of tools designed to increase the predictability of disaster response coordination mechanisms including a partnership with UN OCHA ROAP and the Humanitarian Advisory Group (HAG) to publish the Humanitarian Civil-Military Coordination in Emergencies toward a Predictable Model (2018) which is the latest version. ACMC also works with regional and global stakeholders to produce other disaster management knowledge resources, capacity building through civil-military police exercises and continuous improvement of lessons learned from disaster response.²⁹⁴

Australian Defence Force Peace Operations Training Centre (POTC)

The Australian Defence Force Peace Operation Training Centre's mission is to prepare Australian and international personnel for employment on peace operations and more recently as Gender Advisers. The Centre contributes to Defence's international engagement objectives through the conduct of bilateral exercises, instructor support and mobile training teams. The POTC conducts an annual series of peace operations seminars which include academic presentations, plenary discussions and small group activities.²⁹⁵

National Disaster Framework and Plans

Australia has multiple frameworks and plans related to HADR and domestic emergency response. These include:

National Disaster Risk Reduction Framework

Australia's National Disaster Risk Reduction Framework outlines a national, comprehensive approach to proactively reducing disaster risk. It includes multisector collaboration within the Australian Government Department of Home Affairs. This framework was co-designed with representatives from all levels of government, business, and the community sector. Key components of the framework were developed in June 2018. The framework translates the first three Sendai Framework priorities into action for the Australian context. The framework establishes a 2030 vision, goals and priorities broadly aligned to the Sendai Framework and the 2030 Sustainable Development Goals and outlines foundational strategies for action to meet these across five years (2019-2023). The framework outlines a coordinated approach to reducing disaster risk and it is designed to leverage the work and progress made across all sectors since the release of the National Strategy for Disaster Resilience (NSDR) in 2011.²⁹⁶

National Strategy for Disaster Resilience - 2011

The National Strategy for Disaster Resilience (NSDR) was adopted in 2011. Emergency Management Australia is guided by the NSDR. The purpose of the Strategy is to provide highlevel guidance on disaster management to federal, state, territory and local governments, business and community leaders and the not-forprofit sector. It focuses on priority areas to build disaster resilient communities across Australia. While the Strategy focuses on natural disasters, the approach it articulates may also be applicable in preparing communities to deal with other disasters such as pandemic, animal disease and terrorist events.²⁹⁷

Australian Government Disaster Response Plan - COMDISPLAN 2017

The Australian Government Disaster Response Plan 2017, Commonwealth Government Disaster Response Plan (COMDISPLAN), is the plan for the provision of Australian Government non-financial assistance to Australian states and territories in an emergency or disaster. The Minister with responsibility for emergency management must authorize approval for the provision of Australian Government nonfinancial assistance. The term 'non-financial assistance' refers, but is not limited to: planning expertise, provision of mapping services, counselling, advice, management of external resources and physical assistance. Annex A of the COMDISPLAN provides an overview of capabilities that Australian Government agencies are able to provide. In certain circumstances, under the direction of the DGEMA, EMA may request the pre-positioning of Australian Government resources in advance of a disaster impact or a formal request for assistance to reduce response time.

During an event where international nonfinancial assistance is provided, EMA will adhere to the Arrangements for International Reception. Where resources to meet a particular need are not available in Australia, EMA in consultation with the affected jurisdiction, Department of Foreign Affairs and Trade (DFAT) and Prime Minister and Cabinet (PM&C) will seek international assistance as necessary through the appropriate channels. EMA will coordinate the movement of non-financial assistance to the affected jurisdiction in line with the Arrangements for International Reception.²⁹⁸

National Health Crisis Management and Response Arrangements

Australia has a series of standing health emergency plans, ordered from high level policy down to operational detail. The standing plans dealing specifically with pandemic response are described in the Parliamentary Library's publication *Australian Pandemic Response Planning: a Quick Guide*. The main standing response plans for a pandemic are the following:²⁹⁹

- the Emergency Response Plan for Communicable Disease Incidents of National Significance: National Arrangements: National CD Plan (May 2018) (the National CD Plan); and
- the Emergency Response Plan for Communicable Disease Incidents of National Significance (September 2016) (the CD Plan); and
- the Australian Health Management Plan for Pandemic Influenza–AHPPMI, August 2019, (Pandemic Influenza Plan, also referred to as AHPPMI) and
- the previously mentioned Australian Government Disaster Response Plan (2017) (COMDISPLAN).

The Australian Government Crisis Management Framework (December 2017) (AGCMF) identifies the planned decisionmaking framework for response to, and recovery from, any crisis event.

The Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19) (7 February 2020) (COVID-19 Plan) adapts the Pandemic Influenza Plan to specifically manage the national COVID-19 response. The Plan includes a response phase, and initial action to targeted action phases, and a stand down phase.

On 21 January 2020 the Chief Medical Officer (CMO) issued a determination adding 'human coronavirus with pandemic potential' to the Biosecurity (Listed Human Diseases) Determination 2016. This decision triggered the activation of the National Incident Room, the National Medical Stockpile, the National Trauma Centre, daily meetings of the Australian Health Protection Principal Committee (AHPPC), and meetings of state, territory and Commonwealth health ministers to discuss pandemic readiness.³⁰⁰

Australian State and Territory Emergency Management Plans

State and territory emergency management plans play an important role in emergency planning. Further details include:³⁰¹

Australian Capital Territory - https://www.esa. act.gov.au/cbr-be-emergency-ready/emergencyarrangements

New South Wales - https://www.emergency.nsw. gov.au/Pages/publications/plans/EMPLAN.aspx

Northern Territory - https://www.pfes.nt.gov.au/ Emergency-Service/Publications-and-forms.aspx

Queensland - https://www.disaster.qld.gov.au/ cdmp/Documents/Queensland-State-Disaster-Management-Plan.pdf

South Australia - https://www.dpc.sa.gov.au/ what-we-do/services-for-government/securityand-emergency-management/state-emergencymanagement-plan

Tasmania - https://www.ses.tas.gov.au/about/ planning-and-policy

Victoria - *https://www.emv.vic.gov.au/policies/ emmv*

Western Australia - https://www.semc.wa.gov. au/resources/legislation-and-policy-framework

Evacuation from Affected States

The Australian Government Plan for the Reception of Australian Citizens and Approved Foreign Nationals Evacuated from Overseas (AUSRECEPLAN) 2017 outlines the processes for the safe repatriation of Australians, their immediate dependents and approved foreign nationals (evacuees) following an Australian Government led evacuation in response to an overseas disaster or adverse security situation. In the lead up to or following an emergency incident overseas, the Australian Government may decide to evacuate Australians and/or other approved foreign nationals. The decision is made by the Minister for Foreign Affairs following a recommendation by the Inter-Departmental Emergency Task Force (IDETF) meeting.³⁰²

AUSRECEPLAN is a collaborative plan between the Australian Government and jurisdictional governments. Operations under this plan are premised on a task being requested and accepted by a jurisdiction. DFAT is the lead Australian Government agency responsible for the coordination of the evacuation of Australians and approved foreign nationals into Australia. EMA leads and coordinates the onshore reception arrangements into Australia of evacuees from overseas. This is carried out in conjunction with jurisdictional governments.³⁰³

United Nations' Sendai Framework for Disaster Risk Reduction

In 2015, the Sendai Framework for Disaster Risk Reduction 2015-2030 (the Sendai Framework) was adopted by Australia and other members of the United Nations at the third UN World conference on Disaster Risk Reduction (DRR).³⁰⁴ The Sendai Framework is a fifteen-year plan and global blueprint toward the substantial reduction of disaster risk and losses of lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries worldwide.

The Australian Government is engaging in regional and global platforms to share best practices, discuss lessons learned and encourage engagement across all sectors to implement the Sendai Framework. Jurisdictions are collaborating to deliver a national roadmap for implementation as well as incorporating Sendai Framework priorities into existing Australian disaster resilience and emergency management policies to complement standing and matured initiatives within state and territory practices.³⁰⁵ The Framework outlines seven clear targets and four priorities for action to prevent new and reduce existing disaster risks. The Seven Global Targets include:³⁰⁶

- Substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rates in the decade 2020-2030, compared to the period 2005-2015; and
- 2. Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020-2030, compared to the period 2005-2015; and
- Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030; and
- 4. Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030; and
- 5. Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020; and
- Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this Framework by 2030; and
- 7. Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030.

The four priorities are:

- 1. Priority One: Understanding disaster risk; and
- 2. Priority Two: Strengthening disaster risk governance to manage disaster risk; and
- 3. Priority Three: Investing in disaster risk reduction for resilience; and
- 4. Priority Four: Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Figure 9 shows the Sendai DDR Framework.³⁰⁷

Chart of the Sendai Framework for Disaster Risk Reduction 2015-2030

Scope and purpose

The present framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors

Expected outcome

The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience

Targets

Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared to 2005-2015 Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared to 2005-2015

Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030 the faci dev

Substantially reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030 Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020 s

Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of this framework by 2030 Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030

Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas.

Priority 1

Understanding disaster risk

Disaster risk management needs to be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment Priority 2 Strengthening disaster risk governance to manage disaster risk

Disaster risk governance at the national, regional and global levels is vital to the management of disaster risk reduction in all sectors and ensuring the coherence of national and local frameworks of laws, regulations and public policies that, by defining roles and responsibilities, guide, encourage and incentivize the public and private sectors to take action and address disaster risk Priority 3 Investing in disaster risk reduction for resilience

Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment. These can be drivers of innovation, growth and job creation. Such measures are cost-effective and instrumental to save lives, prevent and reduce losses and ensure effective recovery and rehabilitation

Priority 4

Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction

Experience indicates that disaster preparedness needs to be strengthened for more effective response and ensure capacities are in place for effective recovery. Disasters have also demonstrated that the recovery, rehabilitation and reconstruction phase, which needs to be prepared ahead of the disaster, is an opportunity to «Build Back Better» through integrating disaster risk reduction measures. Women and persons with disabilities should publicly lead and promote gender-equitable and universally accessible approaches during the response and reconstruction phases

Figure 9: Sendai Framework for Disaster Risk Reduction 2015-2030

CONCLUSION

Disasters are increasing in frequency, scale, and impact. The impacts have been greatest in the Indo-Pacific region. Disaster resilience is a serious challenge; however, considerable progress has been achieved at local, national, regional, and global levels to strengthen resilience and improve the ability to respond to these events. Australia is a key player in disaster management and humanitarian assistance efforts and is well positioned geographically to respond to disasters in the Indo-Pacific region. Australia has a range of specialist capabilities to respond to humanitarian crises including Australian personnel deployed to provide humanitarian expertise and providing lifesaving humanitarian relief supplies. Their partnerships with local and international humanitarian organizations are also important assets.308

The Department of Foreign Affairs and Trade (DFAT) is responsible for leading the Australian Government's response to international humanitarian crises.³⁰⁹ DFAT works in coordination with Australian Government agencies and other agencies to provide disaster relief. The Australian Government Overseas Disaster Assistance Plan (AUSASSISTPLAN), Protection Framework, and Humanitarian Strategy are all important pieces in Australia's Disaster Relief and Humanitarian Assistance response.³¹⁰

Australian aid and humanitarian strategy goals are helping communities and governments to be better prepared for and respond to natural disasters. They invest in disaster risk reduction in order to reduce the impact of a crisis, save lives, and limit the economic costs of a disaster. Risk reduction activities include improving warning systems, ensuring buildings are built stronger to withstand extreme weather events, and supporting vulnerable communities to gain access to insurance.³¹¹

Australia's domestic plans, policies, agreements, and strategies reflect a cooperative effort for Australia to withstand and recover from the effects of all potential hazards. This includes close collaboration between civil and military entities. Australia has multiple frameworks and plans related to HADR and domestic emergency response.

Australia's National Disaster Risk Reduction Framework outlines a national, comprehensive approach to proactively reducing disaster risk. It is a multisector collaboration within the Australian Government Department of Home Affairs. The framework outlines a coordinated approach to reducing disaster risk and it is designed to leverage the work and progress made across all sectors since the release of the National Strategy for Disaster Resilience (NSDR) in 2011.³¹² The Department of Home Affairs leads the disaster emergency management response through Emergency Management Australia (EMA). EMA is guided by the NSDR and also delivers programs, policies, and services, in line with the Australian Government Disaster Response Plan 2017 (COMDISPLAN) which provisions non-financial assistance to Australian states and territories in an emergency or disaster.313

Australia has recently been faced with a deadly pandemic and destructive bushfires. In response to COVID-19, the Australian Government activated a National Coordination Mechanism (NCM) with coordination with Department of Home Affairs, the Department of Health, as well as states and territories.³¹⁴

Drought and higher temperatures have contributed to longer and more dangerous fire seasons, most recently with the 2019-2020 fire season which triggered a national crisis.³¹⁵ As a result, Australia called on its Defence Forces who supported state fire and emergency services across the country, as well as expressed willingness to accept international support³¹⁶ during Operation Bushfire Assist³¹⁷ from U.S., Canada, Fiji, Indonesia, Japan, New Zealand, Papua New Guinea, and Singapore defence force partners.³¹⁸

APPENDICES

Information Sharing

Understanding how to overcome the information challenges that civilian and military agencies experience during a typical disaster response mission is important. Knowing what the available HADR resources are will assist Joint Task Force leaders and staff during mission planning.³¹⁹ Sharing information is critical since no single responding entity, NGO, International Governmental Organization (IGO), assisting country government, and host government can be the source of all the required information.³²⁰

Collaboration, information sharing (IS), and networking have been the backbone of successful disaster response and preparation. Disseminating information not only to those in-country and threatened by disaster, but also to those responding to assist in the emergency has been crucial to timely, efficient and effective disaster response. Recent technology has advanced to aid predicting and alerting of disasters around the world which has resulted in early warning and evacuation measures and well as opportunities to react and prepare for incoming threats to countries. The following are some of the ways in which information regarding disaster risk management and response are shared. Managing information is central to the overall mechanisms within disaster preparedness and response. There are many resources, stakeholders, and components to consider with IS before, during, and after a natural disaster. This section will discuss country-specific, humanitarian, regional, government, and DoD information sources.

Australian Information Sources

The Australian Disaster Resilience Knowledge Hub (the 'Knowledge Hub') is a national, open-source platform that supports and informs policy, planning, decision making and contemporary good practice in disaster resilience. It houses information on historical Australian disasters. It also highlights current and emerging themes in the resilience sector, linking national guidelines with research and fostering collaboration. The Australian Institute for Disaster Resilience (AIDR) develops and maintains the Knowledge Hub. AIDR is supported by the Australia's Department of Home Affairs, the Australian and New Zealand National Council for Fire, Emergency Services and Land Management (AFAC), the Australian Red Cross, and the Bushfire & Natural Hazards Cooperative Research Centre (CRC).³²¹

Australian Red Cross (ARC) is an independent humanitarian organization, auxiliary to the Australian Government in the humanitarian field, supporting activities to increase community resilience, disaster preparedness, response and recovery both nationally and internationally. ARC works to promote and strengthen international humanitarian laws and values and contribute to improvements in disaster policy and practice.³²² Website: *https://www.redcross.org.au*

Humanitarian Information Sources

United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Regional Office for Asia and the Pacific (UNOCHA ROAP) seeks to optimize the speed, volume and quality of humanitarian assistance and coordinates emergency preparedness and response in the world's most disaster-prone region in support of national governments. ROAP covers 41 countries partnering with them for coordinated and effective international responses to emergency situations. Website: https://www.unocha.org/roap

For UNOCHA situation reports, click on "Subscribe" button on bottom of page.

United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Office of the Pacific Islands (OP)

In 1999, OCHA established an office for the Pacific (OP) to mobilize and coordinate effective and principled humanitarian action in partnership with national and international actors. OCHA OP personnel can provide support in information management, reporting, mapping, media and communications, assessments, humanitarian financing, and inter-cluster coordination.³²³

Subscribe to receive OCHA's information products via their website: https://www.unocha.org/office-pacific-islands/ about-ocha-pacific

ReliefWeb is a service of UNOCHA that consolidates information and analysis from organizations, countries and disasters for the humanitarian community. Website: *https://reliefweb.int*

PreventionWeb is provided by UNISDR to consolidate disaster risk reduction information into an online, easy to understand platform. Website: *http://www.preventionweb.net/english*

The International Federation of Red Cross and Red Crescent Societies (IFRC) is the world's largest humanitarian organization, comprised of its 191 member National Societies including Australian Red Cross, a secretariat in Geneva and over 60 delegations around the world. The IFRC carries out relief operations to assist victims of disasters and combines this with development work to strengthen the capacities of its member National Societies. The IFRC's work focuses on four core areas: promoting humanitarian values, disaster response, disaster preparedness, and health and community care.³²⁴ Website: *http://www.ifrc.org*

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. It also works to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. ICRC, together with IFRC and the 191 Red Cross Red Crescent Societies, make up the Red Cross Red Crescent Movement.³²⁵ Website: *https://www.icrc.org/en*

Humanitarian Response is a platform providing the humanitarian community a means to aid in coordination of operational information and related activities. Website: *https://www.humanitarianresponse.info*

Global Disaster Alert and Coordination System (GDACS) is a cooperation framework between the United Nations, the European Commission and disaster managers worldwide to improve alerts, information exchange and coordination in the first phase after major sudden-onset disasters. Website: *https://www.gdacs.org/alerts*

Virtual OSOCC is a real-time online coordination tool for disaster response professionals from USAR teams, national authorities, as well as regional and international organizations at a global level. Website: *https://vosocc.unocha.org*

The latest alerts can be found here: http://www.gdacs.org/Alerts/default.aspx

To subscribe: http://www.gdacs.org/About/contactus.aspx

Consider other information resources, such as:

Humanitarian Country Teams (HCT)

The HCT is a strategic and operational decision-making and oversight forum established and led by the Humanitarian Coordinator in each country. It is generally comprised of representatives from various UN agencies, IOM, international NGOs, and the International Red Cross/Red Crescent Movement. During a disaster response, HCTs often produce a Situation Report, usually in conjunction with UNOCHA.

Most HCT situation reports can be found through ReliefWeb: *https://reliefweb.int*

Humanitarian Data Exchange (HDX) is an open platform for sharing data across crises and organizations launched in 2014 with the goal of centralizing humanitarian data for easy access and analysis. HDX is managed by OCHA's Center for Humanitarian Data, which is located in the Hague.

Website: https://data.humdata.org/faq

Regional Information Sources

The New Zealand Defence Force Joint Information Fusion Centre (NZDF JIFC) shares Open Source Situational Awareness (OSSA) reports with its partners. It combines information from the New Zealand Meteorological Service, the Joint Typhoon Watch Centre, and the Affected State's NDMO and domestic meteorological service. The report also lists useful contacts, such as the national Red Cross. To subscribe to OSSA reports, email: *jifcconspt@nzdf.mil.nz*

Changi Regional HADR Coordination Centre (RHCC) was launched in September 2014 by Singapore's Ministry of Defence to support the military of a disaster-affected state in coordinating assistance with any foreign militaries provided by assisting states. It aims to provide open, inclusive and flexible platforms that allow both regional and extra-regional militaries to work together effectively in a multinational disaster response effort. RHCC manages the Offers and Prospectuses Electronic Repository and Access Center for Internet Security (OPERA CIS) web portal to broadcast updated situation status of multinational military responses to disasters to minimize duplication and gaps in the provision of foreign military assistance.

Website: https://www.changirhcc.org/

To subscribe to RHCC Weekly and Spot Reports, email: *Changi_RHCC@defence.gov.sg*

The ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre) has developed a Disaster Monitoring and Response System (DMRS). The DMRS is a disaster monitoring tool designed in partnership with the Pacific Disaster Center Global (PDC), a US Government supported applied science and information center based in Hawaii. The system allows the Jakarta based AHA center to visually monitor, geographically detect and synthesize multiple streams of data on hazardous events or disasters such as earthquakes, tsunamis, volcanic eruptions, cyclones, floods, and other natural disasters. The PDC feeds information to the DMRS which receives inputs on hazards in the region as they happen as well as hydrometeorological data such as wind speed and direction, clouds, sea temperature, etc. The maps can provide additional information with overlays based on population density data, location of airports and seaports, and major roads and infrastructure to provide context to threats and enable specific analysis for response and mitigation planning.³²⁶ For updates on disasters in the 10 ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam), email info@ahacentre.org, subscribe at https:// ahacentre.org/subscribe-to-flash-update or go to https://ahacentre.org/Resources Website: https://ahacentre.org

ASEAN Disaster Information Network (ADINET), is an open source repository of information available to the public providing information on regional hazards and disasters. The platform is run by the AHA Centre, which receives information and reports submitted from the public regarding hazards and disasters in the area. Once a report has been submitted, the AHA Centre will vet the information for relevance and accuracy and then add the new information to the platform. Individuals and agencies can sign up to receive real time alerts by email on various categories such as tsunami, volcano, earthquake, floods, oil spills, landslides, etc. The ADINET has been recording disaster information in the region since the AHA Centre became operational in 2012.³²⁷

Website: http://adinet.ahacentre.org

The ASEAN Science-Based Disaster

Management Platform is a one-stop interactive research portal which houses thousands of resources on disasters. It includes documents and publications, reports and research, legislation on disaster risk reduction and disaster management, as well as a discussion forum where individuals can pose questions, participate in surveys and converse about issues surrounding disaster management and mitigation.³²⁸

In addition to hosting the aforementioned forums and platforms, the AHA Centre also disseminates information on a regular basis to the public to raise awareness on disaster risk reduction and preparedness. During emergencies, the AHA Centre releases immediate flash updates and situation updates. Whereas in non-emergency times, the AHA Centre publishes a weekly disaster update, *Diasfore*, and a monthly newsletter, *The Column*. All of these publications are available on *https://www.ahacentre.org* as well as the AHA Centre's social media accounts.

The AHA Centre has hosted an official Twitter account @AHACentre since July 2011. https://twitter.com/AHACentre

The AHA Centre also has a Facebook page with over 14,000 followers: https://www. facebook.com/ahacentre. They use these forums to provide disaster management information and provide updates and tools to an international audience. The Weekly Disaster Update is also shared on these sites, along with photos and videos of disaster management trainings and exercises.

US Government (USG) Information Sources

US Agency for International Development (USAID)

USAID is committed to responding to crises around the world to help people and places most in need. They aim to:

- Promote global health
- Support global stability
- Provide humanitarian assistance
- Catalyze innovation and partnership
- Empower women and girls

USAID produces a monthly newsletter, USAID Newsletter, which is available digitally at: https://www.usaid.gov/news-information/ newsletter

More information and updates from USAID are available via their blog, *IMPACT*, at *https:// blog.usaid.gov* and on Facebook, Instagram, Twitter, and YouTube. Website: *https://www.usaid.gov*

Bureau for Humanitarian Assistance (BHA)

The Bureau for Humanitarian Assistance (BHA) is responsible for leading and coordinating the U.S. Government response to disasters overseas. BHA responds to an average of 65 disasters in more than 50 countries every year. BHA fulfils its mandate of saving lives, alleviating human suffering and the reduction of the social and economic impact to disasters worldwide in partnership with USAID functional and regional bureaus and other U.S. government agencies. BHA works with the international population to assist countries prepare for, respond to and recover from humanitarian crises.³²⁹

USAID/BHA products include situation reports and maps, which are available via email mailing lists as well as Reliefweb.org. Info products (HA Updates/Fact Sheets, etc) are also available on USAID.gov (https://www.usaid.gov/ humanitarian-assistance) For BHA updates on a disaster response, ask the BHA representative for the respective COCOM to add you to the email list:

- BHA.INDOPACOM@usaid.gov
- BHA.SOUTHCOM@usaid.gov
- BHA.NORTHCOM@usaid.gov
- BHA.AFRICOM@usaid.gov
- BHA.SOCOM@usaid.gov
- BHA.CENTCOM@usaid.gov
- BHA.EUCOM@usaid.gov

Pacific Disaster Center Global

The Pacific Disaster Center (PDC) Global has trademarked an early warning and decision support system called DisasterAWARE[®]. DisasterAWARE[®] is primarily for disaster management practitioners and senior decision makers and supports disaster risk reduction and best practices throughout all phases of disaster management, includes early warning and multihazard monitoring, and includes scientificallyverified geospatial data and modeling tools to assess hazard risks and impacts.

The PDC also hosts a public application, Disaster Alert which is a free, early warning app to receive customizable map-based visual alerts of active hazards. The app offers the fastest, most comprehensive global notification system covering every type of natural and man-made hazard to the public. It is available on both iPhone and Android. There is also a link to Disaster Alert without the app to view the world map documenting 18 hazard types.³³⁰ Website: *https://www.pdc.org https://disasteralert.pdc.org/disasteralert*

DisasterAWARE[®] / Emergency Operations (EMOPS) system: (Request account): *https://emops.pdc.org/emops*

To subscribe to PDC reports email: *response@pdc.org*

<u>US Department of Defense Information</u> <u>Sources</u>

All Partners Access Network (APAN)

APAN is the Unclassified Information Sharing Service (UISS) for the U.S. Department of Defense. APAN provides the DoD and mission partners community space and collaboration tools to leverage information to effectively plan, train and respond to meet their business requirements and mission objectives.

APAN's technology team has been supporting humanitarian assistance and disaster response operations for over 15 years. APAN has played an integral role in the success of disaster responses, including the 2015 California Wildfire Response and the 2013 Typhoon Haiyan Response among others, in which they provided militaries and other organizations a platform to share information, increase situational awareness and decrease response time and duplicated efforts for best practices in HADR services.³³¹ For a fuller common operational picture, it is important for DoD personnel to be familiar with APAN while also accessing information sites managed by humanitarian and regional organizations. Website: https://www.apan.org

Note: The Multinational Communications Interoperability Program (MCIP) has an APAN site used in planning exercises and real world HADR information sharing.³³²

Joint Typhoon Warning Center provides advanced warning for U.S. government agencies and organizations in relevant areas. Website: http://www.usno.navy.mil/JTWC

APCSS is a U.S. Department of Defense institute that addresses regional and global security issues, inviting military and civilian representatives of the U.S. and Asia-Pacific nations to its comprehensive program of executive education and workshops. Website: *http://www.apcss.org*

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM)

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DM) is a U.S. Department of Defense organization that was established by U.S. Congress in 1994 and is a direct reporting unit to U.S. Indo-Pacific Command. CFE-DM provides training and education to help U.S. and foreign military personnel navigate complex issues in DMHA. They produce country focused disaster management reference handbooks, after action reports, best practices, and lessons learned for advancement in response coordination. CFE-DM also works to improve cross-coordination and reduce duplication of efforts and promote U.S. involvement in civ-mil consultations and dialogues with relevant HADR parties such as the AHA Center, OCHA and the RHCC. CFE

provides DMHA resources and updates at its website, as well as via their Facebook and Twitter accounts.

Website: https://www.cfe-dmha.org

Disaster Management Reference Handbooks are available for download at: https://www.cfe-dmha.org/DMHA-Resources/ Disaster-Management-Reference-Handbooks

CFE-DM Disaster Information Reports are available for download at: *https://www.cfe-dmha.org/Publications/Reports*

Civil-Military Coordination in Foreign Disaster Relief Missions: Best Practices for Information Sharing is available here: https://www.cfe-dmha.org/LinkClick. aspx?fileticket=fXrWfH3x784%3d&portalid=0

Acronyms and Abbreviations

AADMER	ASEAN Agreement on Disaster Management and Emergency Response
ACDM	ASEAN Committee on Disaster Management
ACMC	Australian Civil-Military Centre
ADF	Australian Defence Force
ADINET	ASEAN Disaster Information Network
ADMM-Plus	ASEAN Defence Ministers' Meeting Plus
ADPC	Asian Disaster Preparedness Centre
ADRRN	Asian Disaster Reduction and Response Network
AGCDTF	Australian Government Counter Disaster Task Force
AGDCC	Attorney-General's Department Coordination Centre
AGDRC	Australian Government Disaster Recovery Committee
AHA Centre	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
AHP	Australian Humanitarian Partnership
AIDR	Australian Institute for Disaster Resilience
APAN	All Partners Access Network
APCSS	The Daniel K. Inouye Asia-Pacific Center for Security Studies
APEC	Asia-Pacific Economic Cooperation
ARC	Australian Red Cross
ARF	ASEAN Regional Forum
ARMOR	Annual ASEAN Monitor Report
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Agency for International Development (now absorbed into DFAT)
AUSASSISTPLAN	Australian Government Overseas Assistance Plan
AUSMAT	Australian Medical Assistance Team
AUSRECPLAN	Australian Government Plan for the Reception of Australian Citizens and Approved Foreign Nationals Evacuated from Overseas
BHA	Bureau for Humanitarian Assistance
CAN DO	Church Agencies Network – Disaster Operation
CCA	Climate Change Adaptation
CDF	Chief of the Defence Force
CFE-DM	Center for Excellence in Disaster Management and Humanitarian Assistance
COMDISPLAN	Commonwealth Government Disaster Response Plan (Australian Government Disaster Response Plan 2017)
CRT	Crisis Response Team
DART	Australian Disaster Assistance Response Teams (not to be confused with the US' OFDA- deployed DARTs)
DFAT	Australian Department of Foreign Affairs and Trade
DFCDR	Department for Community Development and Religion
DMHA	Disaster Management and Humanitarian Assistance

APPENDICES

EAMF	Expanded ASEAN Maritime Forum
EAS	East Asia Summit
EEZ	Exclusive Economic Zone
EMA	Emergency Management Australia
EWG	Experts' Working Groups
FPDA	Five Power Defence Arrangements
FRANZ	Tripartite arrangement between France, Australia, and New Zealand
GDACS	Global Disaster Alert and Coordination System
HADR	Humanitarian Assistance and Disaster Relief
НСТ	Humanitarian Country Teams
HDX	Humanitarian Data Exchange
HHAE	Health and Humanitarian Action in Emergencies Course
ICRC	International Committee of the Red Cross
IFRC	International Federation of Red Cross and Red Crescent Societies
IGO	International Governmental Organization
IMO	International Marine Organization
IORA	Indian Ocean Rim Association
IOS	International Organization for Standardization
IS	Information Sharing
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
LEP	Learning, Empowerment and Protection Initiative
MEIDECC	Tongan Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications
MOU	Memorandum of Understanding
NATCATDISPLAN	National Catastrophic Natural Disaster Plan
NDMO	National Disaster Management Office
NGO	Non-Governmental Organization
NSH	National Security Hotline
NZDF JIFC	New Zealand Defence Force Joint Information Fusion Centre
OCHA	Office for the Coordination of Humanitarian Affairs
OECD	Organization for Economic Cooperation and Development
PDC	Pacific Disaster Center
PIF	The Pacific Islands Forum
PNG	Papua New Guinea
RAMSI	Regional Assistance Mission to Solomon Islands
RHCC	Changi Regional HADR Coordination Center
RIMPAC	Rim of the Pacific Exercise
SAR	Search and Rescue
SIGINT	Signals Intelligence

APPENDICES

SPC	Secretariat of the Pacific Community
SSEUR	SIGINT Seniors Europe
UN	United Nations
UNFPA	United Nations Population Fund
UNHCR	Office of the United Nations High Commissioner for Refugees (also the "United Nations Refugee Agency")
UNICEF	United Nations Children's Fund
UNISDR	UN International Strategy for Disaster Reduction
UNOCHA ROAP	United Nations Office for the Coordination of Humanitarian Affairs Regional Office for Asia and the Pacific
USAID	US Agency for International Development
USAR	Urban Search and Rescue
WASH	Water, sanitation and hygiene
WFP	UN World Food Programme
WHO	UN World Health Organization

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