

# Making Cities Resilient Campaign

## Nomination for Canberra (Australia) to be recognised as a Role Model City



## Annex II

### Nomination form for cities and local governments to participate in the campaign

Please send the nomination form and the mayor's letter to [isdr-campaign@un.org](mailto:isdr-campaign@un.org) or use the online submission form available on the campaign website: [www.unisdr.org/campaign](http://www.unisdr.org/campaign).

Nominations will be accepted on an ongoing basis throughout 2010-15.

| City / Local Government<br>(Please indicate the year the numbers were provided.)   |   |
|--|---|
| City name  | Canberra  |
| Province/State   | Australian Capital Territory  |
| Country  | Australia   |
| Size (year)  | 814.2 km <sup>2</sup> (314.4 sq mi) (2009)  |
| Population (year)  | 358,222 (2011)  |
| Hazard type(s)   | Bushfire, Extreme Heat, Severe Storm, Infrastructure Failure – Power, Human Epidemic Infectious Disease, Flash Floods, Bio-Security Emergencies (includes exotic/endemic animal, plant and pest emergencies). |
| Name of Mayor / Commissioner / Governor / Community leader   |   |
| Mr Simon Corbell MLA, Minister for Police and Emergency Services.  |   |
| Which part of the city administration will be the focal point for the Campaign?  |   |
| Security and Emergency Management Branch, ACT Justice and Community Safety Directorate, ACT Government                           |   |
| Contact details Focal Point  |   |
| Name   | Baden McMaster  |
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| Which local institutions will be engaged in the Campaign?<br>(In addition to the local government.)                              |   |
| Australian National University (ANU) – MNHD Program<br>ACTEW AGL & ACTEW Water<br>Australian Red Cross – Auxiliary to Government |   |

## **Glossary of Acronyms**

|        |  |
|--------|--|
| ACTAS  | ACT Ambulance Service                                    |
| ACTESA | ACT Emergency Services Agency                            |
| ACTFR  | ACT Fire and Rescue                                      |
| ACTRFS | ACT Rural Fire Service                                   |
| ACTSES | ACT State Emergency Service                              |
| AFP    | Australian Federal Police                                |
| AGDRP  | Australian Government Disaster Recovery Payment          |
| AIIMS  | Australasian Inter-Service Incident Management System    |
| AWS    | Automated Weather Station                                |
| BCA    | Building Code of Australia                               |
| CAD    | Computer Aided Dispatch system                           |
| CCIP   | Community, Communication and Information Plan 2012       |
| CCTV   | Closed Circuit Television                                |
| CFUs   | Community Fire Units                                     |
| CH&HS  | Canberra Hospital and Health Services                    |
| CHO    | Chief Health Officer                                     |
| CSD    | Community Services Directorate                           |
| DTS    | Deemed-To-Satisfy  |
| EA     | Emergency Alert system                                   |
| ECCOP  | Emergency Coordination Centre Operations Plan            |
| EID    | Epidemic Infectious Disease                              |
| ETD    | Education and Training Directorate                       |
| ETS    | Emergo Train System                                      |
| HD     | Health Directorate                                       |
| HEP    | Health Emergency Plan                                    |
| IAM    | Identity and Access Management project                   |
| ICCS   | Incident Command and Control System                      |
| JACSD  | Justice and Community Safety Directorate                 |
| NCRDP  | National Capability Review and Development Program       |
| NCTC   | National Counter Terrorism Committee                     |
| NDRP   | Natural Disaster Resilience Program                      |
| NDRRA  | Natural Disaster Relief and Recovery Arrangements        |
| NEMC   | National Emergency Management Committee                  |
| NERAG  | National Emergency Risk Assessment Guidelines            |
| NEWS   | National Early Warning System                            |
| NGOs   | Non-Government Organisations                             |
| NSDR   | National Strategy for Disaster Reduction                 |
| PatCH  | Paediatrics at the Canberra Hospital                     |
| PPRR   | Prevention, Preparedness, Response and Recovery          |
| PSQU   | Patient Safety and Quality Unit                          |
| RSC    | Recovery Sub-Committee                                   |
| SCPEM  | Standing Council for Police and Emergency Management     |
| SEMB   | Security and Emergency Management Branch                 |
| SEMPG  | Security and Emergency Management Planning Group         |
| SEMSOG | Security and Emergency Management Senior Officials Group |
| SEWS   | Standard Emergency Warning Signal                        |
| TAMSD  | Territory and Municipal Services Directorate             |
| TCH    | The Canberra Hospital                                    |

## Hazard and Vulnerability Profile

(Please indicate major disasters that have occurred, prevailing hazards and vulnerable conditions.)

### Summary

Between 1939 and 2003, the Australian Capital Territory (capital Territory of the Commonwealth of Australia that contains Canberra), often abbreviated ACT, has experienced severe bushfire events when intense bushfires burnt over thousands of hectares and in some cases entered urban areas under the influence of high temperatures, dry conditions and strong winds. The worst of these was in January 2003 and which resulted in the loss of four lives, destroyed over 500 dwellings and incurred the highest cost of any natural disaster in the ACT, including property losses valued between \$600 million and \$1 billion.



While significant flooding events in Canberra are not frequent, there have been major events, including the flash flood that occurred on Australia Day 1971 which killed seven people including four children, injured 15 and affected a further 500 people. The insurance damage at the time was estimated at \$9 million. It was estimated that around 95mm of rain fell in one hour during this event. Recent floods have occurred in 2003, 2010 and 2011 but not to the same extent.



Severe thunderstorms occur in this region and in recent years such storms have been frequent, with extensive damage occurring on 2 December 2005, New Year's Eve 2006 and in February 2007.

Canberra has experienced on average one earthquake per year for the past 50 years. It lies within a broad north east – south west trending belt of epicentres. The largest events recorded in this zone were of Richter magnitude ML 5.6, the same size as the December 1989 Newcastle earthquake.

### Timeline of significant weather events in the ACT and surrounding areas 2007-2011

**Last 5 years:**

January 2011 - A severe thunderstorm in Canberra was associated with reports of golf ball sized hail, resulting in roof damage in the Tuggeranong area (south Canberra) with over 200 telephone calls for assistance to the ACT State Emergency Service (SES).

December 2010 - Heavy rain during the last week of November and first weeks of December led to substantial flooding during early December, with widespread evacuations of nearby towns including Wee Waa, Coonamble, Queanbeyan and Wagga Wagga. The Burrinjuck and Captains Flat dams were in danger of failure, with 135 flood rescues and over 2800 requests for assistance to the New South Wales SES between November 29 and December 13. The ACTSES responded to 927 requests for assistance.

January 2009:

- Thunderstorm with 2cm hail at Yarralumla, an inner suburb of Canberra. Heavy rain caused flooding of stormwater drains after 38mm at Curtin and 37 mm at Watson. Roads were blocked when strong winds brought down trees. Lightning hit a substation in Melba causing power outages to nearby homes. The ACTSES responded to 228 requests for assistance. Thunderstorms and a possible tornado in the northern suburbs of Canberra caused a 2 kilometre (km) trail of damage.
- Canberra Airport recorded a wind gust of 106 km/hr from a thunderstorm downburst. This is the strongest winds in January since 1980 and the strongest winds in any month for over 12 years. Several trees were brought down blocking roads in Curtin.
- Strong winds during a dust storm on the south-west slopes, the highest gust of 100 km/hr at Khancoban was the second highest wind gust at that site over the past 7 years. The strong winds brought down over 80 trees in the Howlong area and caused power outages affecting over 4000 people. The NSWSES reported nearly 200 jobs. In the northern suburbs of Canberra a 2km trail of damage in Harrison, Dunlop and Palmerston was believed to have been caused by a tornado. The NSWSES reported over 80 jobs.

December 2008 - Severe thunderstorm producing heavy rain and small hail in Canberra caused local flash flooding in the Deakin-Curtin area of Woden Valley. Up to 56mm recorded at Curtin (Deakin West) in about 2 hours. The ACTSES responded to 117 requests for assistance.

October 2008 - A thunderstorm, small hail and strong winds brought down trees in northern Canberra. Minor structural damage from strong winds in the Queanbeyan area caused 6 jobs for the NSWSES.

September 2008 - A line of storms caused strong winds over southern districts of NSW. The highest gust was 126 km/hr at Thredbo Automated Weather Station (AWS), the strongest winds in NSW during September, and 104 km/hr at Cabramurra, both in the Snowy Mountains. The ACT experienced the strongest winds since December 2005 with a gust of 98km/hr at Canberra Airport. Mount Ginini in the mountains South-West of Canberra recorded a similar gust. There were many reports of fallen trees causing damage to buildings with several houses unroofed. One person was injured in the suburb of Kambah when a tree pinned him to the ground. The ACTSES responded to 105 requests for assistance.

August 2008 - An upper trough brought with it a cold pool of air, bringing light snowfalls to low levels over the Southern and Central Tablelands and the higher parts of the south west slopes. Snow settled to a depth of about 4cm near Batlow on the South West Slopes and 2cm at Crookwell. Snow was reported on the Hume Highway near Yass disrupting traffic. There were also snow flurries in some northern Canberra suburbs with heavier falls in the Collector area on the Southern Tablelands, disrupting traffic flows on the Federal Highway. Over half a metre of snow fell in the Snowy Mountains during the first 10 days of August.

November 2007 - On the 3<sup>rd</sup>, thunderstorms with heavy rain and local flash flooding were reported in Canberra's central business district. On the 28th at Jerangle, south of Canberra, 66mm in a short period was recorded.

June 2007 - Heavy snow between Canberra and Braidwood closed Kings Highway. Up to 15cm of snow was reported at Bungendore, east of Canberra. In the hills south east of Canberra, falls of 20-30cm were reported, closing all local roads. The weight of snow broke large branches off many trees. Falls up to 10cm were reported from higher ground of the Central Tablelands. At Michelago, south of Canberra, 10-15cm of snow closed the Monaro Highway for several hours.

February 2007 - At Canberra a severe thunderstorm occurred in the Kambah-Weston Creek area (southwest Canberra). Flash flooding damaged many houses. The highest fall of 56mm occurred at Stirling College. At Canberra, widespread heavy hail up to 3cm in diameter covered the ground to a depth of 20cm causing 1 metre high drifts in the Civic Centre. Cars were damaged and many buildings were closed due to water damage. Telecommunications were also cut. Hail caused extensive damage at the Australian National University which was closed for a day along with numerous other government buildings and several schools. More than 1,100 homes were flooded. The ACTSES responded to 289 requests for assistance.

**Earlier significant events:**

January 2005 - Heavy storms and a mini cyclone struck Canberra leaving a path of destruction from Belconnen to Fyshwick. Hundreds of trees and power lines were brought down by the severe winds and resulted in 1 death with 51 suburbs reporting significant damage.

January 2003 - Temperatures in the 40 degree Celsius range, strong winds and lightning strikes resulted in the most destructive fires the ACT has experienced.

January 1971 - flash flood in the Woden Valley.

Achievements and plans in relation to the ten essentials areas

A - Make an estimation of the status per essential as follows:

1 - poor/nothing in place, 2 - some progress in place, 3 - in place, well functioning, or N/A

B - Please describe main areas of progress and achievements.

C - Please identify activities and plans your city will pay special attention to improve the current situation during the campaign and beyond. Additionally, feel free to propose special events or activities your city would like to undertake to raise awareness on disaster resilience. Please select the respective Essential(s).

**Essential 1 – Risk reducing organization and coordination in place**

Status - 3

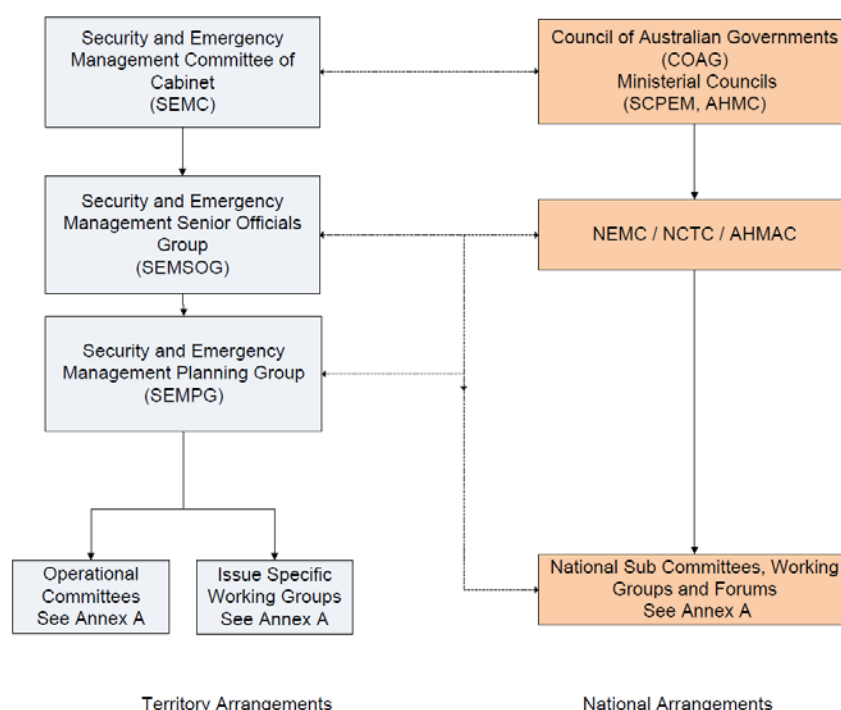
**Progress and achievements –**

**Emergencies Act 2004**

- The *Emergencies Act 2004 (the Act)* has been established in response to the Report of the McLeod Inquiry into the Operational Response to the January 2003 Bushfires in Canberra.
- The Act provides legislative basis for the following objectives:
  - to protect and preserve life, property and the environment; and
  - to provide for effective emergency management that—
    - (i) has regard to the need to prepare for, prevent, respond to and recover from emergencies; and
    - (ii) takes an all-hazards approach to emergency management; and
  - to provide for the effective and cohesive management by the commissioner of the state emergency service, the ambulance service, fire and rescue and the rural fire service; and
  - to recognise the value to the community of all emergency service members, including volunteer members.
- The Act establishes the Security and Emergency Management Senior Officials Group (SEMSOG) for the ACT Government, comprising senior executive staff across relevant directorates and agencies, to enhance emergency management capabilities across Canberra. These capabilities include work targeted at:
  - ensuring all directorates and agencies understand their role in disaster risk reduction and preparedness.
  - enhancing and sustaining disaster resilience across government, business (including essential services/infrastructure), and the broader Canberra community;
  - enhancing capabilities to reduce community vulnerability to the effects of emergencies, including the improvement of emergency management awareness and training;

- coordinate and develop whole of government security and emergency management policy arrangements, and related sub-plans;
- provide for the coordination and review of specific security and emergency management matters between government entities; and
- provide advice to ministers about security and emergency management.
- The Act also provides for the SEMSOG to assist Cabinet in leading the ACT Government's response and recovery to an emergency in Canberra, with support provided by various crisis coordination centres and strategic planning groups.
- During an emergency, the SEMSOG may engage with different agencies, volunteers, Non-Government Organisations (NGOs), business community members and other jurisdictional governments.
- The Act also provides for the statutory appointment of an 'Emergency Controller'. The functions and powers of an emergency controller may be granted if an emergency has happened, is happening, or is likely to happen in Canberra.
- Figure 1 below details the relationship of the key ACT and national forums for emergency management.

**Figure 1 – Governance arrangements for emergency management prevention and preparedness in the ACT.**



### Risk Reduction Planning

#### ACT Emergency Plan

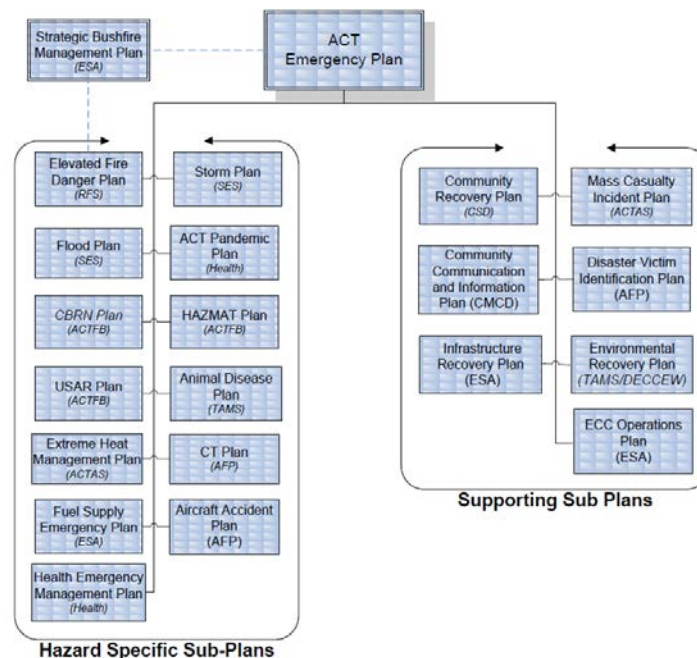
- Accountability for the management of risks in Canberra is defined and supported by a planning framework that ensures agencies have in place preparedness arrangements to respond to emergencies when they occur.
- Arrangements have also established structures to support the functions and activities of the SEMSOG, including the review and development of emergency plans for all hazards faced by Canberra.
- The *ACT Emergency Plan* (the Plan) is regularly reviewed and refreshed to provide for an up-to-date integrated emergency response, utilising the skills and resources of all relevant directorates and agencies and the community to respond to emergencies.
- The Plan also aims to ensure identified arrangements are scalable and flexible so they can be adapted as required.



### Sub Plans -

- The Act also provides that the Plan must include a plan for an emergency if there is a reasonable possibility of the emergency happening in Canberra.
- Sub Plans are prepared when the management arrangements necessary to deal with the effects of the hazard or the supporting function:
  - differ from the routine operational and coordination arrangements of agencies, including long running incidents;
  - require specific measures to reduce potential impacts on life, property or the environment of Canberra; or
  - require the application of the resources and capability of multiple agencies or cross jurisdictional resources.
- 'Hazard Specific Sub Plans' or 'Supporting Sub Plans' (see Figure 2) are prepared to ensure the delivery of comprehensive emergency management arrangements relevant to the hazard, consistent with the Prevention, Preparedness, Response and Recovery (PPRR) framework for identified hazards, and where operational arrangements and functions may arise from a range of hazards such as arrangements for recovery, mass casualty and fatality management.
- Supporting Sub Plans are generally focused on functional arrangements to provide support to lead agencies and need not apply the comprehensive framework of PPRR.
- In the development of Hazard Specific and Supporting Sub Plans, agencies across Canberra are required to consider issues associated with climate change, and where appropriate, identify appropriate mechanisms for adaptation.
- As required, operational plans, procedures and doctrines may be prepared to support emergency management arrangements in Canberra. These may include:
  - operational plans for significant events, such as mass gatherings and major community or political events to direct police and emergency services in operational response specific to the particular event; or
  - operational procedures and doctrine to assist emergency services and agencies in responding to incidents that have a low level of complexity and require limited inter-agency coordination of resources.
- Such arrangements are at the tactical or operational level, and provide the general day-to-day operational framework for response and supporting agencies. These arrangements will usually underpin the more complex and specific sub plans of the Plan.

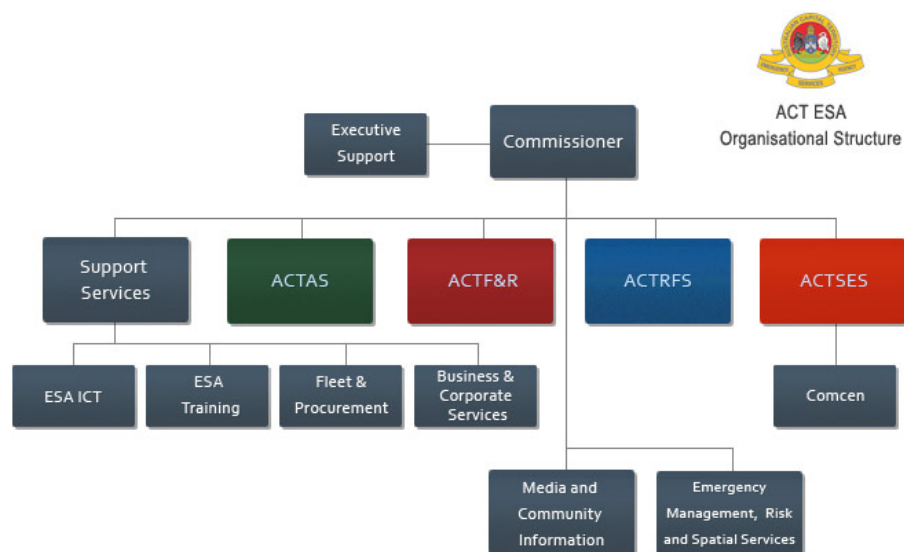
**Figure 2 – Hazard Specific and Supporting Plans Framework.**





- The Justice and Community Safety (JACS) Directorate of the ACT Government has a vision for emergency services that is “a prepared community supported by an expert and timely emergency service response.” To achieve this the Directorate, through the Emergency Services Agency (ESA) works to:
  - reduce and prevent the impact of emergencies;
  - ensure the preparedness of the community; and
  - have resources and services ready to respond to emergencies should they occur.
- The Emergency Services Agency (ESA) structure, as seen at Figure 3, integrates the following::
  - ACT Ambulance Service (ACTAS), responsible for providing emergency and non-emergency ambulance and aeromedical ambulance services to the ACT and surrounding south east NSW region. ACTAS also provides Intensive Care Paramedics (ICPs) to, and conducts the day-to-day management of, the Snowy Hydro SouthCare helicopter.
  - ACT Fire and Rescue (ACTFR), responsible in a variety of areas related to fire and rescue, providing many functions ranging from fire suppression to rescue capabilities to community safety activities. ACTFR is acknowledged as one of the most multi skilled fire and rescue capabilities in Australia.
  - ACT State Emergency Service (ACTSES), a volunteer emergency service organisation which gives immediate assistance to the community during emergencies and disasters. The main function of the ACTSES is to undertake planning and response operations for storms and floods. ACTSES may also assist ambulance, fire and police services in dealing with a range of incidents or emergencies
  - ACT Rural Fire Service (ACTRFS), who are responsible for protecting life, property and the environment from all bush and grass fires that occur within rural or non-suburban areas of the ACT including Canberra. ACTRFS has both volunteer brigades and a brigade of employees from a local government directorate who work together responding to bush and grass fires, and conducting hazard reduction burning to reduce the fire threat to the ACT, including Canberra.

**Figure 3 – Organisational Structure of the Emergency Services Agency (ESA).**



- These services, together with a range of supporting groups, also provide risk planning, training, fleet communications and technology services. In regards to communication, the ESA agencies utilise the Australasian Inter-Service Incident Management System (AIIMS). The AIIMS provides for a robust, scalable, and a widely applicable system for dealing with all manner of complex incidents and emergencies.
- ACT Policing is a business unit of the Australian Federal Police (AFP) which was created for the purpose of providing policing services to the ACT, inclusive of Canberra, under the auspices of a Policing Arrangement between the Commonwealth and ACT Governments. The current Purchase Agreement was signed in June 2011 and is managed by the Directorate.

- ACT Policing utilise the Incident Command and Control System (ICCS) designed to improve emergency response operations of all types and complexities across their organization.
- The Directorate also contains the Security and Emergency Management Branch (SEMB). SEMB provides whole of government coordination of strategic policy in emergency management, critical infrastructure protection/resilience, protective security and counter terrorism. SEMB also provides secretariat duties for the emergency management committees that are engaged in PPRR across Canberra.
- Volunteers are involved in virtually every aspect of the PPRR process in Canberra. Without them, the level of protection available to our community would be reduced. The Directorate has over 600 volunteers. Our volunteers generally provide several hours each week for training, which is usually during the evening, and make themselves available to respond when an emergency occurs. This may entail leaving work at short notice, so they need to discuss their possible commitment with their employer.

#### Participation of citizen groups and civil society

- The ACT Government has established over 50 Community Fire Units (CFUs) across the Territory. The CFUs provide Canberra residents living in high bushfire risk areas with the training, equipment and support to protect their homes in the event of a bushfire. The expansion of this program has been significant since its introduction 5 years ago as part of the ACT Government's response to the January 2003 bushfires. There are approximately 1,000 volunteers that make up the CFUs, which comprises of residents who live close to bush land areas across Canberra, and are trained and equipped by the ACT Fire and Rescue (ACTFR) to safeguard local homes during a bushfire until the fire services arrive.
- The ACT Rural Fire Service (ACTRFS) currently consists of approximately 480 Brigade Volunteers operating out of 8 brigade stations across the Territory. This is supported by over 160 Territory and Municipal Services Brigade staff.
- The ACT State Emergency Service (ACTSES) currently consists of approximately 228 volunteers located in 7 separate units.
- The development and implementation of a range of Community Services Directorate initiatives that deals with working with community organisations who deliver services to vulnerable people to also educate their clients on preparing for emergencies. The *'Think Ahead, Be Ready, Stay Safe'* Emergency Preparedness Guide (the Guide) has been used by a wide range of community organisations in the ACT. A feature of the process for distributing the Guide to vulnerable members of the community included the role of community service organisations and ACT Government directorates and agencies in working with their vulnerable clients to raise awareness of emergency preparedness and to complete a *"Grab and Go Kit"* with details of their medication, important phone numbers, and providing evacuation kit items.

*A copy of the 'Think Ahead, Be Ready, Stay Safe' guide is at **Appendix A**.*

*A copy of the 'Grab and Go Kit' is at **Appendix B**.*

- Community preparedness has been significantly enhanced with over 100 properties participating in the *'Farm FireWise'* program in 2010-11. The program helps rural landholders prepare for and prevent bushfires by identifying the best fire protection strategies for individual properties and circumstances.
- The ACT Government implements an extensive ongoing bushfire fuel management program with the community. Bushfire fuels (leaf litter, twigs, bark, shrubs and grasses etc) build up naturally over time and fuel management (or fuel reduction) refers to the reduction or removal of these combustible materials through various means including mechanical, chemical, biological or fire.

#### Plans –

- ACT Government agencies develop projects that aid in mitigating disasters and provide appropriate emergency management capability and capacity, and are consistent with a framework based upon a Territory-wide prioritised natural disaster risk assessment. The analysis and treatment of risk will consider the National Disaster Resilience Framework, which articulates the high level disaster resilience agenda which was established by Standing Council for Police and Emergency Management (SCPEM). The framework sets clear guidance and principles for the emergency management sector in contributing to a disaster resilience agenda being pursued across all jurisdictions and all levels of government.
- The ACT Government undertakes exercises and workshops to examine and assess the effectiveness of current

and possible future emergency management arrangements.

- Training and exercising of the Plan and its Sub Plans are undertaken on a routine basis to ensure agencies are familiar with and understand the described emergency arrangements, and to provide for ongoing review and improvement of arrangements, policies and processes.
- Emergencies Act 2004 (the Act)
- Security and Emergency Management Senior Officials Group (SEMSOG)
- ACT Emergency Plan
- National Disaster Resilience Framework – established by the Standing Council for Police and Emergency Management (SCPEM)

## Essential 2 – Budget assigned

Status - 3

### Progress and achievements –

- The ACT Government budgets for disaster risk reduction which includes various measures of emergency mitigation, preparedness and advocacy. In 2010-11 this included: \$1.252m allocated to implement the latest version of the Strategic Bushfire Management Plan consisting of a range of bushfire mitigation programs for community education and awareness, construction and upgrade of water points, helicopter landing pads, fuel breaks, infrastructure to facilitate grazing and prescribed burning for fuel management, \$1.64m to construct a new ACTRFS Facility at Tidbinbilla and \$2.93m to progress the ESA Mobile Data Solution Project.
- Whilst the ACT Government doesn't provide 'direct' incentives for people in Canberra to reduce disaster risk we do provide training materials and advice such as the 2010 StormSafe campaign and indirect incentives. These initiatives include such measures as the ACTSmart rebates and assistance program to indirectly allow communities to better reduce the risks to certain emergencies they may face.
- In December 2009, the ACT Chief Minister signed the National Partnership Agreement on Natural Disaster Resilience. The ACT Government in partnership with the Commonwealth implement the Natural Disaster Resilience Program (NDRP). The Program aims to achieve safer, sustainable communities better able to withstand the effects of natural disasters and reduce the risk, damage and losses caused by such events. The funding for the program is on a cost sharing basis and in 2011-12 both the ACT and Commonwealth Governments committed \$1.285m to implement a range of programs across Canberra.
- The ACT Government is determined to set the standard in resource and energy efficiency and to achieve this has established a \$3 million loan fund available to ACT Government agencies. This fund supports targeted action to reduce emissions by agencies under the ACT Government Carbon Neutral component of *Weathering the Change Action Plan 2* (detailed further at Essential #3). Agencies can access the fund to borrow money to implement sustainability projects and are able to repay the loan with the financial savings made from implementing the project.
- The ACT Government allocated \$380,000 to Climate Change Grants to assist community organisations and individuals in building support for community action on climate change.
- The Australian Government Disaster Recovery Payment (AGDRP) is a one-off payment provided under the Social Security Act 1991 to eligible Australian residents who are adversely affected by a major disaster. The AGDRP provides short-term financial assistance of \$1000 to adults and \$400 to children who are adversely affected by a major or widespread disaster, either in Australia or overseas.

### Improving Emergency Services

- The ACT Government has recognised the importance of our emergency services and is committed to ensuring locations of emergency services facilities are optimised to meet both community demographics of Canberra and operational response to emergencies.
- It is envisaged that the decision in the relation to future emergency sites will impact on planning arrangements for the Territory.
- The Government allocated \$2.2 million in the 2008-2009 Budget to commence the design and planning for refurbishment or construction of the initial batch of new facilities for fire, ambulance and emergency services.
- In March 2012, the ACT Government opened the new state of the art police station. The \$23.5m Police Station is the culmination of four years work between the ACT Government, Justice and Community Safety Directorate and ACT Policing. The station provides the best possible infrastructure for ACT Policing, while maximising energy efficiency to reduce the building's carbon footprint through features such as chilled beam air conditioning;

rainwater harvesting; evacuated tube solar hot water systems; and motion-sensing, integrated heating, lighting and cooling systems.

**Figure 4 – Belconnen Police Station**

a) *Central courtyard acts as a refuge for officers on duty, and allows daylight into the interior.*



b) *Staff meal room opens onto the courtyard.*



c) *Unique exterior design that includes white sunscreens that provide visual privacy.*



- The ACT Emergency Services Agency (ESA) *Station Upgrade and Relocation Strategy* is about improving community safety for Canberrans as the city expands and the population grows. It seeks to reduce, and where possible, prevent the impact of emergencies should they occur, with particular attention to the protection and preservation of life, property and the environment.
- Extensive analysis has been undertaken into where ambulance and fire stations should be located in the Territory for at least the next 20 years. The studies identify options as to where new ESA stations will be required to meet current and projected demand as the city grows.
- The Strategy was prepared from the study findings. Since then an Implementation Plan has been developed in

close consultation with operational staff to determine the most effective way to deliver the recommended service improvements.

- Subject to ACT Government budgetary and statutory approvals, the ESA plans to deliver service improvements to the ACT in four phases between 2012 and 2017.

*A copy of the factsheet on the ESA Station Upgrade and Relocation Strategy is provided at **Appendix C**.*

#### Natural Disaster Relief and Recovery Arrangements (NDRRA)

- The Australian Government provides funding through the NDRRA to States and Territories to help pay for natural disaster relief and recovery costs. Under the NDRRA, reimbursements are provided up to 50 per cent of State or Territory expenditure on personal hardship and distress (PHD) assistance. PHD expenditure is funding generally used during an emergency for the provision of:
  - clothing;
  - food;
  - accommodation;
  - repairs to housing; and
  - replacement of essential household items and personal effects.
- The Australian Government may also reimburse 50 to 75 per cent of State or Territory expenditure on measures including:
  - restoration or replacement of essential public infrastructure (such as roads or bridges);
  - concessional interest rate loans to small businesses, primary producers, voluntary non-profit bodies and needy individuals; and
  - In severe events, funding for a community recovery package is available to help affected communities recover. Activation of a community recovery package requires agreement by the Prime Minister and State Premier or Territory Chief Minister.
- The community recovery package may include the following assistance measures:
  - community recovery funds to help restore social networks and community facilities;
  - small business recovery grants to assist with clean-up and recovery costs; and
  - primary producer recovery grants to assist with clean-up and recovery costs.

#### Exercises – preparedness.

- SEMB manages the ACT Government's National Counter Terrorism Committee (NCTC) Drill Style Exercise Program. This included an annual budget of \$160,000 which also covered exercise consumables.
- The ESA and ACT Policing are the primary agencies that use funding for this program, however other agencies such as Territory and Municipal Services Directorate (TAMSD) and the Health Directorate (HD) also utilise this funding.
- SEMB uses this funding for training of SEMB staff, Liaisons Officers and Volunteers in the Territory Crisis Centre.
- SEMB manages the National Capability Review and Development Program (NCRDP).
- In 2010, SEMB used this program to undertake the multiagency, multijurisdictional counter terrorism exercise Mercury 10.

#### Plans –

- The ACT Government is currently in the process of advertising for applications for the 2012-13 ACT NDRP.
- SEMB is currently in the process of preparing bid submissions for conducting Counter Terrorism exercises across the ACT Government and ACT Policing as part of the NCTC Drill Style Exercise Program. The 2012/13 Exercise Program will emphasize multi-agency exercises that will improve financial efficiencies, develop agency coordination and capability, and innovate the execution of these exercises. To facilitate this, an ACT Government NCTC Exercise Management Advisory Group has been created to act as a forum to discuss, plan, implement and manage counter-terrorism exercises. The Group is made up of representatives from all relevant Police and Emergency Services agencies. The overall concept of the group is to provide a seamless integration between ACT Government, ACT Policing and other Federal Departments.
- Strategic Management Bushfire Plan
- Natural Disaster Resilience Program (NDRP)



**Progress and achievements –**

**The Canberra Plan – Towards Our Second Century**

- The Canberra Plan was launched in 2004 to guide the growth and development of Canberra for this generation and beyond. It set out a strategy that reflected the views and values of Canberrans and responded to the challenges facing the city.
- Underpinning the Plan's vision is the concept of sustainability. This recognises that innovation and creativity must be encouraged in order to continue strong economic growth, that the causes of disadvantage and social exclusion must be addressed if all citizens are to share in the city's good fortune, and that our natural and built environment must be kept healthy so that all in the community can enjoy the recreational and spiritual benefits they offer.
- The Canberra Plan is underpinned by a wide range of more detailed plans and strategies. Importantly, these plans articulate the ACT Government's priorities and outline ways in which various sectors of the community can participate in and contribute to Canberra's future prosperity.
- The *Canberra Plan: Towards Our Second Century* articulates the vision through seven strategic themes that reflect the ACT Government's priorities. The themes are:
  - quality health care
  - a fair and safe community
  - excellent education, quality teaching and skills development
  - a strong, dynamic economy
  - a vibrant city and great neighborhoods
  - a sustainable future
  - high-quality services.

**Emergency Risk Management Project**

- The ACT Government has developed a Territory-wide prioritised natural disaster risk assessment in accordance with the principles and generic guidelines on risk management provided in the standard *AS/NZS ISO 31000: 2009 – Risk Management: Principles and guidelines* and the *National Emergency Risk Assessment Guidelines (NERAG) 2010*. These documents provide a platform to a systematic approach for identifying, analysing, evaluating and treating emergency risks to effectively determine the most appropriate strategies for managing such emergencies and mitigate the impact on the community, its social fabric and surroundings. This project is being developed and will be implemented in close conjunction and consultation with relevant stakeholders, including public consultation with the Canberra community.
- The project has considered the risks associated with a range of natural, technological, environmental and other hazards that, should a disaster event occur as a result of any of these hazards, would require a coordinated multi-agency response and specific command posts to manage the event.
- Key to this project is the consideration of existing emergency management arrangements and plans, such as the Plan and Sub Plans, with a view to build on current strategies rather than replace or duplicate them.
- This Emergency Risk Management Project is a continuous process. Monitoring and reviewing are integral parts of the process. Risks and the effectiveness of the treatment strategies need to be monitored to ensure risk levels reflect the positive impact of those strategies.
- The Working Group established for the Emergency Risk Management Project is also committed to monitoring and reviewing its report, taking into consideration:
  - changes to context;
  - changes to legislative requirements;
  - changes to stakeholder involvement;
  - changes to hazards, the community and the environment;
  - the emergency risk management project; or
  - actual emergencies arising from risks.

### Climate Change Adaptation

- The ACT Government is undertaking the development of a Climate Change Adaptation framework.
- Inclusive to this framework, is 'Weathering the Change the ACT Climate Change Strategy 2007-2025'. This strategy provides an overview of climate change science, the predicted impacts on the ACT Government's vision and direction for responding to climate change. It has evolved from a discussion paper released in March 2006, to which many submissions, from the public, business and community groups were received.
- The Strategy sets out the approaches the Government will pursue between now and 2025 to support the broader community response to climate change. Detailed Action Plans have been developed at regular intervals during the life of the Strategy. In this way, the Strategy remains responsive to new knowledge and technological developments in Australia and internationally, and can be adjusted accordingly.
- As part of this framework, the government aims to prioritise climate change work and responses within a number of related current ACT policy and strategy reviews and developments.
- In the development of all Sub Plans, agencies are required to consider issues associated with climate change, and where appropriate, identify appropriate mechanisms for adaptation.

### Other

- A dedicated risk and planning group has been established in the ESA. This section undertakes a range of functions that deals with emergency risk planning, including:
  - improved capabilities for technical and specialist services across the ESA;
  - undertaking the knowledge transfer to service personnel to provide redundancy and capability for emergency risk analysis;
  - the provision of all hazards risk advice to key stakeholders through an operational planning group;
  - the acquisition and presentation of specialised, incident-critical intelligence to Incident Management Teams;
  - undertake specialist training for risk analysis;
  - the provision of training to staff in the management and use of tools, systems and procedures for specialist risk analysis;
  - maintaining specialist data sets for situation analysis and emergency management planning.
- The principles of emergency risk management utilised in Canberra are used to inform and develop Sub Plans.
- Since 2004, a detailed topographic map for the ACT was established and updated by Geoscience Australia in collaboration with relevant ACT Government directorates and agencies. The map is available to the general community and is of significant assistance to emergency service workers.

### Plans –

The following Acts, Regulations and Plans provide the basis of legislative support that underpins urban development plans, decisions and plans the city's resilience:

- *Australian Capital Territory (Planning and Land Management) Act 1988* - provides for the planning of the Australian Capital Territory and the management of land in the Territory. The Act details the legislative connectivity of the *National Capital Plan* and the *Territory Plan*.
- *The National Capital Plan* – the purpose of the *National Capital Plan* is to ensure that the Commonwealth's national capital interests in the Territory are fully protected, without otherwise involving the Commonwealth in matters that should be dealt with by the Canberra community.
- *Planning and Development Act 2007* and *Planning and Development Regulation 2008* - This Act is the key regulatory instrument for land, planning and building policy that the ACT Government administers.
- *Territory Plan* - ensures that the Territory is planned and developed 'in a manner not inconsistent with the *National Capital Plan*, the planning and development of the Territory to provide the people of the Territory with an attractive, safe and efficient environment in which to live and work and have their recreation'.
- *The Canberra Spatial Plan* - is the Australian Capital Territory's key strategic planning document, designed to 'provide clear strategic directions for the development of Canberra over the next 30 years and beyond.'
- *Building Act 2004* – regulates buildings and building work within the ACT.
- *Emergencies Act 2004* – 'to protect, preserve life, property and the environment...'
- From the outcomes of the Emergency Risk Management Project, a report will be developed that is consistent with the Australian National Disaster Resilience Framework, the aim of which is to support measures to strengthen communities, individuals, businesses and institutions to minimise the adverse effects of disasters on



the ACT.

- The ACT Government has released '*Weathering the Change Draft Action Plan 2*' for public consultation. The purpose of Draft Action Plan 2 is to consult on strategies and actions that will place Canberra on a pathway towards zero net emissions and increase our ability to adapt to a changing climate. The ACT Government has set the most ambitious greenhouse gas reduction targets of any jurisdiction in Australia. Legislation has committed ACT targets of zero net emissions by 2060 and a 40% reduction in greenhouse gas emissions from 1990 levels by 2020. A zero net emissions Canberra in 2060 will look, feel and be very different to the city we live in today. For Canberra, this transition provides a unique opportunity to demonstrate and showcase the feasibility and benefits of being responsive to climate change.
- The Security and Emergency Management Planning Group (SEMPG), a whole of government group of senior officials across government that deal with security and emergency management, are currently considering issues related to making the Plan and Sub Plans available to the public, and whether sanitised versions will be required that do not delineate on sensitive operational procedures.
- The ACT Government is preparing to make available to the general public appropriate flood data information so they are aware of the threat through urban areas, roads and pathways from floods.

#### Essential 4 – Investment in risk reducing infrastructure

Status - 3

##### Progress and achievements –

- Under the *ACT Asset Management Code*, ActewAGL prepares and implements an ongoing asset maintenance program. Currently, a major part of the maintenance program is related to the inspection and replacement of the ageing natural timber distribution poles.
- The Murrumbidgee River was introduced as a new supply source as a contingency measure for drought (2002-05) in the ACT. A pump station has been constructed near Cotter Pump Station to allow up to 50 ML/day to be pumped from the Murrumbidgee to the Mount Stromlo Water Treatment Plant. This supply will only be drawn upon in emergency conditions such as extreme droughts.
- The ACT Government has approved ACTEW's plans to increase capacity of the Cotter Dam, which will see the ACT's flagship water supply by increase the capacity of Cotter Dam from 4 to 78 gigalitres.
- Major projects are being planned or are underway relating to the provision of emergency power supply capacity to ACT: a new bulk transmission connection point at the southern end of Canberra, a new zone substation to replace the ageing Fyshwick Zone Substation, progressive increase of existing zone substation capacity at multiple zone substations across the network, relocation of existing sub-transmission assets including Belconnen Zone Substation and Causeway Switching Station, progressive augmentation of high-voltage distribution network capacity and expansion of the network to meet the needs of ongoing land development in Canberra.
- The ACT Government is currently preparing to publicly make available the release of the ACT flood data for the 1:100 year flood level to the general public.
- Significant climate change adaptation and abatement initiatives in the 2008- 09 Budget included:
  - planting of one million trees at the Canberra International Arboretum and Gardens (\$10.6 million);
  - energy efficient street lights (\$3 million); and
  - additional future tree plantings across the Territory (\$20 million).
- The ACT Government has invested \$18.6 million for a new emergency services headquarters in the ACT.
- Scoping and initial development of an 'ACT Resilience Strategy' which will include consideration of resilience for critical infrastructure/essential services in Canberra.
- Development of an exercise program involving owners of critical infrastructure in Canberra.
- ACT Government is currently working on the development of an information management system that incorporates a critical infrastructure database and a messaging service capability.
- Further work to be conducted on how 'assets of interest' sites can be flagged on the Emergency Services Agency Computer Aided Dispatch (CAD) system to assist in the emergency management capabilities of incidents at identified sites.
- Further work with owners and operators of critical infrastructure to identify interdependencies between different elements of critical infrastructure.

##### Critical infrastructure protection/resilience

- Protective security arrangements have been implemented to protect key government and public facilities across

Canberra, for example the installation of Closed Circuit Television (CCTV) systems at identified sites of mass gathering and major sporting venues in Canberra.

- ACT Policing have made provisions in their CAD system to flag assets of interest across the ACT. The intent of this will be to ensure linkages can be made in the event that infrastructure in Canberra is subject to crime.
- Regular sectoral threat assessment briefings and exercises are conducted by SEMB and ACT Policing for critical infrastructure assets in Canberra.
- ACT Government directorates and key stakeholders, including industry, are regularly briefed on critical infrastructure for Canberra.

#### **Plans –**

- ACT Infrastructure Plan - The ACT Government established its \$1 billion *Building the Future* infrastructure program as the cornerstone of the Government's 2008-09 Budget for Canberra. The five-year program will provide the necessary works and other infrastructure to meet the city's health, transport, urban amenity, environmental, social and economic development needs into the future.
- The Plan also outlines ACT infrastructure investments since self government and identifies current infrastructure priorities. The Plan also provides information on, and discusses the economic issues and drivers underlying the demand for infrastructure. These include changes in demography, changes in local, national and international economic circumstances, government policy, the implications of growth and development in the region surrounding the ACT, environmental considerations and financial issues.
- Threat Assessments and Risk Context Statement briefings for Canberra critical infrastructure to be conducted accordingly.

#### **Sub-Plans –**

- Infrastructure Recovery Sub Plan - The ACT Government has established this Sub Plan with the aim to provide an effective framework for a coordinated response to and recovery from emergencies involving damage or disruption to infrastructure in Canberra. Its objectives are:
  - to enable coordination of all key stakeholder groups involved in the response and recovery effort;
  - to provide for ongoing liaison and information dissemination with all key stakeholder groups, including the development and distribution of timely warnings and advice to at-risk communities;
  - the mobilisation of emergency management resources for the conduct of infrastructure recovery operations;
  - to enable the Territory Controller to determine the priorities for recovery and restoration programs for key areas affected by an event.
- In regards to the recovery of infrastructure, the overall aim is to return the Canberra community to as near a normal level of operation in the shortest possible time. In general terms priority in Canberra would be given to:
  - restoring essential services;
  - regaining access to living accommodation;
  - restoring business operation; and
  - restoring lifestyle.
- Key essential services are identified as follows (though not necessarily in priority order). The recovery effort will normally occur on each of these services simultaneously, with priorities determined by an 'Emergency Controller' if appointed under the Act. These services include:
  - restoring mobility access;
  - power (will commonly be highest priority);
  - communications;
  - transportation network;
  - water;
  - sewerage;
  - health facilities;
  - shelter;
  - financial services;
  - food supply;
  - waste disposal; and
  - Gas.

**Progress and achievements –**Safe Schools

- The Education and Training Directorate (ETD) conducts mandatory school safety checks twice a year (Semester 1 and Semester 2) which include a review of school emergency management arrangements.
- A new Security and Emergency Management Checklist has been developed for schools. It encompasses basic emergency response procedures (i.e. fire, bomb threat, medical emergency).
- The Directorate oversees the building and ground works activities in September of each year to ensure all schools have taken the necessary precautions to prepare them for the upcoming bushfire and storm season.
- The Directorate upgrades its 'Temporary School Closure During an Elevated Fire Danger Rating' policy annually to align its bushfire preparedness strategies with the whole-of-government Elevated Fire Danger Plan. ACT Childcare services, Disability ACT group homes and community facilities also underwent similar assessments in regards to elevated fire danger arrangements.
- Mandatory school safety checks occur twice a year (Semester 1 and Semester 2) which include a review of school emergency management arrangements.
- ACT public schools have Emergency Management Plans and Checklists which are regularly reviewed. It encompasses basic emergency response procedures (i.e. fire, bomb threat, medical emergency, lock out /lock down).
- All ACT public schools take the necessary precautions to prepare for the upcoming bushfire and storm season.
- 'Temporary School Closure During an Elevated Fire Danger Rating' procedures are upgraded annually to align its bushfire preparedness strategies with the whole-of-government Elevated Fire Danger Plan. ACT Childcare services, Disability ACT group homes and community facilities also underwent similar assessments regarding to elevated fire danger arrangements.
- A minimum standard for security in ACT public schools, including a schedule of operational hours for each site, is maintained to ensure site security. This system allows for school sites to be remotely armed and disarmed.
- The introduction of security fences at 43 public school sites has seen a large decrease in after-hours vandalism. As a consequence, schools have been able to develop external play-spaces without the fear of them being destroyed. Targeted security patrols also provide additional security for schools to reduce the risk of vandalism.

Health Facilities

- The ACT Government announced *Your Health-Our Priority* in 2008, incorporating a \$1 billion plus redevelopment of health infrastructure with the aim of revitalising the ACT health system to respond to growing health service demand through to 2022 and beyond. *Your Health-Our Priority* is a comprehensive, multifaceted asset development plan. It incorporates the total health system, including new models of care aimed at better management of chronic disease and keeping people out of hospital. It also includes better use of technology and different ways of providing care such as community based post-hospitalisation support, or other step-up and step-down facilities.
- The Health Directorate has established a dedicated Patient Safety and Quality Unit (PSQU). The PSQU provides: leadership and strategic advice on safety and quality issues and supporting the implementation of safety and quality initiatives; manages a number of safety and quality systems, including the *Risk and the Work Safety Management System*; monitors compliance and assessing progress against agreed safety and quality goals through mechanisms like accreditation, clinical review, the Policy Advisory Committee; and delivers services that support safety and quality like the Early Intervention Physiotherapy Service and the Occupational Medicine Unit.
- The ACT Health Emergency Plan (HEP) is a supporting plan of the ACT Emergency Plan that outlines the standing health emergency management arrangements in the ACT. The HEP underwent a major revision by the Health Emergency Management Sub-Committee (HEMSC) over 2011.
- The HEMSC is chaired by the Chief Health Officer (CHO) and membership is afforded to key agency and organisational representatives within the ACT health sector. The HEMSC meets quarterly to assist the CHO in developing the HEP, and to coordinate government and private health sector support and resources during emergency response and recovery operations.
- Extensive revision of the Canberra Hospital and Health Services (CH&HS) emergency code management plans has been undertaken over 2011-12. The revision encompassed the incorporation of the plans and processes described in Australian Standard AS 4083-2010 planning for Emergencies - Health Facilities.

- The Health Directorate conducted a series of mass casualty simulation exercises over 2008-2012 culminating in a major mass casualty exercise conducted in March 2012. Exercise Ayotu incorporated a multi-agency response to a simulated mass casualty terrorist event. Ayotu utilised the EmergoTrain System (ETS) and tested pre-hospital and hospital mass casualty management and major incident coordination across the health sector. The scenario for exercise Ayotu involved the detonation of two improvised explosive devices at major public transport hubs generating in excess of 570 casualties. A number of valuable lessons were identified after the exercise and a formal exercise report was developed to provide recommendations to consolidate and strengthen future major incident preparedness and response across the Directorate and with partners in the private sector.
- The Health Directorate has implemented the new Identity and Access Management (IAM) project. Commencing July 2012, the project will deliver a simple, responsive, centralised process for providing new staff members with access to buildings and computers. The initial implementation of the IAM Service will introduce a single point of contact for providing, modifying and removing access – it will provide a single point for: obtaining new proximity access and identification cards; creating new ACT Government network accounts for access to computers; requesting modification to existing building or computer access; and removing access once a staff member leaves the organisation.
- In acknowledgement that aged care sector is particularly vulnerable to the consequences of natural disasters and emergencies, the Health Directorate has been working with the sector to improve its resilience and planning for emergencies occurring in the ACT. There are 26 aged care facilities in the ACT with over 2000 residents in total. Over 2011-12 the Directorate undertook a survey and conducted two workshops exploring emergency management principles for aged care facility managers and senior staff. The survey sought to establish a baseline of resilience for ACT aged care facilities with regards to emergency events and gather information for services and agencies to assist in response activities. The workshops, held in December 2011 and April 2012, provided advice on how facilities could increase resilience, described the ACT emergency management arrangements that support aged care facilities, quantified the type and availability of resources used to respond to an incident at a facility, and developed ongoing communication between aged care facilities, the health directorate and emergency services.

#### **Plans (Health) -**

- The new three-storey \$97 million Centenary Hospital for Women and Children is currently being built on the Canberra Hospital campus and will see the collocation of numerous existing services including Paediatrics at the Canberra Hospital (PatCH), maternity services, the neonatal intensive care unit, gynaecology and fetal medicine and specialised outpatient services. Stage one of the Centenary Hospital is due to open in August 2012.
- The Health Directorate has undertaken a feasibility study to determine the Canberra Hospital's energy requirements in the years to come. This study also looked at possible scenarios to make the hospital more energy efficient. This aligns with the Health Directorate's 2010 Sustainability Strategy to improve the sustainability of the hospital buildings and potentially reduce the future cost of energy. Consideration is being given to improving energy efficiency through design, ways to generate power on site and expanding the existing data centre. As part of this study, the Health Directorate has looked for input from the community about their values and concerns in relation to future energy planning for the hospital.
- The Health Directorate is currently developing an internal action plan to strengthen organisational preparedness and response to extreme heat and elevated fire danger conditions and align Directorate response with existing territory level hazard plans.
- The Directorate is currently reviewing the ACT Pandemic Plan and the lessons learnt from the response to *the 2009 H1N1 global Influenza pandemic*. Currently the directorate intends to undertake major revision of the plan through increasing the scope to encompass whole of government response to all Epidemic Infectious Disease (EID), not just to influenza.

#### **Plans (Schools) –**

- Elevated Fire Danger Plan
- Elevated Heat Plan

**Plans (Health) –**

- ACT Public Health Act 1997;
- ACT Health Emergency Plan (HEP);
- ACT Health Management Plan for Pandemic Influenza;
- Canberra Hospital Emergency (Code) Plans;
- Calvary Health Care ACT Hospital Emergency Plan;
- Public Health Emergency Plan.

**Essential 6 – Risk-compliant building regulation and land use applied**

Status - 3

**Progress and achievements –**

- The ACT Emergency Services Agency has a proactive approach, through representation within aspects of building control and planning at the local and national level.
- Our nationally consistent approach to building compliance covers many aspects of development, from concept to demolition - considering compliance and Agency service delivery aspects, through:
  - Review of applications for sale of government lands
  - Review of Development applications, from individual buildings (where appropriate) to residential and industrial estates
  - Fire safety review of building design, assessment of Deemed-To-Satisfy (DTS) and Alternative Solutions to the Building Code of Australia (BCA)
  - Occupancy Loading assessments for Licensed Premises
  - Review of applications to demolish buildings, when part of a new development
- The ACT Government has defined sustainable development as the effective integration of social, economic and environmental considerations in decision-making processes, achievable through implementation of the following principles: (a) the precautionary principle; (b) the inter-generational equity principle; (c) conservation of biological diversity and ecological integrity; (d) appropriate valuation and pricing of environmental resources.
- The ACT Government has adopted the inter-generational equity principle which means that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.
- The ACT Government has further adopted the precautionary principle which means that, if there is a threat of serious or irreversible environmental damage, a lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- The Draft ACT Planning Strategy was partly based on research which considered risks to the population arising from climate change, specifically heat-wave, fire, flooding and water supply issues. Many of the strategies adopted in the draft have relevance for city resilience, especially strategies 5 to 7 inclusive which seek to promote innovative ecological design, resilient and sustainable infrastructure and a high quality public realm. The intention behind these strategies was to integrate both climate change mitigation and adaptation into the planning decision making process. The Draft ACT Planning Strategy was developed jointly with the Weathering the Change Action Plan 2, which makes complementary recommendations on urban form and urban design. This is an example of an integrated and seamless response to long term climate hazards.
- City Planning's current masterplan program, an implementation of Strategy One of the draft ACT Planning Strategy, seeks to revitalise urban centres and makes them more sustainable over the long term and accessible to citizens of all ages and abilities. More recent iterations of masterplans have been increasingly seeking to improve local micro-climate, for example the Tuggeranong Masterplan has included recommendations for pocket parks and roof gardens to assist in reducing the urban heat island effect. Future work will be directed at making sure that proposed intensification of centres is designed to be climatically sensible, for example, extending the research undertaken in preparation of the planning strategy.

**Legislation and Plans -**

The following Acts, Regulations and Plans provide the basis of legislative support that applies to the realistic, risk compliant building and land use planning principles:

- *Building (General) Regulation 2008;*
- *Building Act 2004;*

- *Planning and Development Act 2007* - main object of the planning strategy is to promote the orderly and sustainable development of the ACT, consistent with the social, environmental and economic aspirations of the people of the ACT in accordance with sound financial principles;
- *Planning and Building Amendment Act 2011*;
- *Planning, Building, Environment Legislation Amendment Act 2012*
- *Draft ACT Planning Strategy*

## Essential 7 – Education programmes and training in place

Status - 3

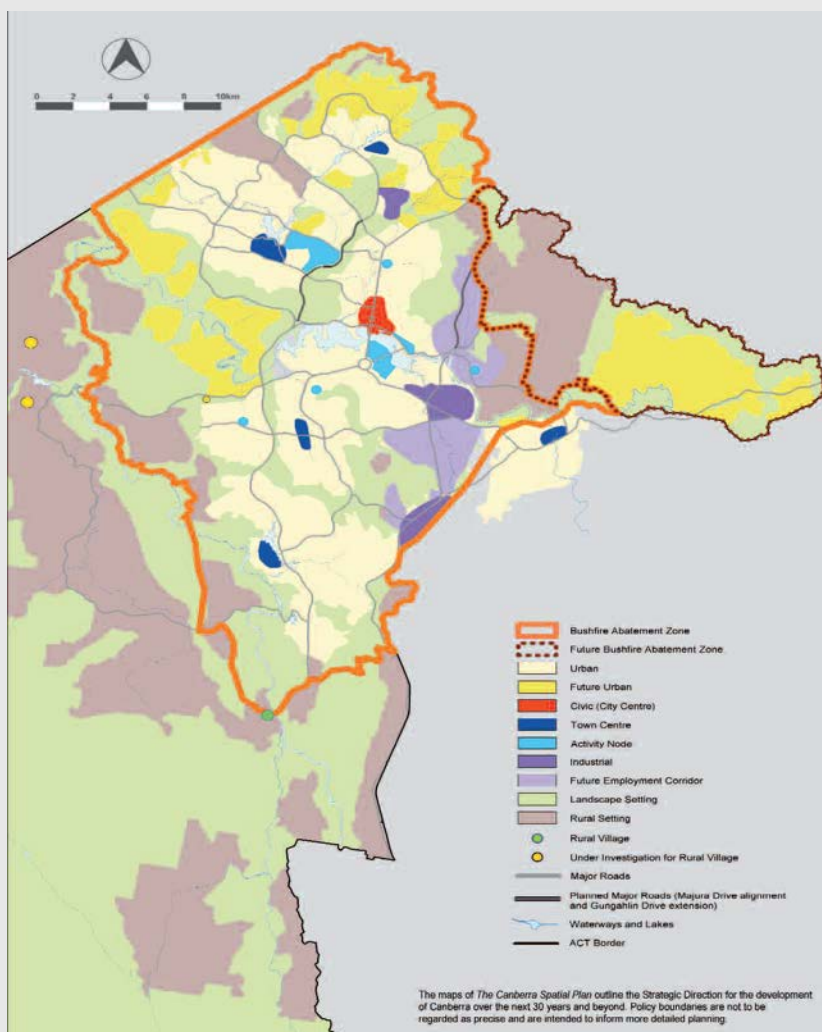
### **Progress and achievements –**

- The Education and Training Directorate (ETD) is involved in discussions at a national level (Ministerial Council for Education, Early Childhood Development and Youth Affairs) regarding the development of the national curriculum incorporating the history of bushfires in Australia. This initiative was a recommendation (Recommendation 6) from the 2009 Victorian Bushfires Royal Commission.
- Individual schools conduct their own emergency education and awareness programs from Kindergarten level through to primary school level.
- Information is actively exchanged and discussed at local and interstate level regarding the development of bush fire response strategies.
- ACT public schools conduct emergency management drills each semester as part of their School Management Toolkit.
- The ACTFR attends ACT schools providing fire prevention and stay safe information and education to staff and students.
- An incident command room is currently being established to provide a centralised point of management for ACT public schools to coordinate specific and whole of government emergency / incidents.
- A communication framework to provide early warning notification to schools during an incident / emergency has been developed and is utilised in various whole of government emergency management exercises.
- ACT Executive Officers regularly attend specific and whole of government training e.g. AIIMS training and exercises to establish rapport and build their knowledge base in relation to emergency / incident management.
- Desktop exercises with other relevant state agencies take place regularly to ensure all stakeholders have an awareness of capabilities and responses.
- The *'Think Ahead, Be Ready, Stay Safe'* Emergency Preparedness Guide (the Guide) has been used by a wide range of community organisations in the ACT to prepare for a range of hazards. Additionally the companion booklet "Grab and Go Kit" to help members of the community to develop an emergency plan that includes space to record important information needed in case of evacuation.
- The Australian Red Cross has been engaged to conduct workshops with case managers and community development workers from ACT agencies and the community sector, who work with vulnerable clients, to increase their awareness of resilience building techniques with their client groups.
- To further increase community awareness of, and provide greater access to, the Emergency Preparedness Guide the Community Services Directorate (CSD) promoted Neighbour Day in March 2012 whereby members of the community were encouraged to meet with neighbours and offer mutual support in preparing for, and responding to, emergency situations.
- The ACTFR conducts an extensive fire education program in ACT schools. The program is presented to kindergarten children in all ACT schools by station crews.
- Resilience is undertaken by the ACTSES by educating the community through events such as 'Storm Safe Week' to prepare for floods and storms by undertaking such actions as cleaning gutters, securing loose items around the house, monitoring weather reports etc.
- Members of the culturally and linguistically diverse community are specifically targeted by the ACTSES to ensure that they are a resilient part of the community.
- A pilot program to engage the community (i.e. schools) is currently being undertaken with the assistance of the Rivers Volunteer Fire Brigade. ACT public schools in the Weston Creek area are being asked if they would like the ACT Rural Fire Service (vehicle and crew from Rivers Brigade) to attend at school fetes and at the school in September/October to provide information regarding bushfire awareness.
- The ETD is currently undertaking a review of all emergency management documentation (Emergency

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| <p>Management Guidelines, Emergency Response Guide [checklist] and Emergency Management Plan template) ensuring they are up-to-date with current emergency management protocols, procedures and 'best practices'.</p> <ul style="list-style-type: none"> <li>• The ESA delivers a range of community education initiatives on an annual basis for a range of hazards including bush and structural fires, storms, floods and medical emergencies. These are detailed in the ESA Media and Community Information Business Plan.</li> <li>• The ESA educational initiatives include the ACT StormSafe campaign to raise awareness of the damage storms and floods can cause, and the annual Bushfire awareness campaign with a series of radio, television and print advertisements designed to highlight the need for ACT householders to play a role in reducing the risk from bushfires over the summer months.</li> </ul>  |            |
| <p><b>Plans –</b></p> <ul style="list-style-type: none"> <li>• Education Act 2004</li> <li>• Education Regulation 2005</li> </ul>  |            |
| <b>Essential 8 – Ecosystems and natural buffers protected</b>  | Status - 3 |
| <p><b>Progress and achievements –</b></p> <ul style="list-style-type: none"> <li>• The ACT SES has the legislative responsibility for flood planning, flood response and community education. ACT SES are progressing studies to enhance preparedness and mitigation measures for a number of key areas identified in the ACT that are susceptible to flooding.</li> <li>• The ACT Government is undertaking the development of a Climate Change Adaptation framework. As part of this framework, the government aims to prioritise climate change work and responses within a number of related current ACT policy and strategy reviews and developments. In the development of emergency sub-plans, directorates and agencies are required to consider issues associated with climate change, and where appropriate, identify appropriate mechanisms for adaptation.</li> <li>• Maximise safety and perceptions of safety within the community – Significant social, environmental and economic losses can result from natural hazards. In the ACT, planning needs to respond to the risk of bush fires, floods, severe storms and high winds. Each has different requirements for risk mitigation. Land use planning can effectively reduce the risk from natural hazards and guide the appropriate management of such areas.</li> <li>• Bushfires - Following the bushfires of January 2003, <i>The Inquiry into the Operational Response to the January 2003 Bushfires in the ACT</i> (McLeod Report) made a number of recommendations about planning principles to minimise risk of fire hazard, including identifying the need to undertake further investigations into a Bushfire Abatement Zone, bushfire protection planning principles and declaration of a Bushfire Prone Area. Current treatments, physical design standards and guidelines, and management approaches for Canberra's urban edge, including planned future residential areas have been further investigated. A broadscale fire hazard assessment has been undertaken to determine the level of bushfire risk across the ACT and whether any areas in the ACT need to be declared as bushfire prone areas. <i>The Canberra Spatial Plan</i> defines a Bushfire Abatement Zone based on the Strategic Direction for the city's growth Map 9 (Bushfire Abatement Zone). The objective of the abatement area is to limit the fire fuels thus reducing the potential hazard.</li> <li>• Other hazards – Urban development is designed to be protected from the impacts of flood events, generally up to the 100 year Average Recurrence Interval (100 year ARI). This protection is provided by the construction of drainage systems including floodways, piped drainage systems, retarding basins, lakes and ponds, and the retention of vegetation within catchments. Other natural hazards for the ACT include severe storms and strong winds which have the potential to affect a large number of dwellings. There are utilities that are required to support the function of the city, including refuse areas, quarries, recycling stations and sewage treatment plants. These have the potential to impact on human health and safety and general amenity and wellbeing. Due to this potential hazard to the community, buffer areas are required around these public utilities.</li> <li>• As a Policy response, the Bushfire Abatement Zone (Map 9 – Bushfire Abatement Zone) will mitigate the risk of bushfire hazards to life and property within metropolitan Canberra. Fuel management within this zone will be site specific to respond to the threat and conserve the landscape qualities of the "bush capital". The Bushfire Abatement Zone has been defined relating to both existing urban areas and future urban areas.</li> <li>• The Bushfire Prone Area will be declared for the ACT's non-urban areas to ensure fire risk is assessed and appropriate building standards are applied under the Building Code of Australia.</li> </ul> |            |



- Bushfire risk mitigation measures will be built into the design of all new development areas.
- Urban development will not be permitted in areas that are at high risk of major natural hazards.
- To ensure safety to the public and minimise health and amenity impacts from utilities required as a part of the urban infrastructure, utility buffer areas have been included.
- A Bushfire Abatement Zone has been defined and principles for land planning, including land use restrictions and performance measures for fire hazard reduction will be implemented. These will be adopted by ACTPLA and the relevant land managers.
- The Bushfire Prone Area will be declared and site specific assessments will be required for proposed residential buildings in accordance with the Building Code of Australia.
- The investigations undertaken as part of the detailed planning for new greenfields residential areas will continue to consider the potential fire, storm and flood hazards.
- Careful planning and management is required to ensure the vegetation in the Molonglo Gorge does not act as an unacceptable fire risk.
- Careful planning of Kowen Plateau and implementation of fuel management strategies will ensure that the western facing escarpment does not present an unacceptable danger to development on the plateau and beyond.



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| <b>Plans –</b> <ul style="list-style-type: none"> <li>• Territory Plan</li> <li>• Canberra Spatial Plan</li> <li>• Map 9 – Bushfire Abatement Zone</li> </ul>   |            |
| <b>Essential 9 – Early warning systems installed</b>  | Status - 3 |
| <b>Progress and achievements –</b> <ul style="list-style-type: none"> <li>• If a decision is made to issue a warning via telephone during an emergency, the ACT Government has established an Emergency Alert (EA) system which allows for messages to be sent to landline telephones based on the location of the handset and to mobile phones based on the billing address within an area defined as under threat or effected by the situation. Implemented since the 2009-10 bushfire season, \$150,000 in 2010-11 (recurrent) has been allocated for the continued operation of this system in the ACT. The system has been tested to random populations within the ACT, and public awareness campaign has assisted with its integration.</li> <li>• In providing public information and warnings in the ACT, special consideration is given to community groups with special needs.</li> <li>• In partnership with a range of organisations, the ACT Government has established formal agreements with local media outlets to provide for the provision of warnings and information to the community and advice to assist the community in preparing for emergencies. This includes via radio (666 ABC Canberra, 2CC Canberra, 2CA Canberra, Mix 106.3 Canberra, 104.7 Canberra), television (ABC TV, Prime TV, Southern Cross Ten, and Win TV), press (The Canberra Times), web (www.esa.gov.au), and telephone (Canberra Connect).</li> <li>• In the event of an emergency, the ACT Government has a dedicated website that publishes information for the community, providing advice about the current status of the emergency and what to do.</li> <li>• A number of public preparedness drills have been conducted in the ACT. This includes a range of ongoing exercise programmes involving public volunteers such as ‘Exercise Capital Impact’ which practiced the response capabilities of emergency services to a mass casualty incident.</li> </ul> |            |
| <b>Plans –</b> <ul style="list-style-type: none"> <li>• Emergency Alert (EA)</li> <li>• National Early Warning System (NEWS)</li> <li>• Standard Emergency Warning Signal (SEWS)</li> <li>• ACT Community, Communication and Information Plan 2012 (CCIP) – A sub plan of the ACT Emergency Plan that outlines the arrangements for communication with the public, the media, and ACT Government Directorates, before, during and after emergencies in the Australian Capital Territory.</li> <li>• Emergency Coordination Centre Operations Plan (ECCOP) - A sub plan of the ACT Emergency Plan that outlines the arrangements for the coordination of support provided by ACT Government and other agencies, before, during and after emergencies in the Australian Capital Territory</li> </ul>  |            |
| <b>Essential 10 – Needs-based (survivors) reconstruction</b>  | Status - 2 |
| <b>Progress and achievements –</b> <ul style="list-style-type: none"> <li>• Since the firestorm of January 2003, the ACT Government has undertaken significant reform and substantial investment to protect our city from bushfires.</li> <li>• Recommendations made by the coronial inquiry into the January 2003 bushfires have been or are in the process of being implemented. These recommendations have considerably strengthened the ACT’s capacity to withstand and recover from serious emergencies including bushfires in the future. The ACT Government has committed to expend considerable sums of money on improving the operational capability of emergency service organisations. For example, the establishment of the new ESA Headquarters at Fairbairn and the Emergency Services Training Complex at Hume.</li> <li>• The ACT Government is committed to the continued improvement of emergency services in the ACT, including provision of the latest bushfire-fighting equipment and technology. In addition, by enhancing bushfire prevention and mitigation through early identification and response systems, reduction of ignitions, provision of education and awareness programs, early planning for new development, expanded practical help to residents in bushfire-prone areas, support for volunteers and regional cooperative arrangements.</li> </ul>  |            |

- The ACT Government participates in several national committees related to the National Strategy for Disaster Reduction (NSDR), including the National Emergency Management Committee (NEMC) and chairing the Recovery Sub-Committee (RSC).

**Plans –**

- ACT Recovery Plan

## Annex III

### Tools provided by the Making Cities Resilient Campaign

A full list of tools related to the 10 essentials for making cities resilient can be found under the “Toolkit” section of the campaign website: [www.unisdr.org/campaign](http://www.unisdr.org/campaign).

Two such tools developed under the framework of the campaign are introduced below:

#### Local Government Self Assessment Tool (LGSAT)

A self-assessment tool for local governments was developed to help **set baselines, identify gaps and have comparable data across local governments**, within the country and globally, to measure advancements over time. By using this universal tool, cities and local governments can argue for priority setting and budget allocations within the city council and with the national government.

To be effective, the self-assessment should be undertaken as a **multi-stakeholder process**, facilitated by local governments. The main actors include local government authorities, civil society organizations, local academia, the business community and community-based organizations, with the support of national entities as needed. The involvement of civil society organizations and community-based organizations is essential to the success of this process.

The tool is available both online and offline. The online system is hosted on the campaign website [www.unisdr.org/campaign](http://www.unisdr.org/campaign). Access to the online system requires a registration process, facilitated by the UNISDR regional offices and the respective national focal point for disaster risk reduction. Each local government user will be provided a unique user ID and password to access the system. Detailed guidelines on the local government self-assessment tool (LGSAT) are also available online.

#### A Handbook for Local Government Leaders

The handbook was developed by UNISDR and campaign partners following the request by mayors and local government leaders for a practical guide on the “Ten Essentials of Making Cities Resilient” and to help plan and implement a community’s risk reduction initiative. It provides an overview of issues related to disaster risk reduction that illustrates the basics of assessing social and economic risk; the essential steps for cities to be safer and more resilient, with a view toward local sustainable development; and opportunities and strategies for advocacy and collaborative working arrangements with national institutions and partners.

Building on knowledge and expertise of cities and local governments participating in the global campaign **Making Cities Resilient: My city is getting ready!**, the handbook includes amongst others:

- A working definition of a disaster-resilient city & an explanation of the drivers that put cities at risk.
- A compelling case for investing city resources in disaster risk reduction, including a discussion of the the risks associated with *not* paying attention to these issues.
- Suggested options for policies that, if established, will give validity to and enable investment in disaster risk reduction.
- An overview of the **Ten Essentials for Making Cities Resilient**, a checklist of critical and interdependent steps for building resiliency.
- Good practices from cities around the world, demonstrating how they have applied the Ten Essentials to reduce risk and increase disaster resiliency.
- A chapter on how to implement the Ten Essentials, organized around five milestone phases that outline 14 steps you can take.