

The Institute for Regional Security



Preparing Communities for a Catastrophic Space Weather Event

A submission to the National Emergency Management Agency
on behalf of the Future Strategic Leaders Program (FSLP)

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Submission to the
National Emergency Management Agency

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at The Institute for Regional Security

**Preparing Communities for a
Catastrophic Space Weather Event (CSWE)**

Recommendations

1. In partnership with the States, Territories and the Commonwealth, a comprehensive review be undertaken of National and State Legislation regarding the case of large-scale energy and communications loss across multiple jurisdictions over a prolonged period and to cover public order response, resource management, and coordination.

This review would have the desired end-state of identifying local (town, municipality, and even community level) structures and powers for those who would or could be responsible for public order, resource control, and rationing. The review would provide recommendations on authority structures in this novel environment and on triggers and mechanisms for smooth transition of authority with minimal lead times (aligned to the lead times associated with CSWE).

2. In partnership with the States, Territories and the Commonwealth, an annual **'Community Preparedness and Resilience Day'** be established, to empower communities and encourage preparedness, as a community initiative when faced with natural disasters.

This day could include education, demonstrations, and drills, facilitated and supplemented by explainer resources including emergency preparation guides/action plans. The day and integrated education would cover more common emergencies such as bushfires, floods and cyclones and would incorporate CSWE among emergencies to build community resilience against.

Focus of Submission

This submission assumes NEMA understanding of and expertise in space weather events and does not therefore provide background on the science and impacts of CSWE.

This submission assumes that, through policy and program reviews and actions, the Government will address:

1. The 'hardening' of critical assets and systems by Government, and by the private sector in collaboration with or at the direction of Government, to protect against space weather events.
2. Identification of critical machinery and components for strategic emergency stockpiles to enable recovery; the allocation of funding to purchase such equipment; legislative change required to regulate private redundancy regarding such machinery and components; and planning and exercising to implement repair and recovery post event.
3. ADF-specific preparedness for re-establishing command, control and supply systems including possible emergency re-positioning of assets post event.
4. Contingency planning for potential national security issues that may arise as a result of disruptions caused by CSWE.
5. The foreign aid policy, preparedness and capabilities in a catastrophic event that impacts neighbouring states in the region.
6. Management of support provided to Australia by unaffected partner nations, and the domestic distribution and dissemination prioritisation of the same.

It is assumed that a CSWE could cause rapid deterioration of the strategic environment with associated national security concerns. Similarly, it is assumed that Australia's ability to generate military power could be significantly disrupted and that the ADF would necessarily prioritise the recovery of its own command and control structures and activate its own (independent) response plan. It might also be assumed that the ADF would prioritise the defence of Australia from external threats depending on any conflict environment at the time. The ADF may therefore be unable to provide the civil assistance often expected by communities in the face of large scale and locally impacted natural disasters. It may also be assumed that the nationwide communication and energy blackout might make a Whole of Government co-ordinated response through the AFP, NEMA and other similar organisations impractical, necessitating a local community-based response to a CSWE.

Defining the Security Issue

Of all potential space weather events, this submission considers only those that might be considered 'catastrophic'. This submission considers that a key security issue of concern for NEMA arising from a 'catastrophic' event involves the likely incapacity of the national and state governments to deliver assistance and enable recovery post event to a significant number of population centres. Based on this characterisation, a 'catastrophic' event is defined on the basis of four elements that would likely precipitate this incapacitation.

A 'catastrophic' event is defined as an event:

1. Involving the loss of all communication, GPS and power systems,
2. Involving the disruption to supply of essentials such as fuel, food, medicines, and
3. Involving the continuation of this loss and disruption over a significant period of weeks and potentially months.
4. Affecting a large geographical area and numerous population centres (for example the whole of Australia or the whole of the eastern States and the Capital Territory of Australia),

Rationale

The critical aspects of a catastrophic space weather event (CSWE) this submission addresses are:

1. The need for maintenance of public order after a CSWE, and coordination and rationing of household and organisational essentials such as food, fuel, medicines and parts, and
2. The education of the Australian public regarding a CSWE that would contribute to community preparedness for and resilience during a CSWE

The primary concern in this submission is enable local communities to survive the initial shock and smoothly transition to reconstitution in the aftermath of a CSWE.

The nature of a CSWE would require rapid and clear communication as regards enacting of event-specific legislation. This is complicated by differing State and Territory laws, policies and structures. Advice to FSLP participants in briefings on CSWE suggests that it would not be clear how authority would be established to deal with radical nature of the loss of societal functions. In particular, authorities and powers necessary to maintain public order were unclear. For example, the authority across local emergency services and local police stations to 'commandeer', protect and control distribution of private property or communal essentials and potentially 'deputise' volunteers in support of these functions.

This concern is further complicated by the lack of clarity around chain of command within that authority in a power and communications blackout environment and the lack of clarity around the triggers to enable the local authorities to start taking control. Crucially, there is the concern of the authority of the community being challenged by radical individuals and groups. There is also a need to establish checks and balances to ensure ethically and morally appropriate exercise of authority.

There is also the requirement to pre-position assets (such as water, medicine, tools, rope, hard hats and any other items) that would enable community management during CSWE.

NEMA should conduct a review of policy and programs including a joint Commonwealth, State and territory review of legislation, policies and structures to clarify and align authority and powers that can be automatically (and locally) declared in the aftermath of an event characterised by the elements of a CSWE defined above.

Much progress and understanding has been achieved in Australia in for building community resilience in the context of major natural disasters. Communities have access to education materials, preparation guides, and local events that connect and engage them to state-based emergency service providers. FSLP participants were however advised that there is a severe shortage in the volunteer force for local emergency services which are predominantly staffed by volunteers. The counter for this would be to build a sense of national and communal capability and ownership around the security of one's community.

As such, this submission recommends that any response to a CSWE be built around a community preparedness initiative so as to avoid counterproductive alarm or a 'survivalist' response to CSWE, and that **CSWE be incorporated into community emergency education**. It recommends, moreover, as a first step in a much more comprehensive and holistic national emergency preparedness education uplift, **that the Commonwealth establish in partnership with States and Territories an annual 'Community Preparedness and Resilience Day' that would be the focus for community and school education and events, for all natural disasters and including CSWE**. Such events would have an added benefit of allowing and enabling community members to familiarise themselves with the local police and emergency services personnel and leadership who might need to use emergency powers in the context of a CSWE.

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