

## Telecommunication Towers in Bush Fire Prone Areas

This Practice Note provides direction on the application of bush fire protection measures to Telecommunication Towers in Bush Fire Prone Areas.

Towers in Bush Fire Prone Areas are critical infrastructure for fire fighting communications and for providing warnings, information and communication channels for people in bush fire prone areas during bush fire emergencies.

Telecommunications sites support wide range of communications services, broadly they are those sites that have infrastructure associated with mobile phones, internet, microwave radio links, trunk mobile radio or private mobile radio (PMR). In some instances, a number of users establish autonomous sites adjacent to one another at the same geographic location. This is variable depending on the size, purpose, complexity and remoteness of the site and could be one hut connected to a shared antenna on a tower alternatively, It could be multiple huts on a location and connected to multiple towers.

As such, a 'precautionary approach' should be taken with respect to critical infrastructure associated with communications during emergencies.

Actions should be taken by owners/ operators to reduce the risk of loss of such infrastructure and associated infrastructure from the effects of bush fire attack.

The asset protection zone is only concerned with the underlying infrastructure required to support such services which are predominately structures and buildings. Essential equipment should be designed and housed in such a way as to minimise the impact of bush fires on the capabilities of the infrastructure to provide communications capability during bush fire emergencies.

When the RFS is asked for comment on new towers or for existing towers, a 10 metre APZ from the tower/ buildings/ infrastructure associated with the tower shall be provided.

Infrastructure does not include:

- road access to the site;
- power or other services to the site;
- associated fencing;

The APZ must be free of surface fuel and elevated fuel and should have minimum canopy.

When RFS provides comments on critical telecommunications infrastructure a recommendation to the owner of the critical infrastructure is made that the materials be designed to withstand 40kWm<sup>2</sup> of radiant heat and to withstand ember penetration into the structure and associated infrastructure.



When considering notices to manage fuel, distances should be consistent with the above criteria.

Owners/operators of critical telecommunications infrastructure may accept the risk of loss of the structure from the effects of bush fire.

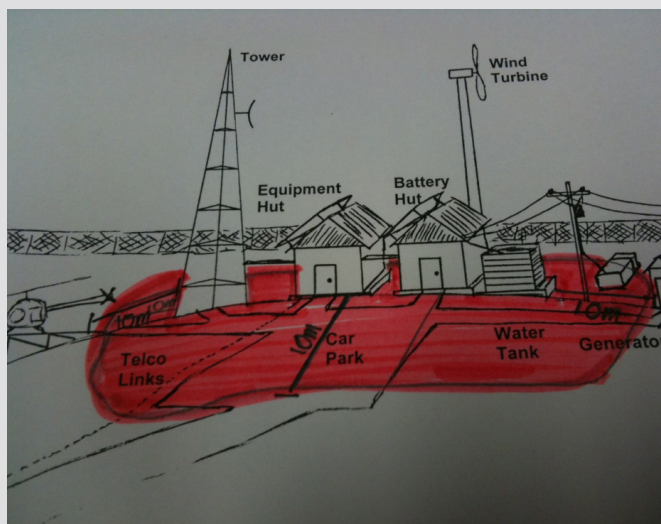
However, the RFS does not accept loss of such structures as it will have a direct impact on life safety within the fire ground.

## Definitions

**Critical telecommunications infrastructure** is identified in a Bush Fire Risk Management Plan.

A **location** is defined as the area of land which includes one or more co located Telecommunications sites.

**Figure 1:** 10 metre APZ from the tower/ buildings/ infrastructure



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