



Site Specific Obligations on Carriers – Section 5

EME Precautionary Approach Checklist

Issue Date:	07/11/2005	Carrier	3GIS	Location	Australian Capital Territory
Description of Infrastructure	Establish 40 new sites across Canberra to provide a new 3 rd Generation network of mobile phone base stations. Each site will require the siting of antennas and associated equipment housing (as indicated on site detail information at section 2).				

5.1 Application of Precautionary Approach to Site Selection – Additional Consideration Items

Section No	ACIF Code Requirement	Comments
	For each site the Carrier have regard to:	
5.1.4 (a)	The reasonable service objectives of the carrier including (i) the area the planned service must cover (ii) power levels needed to provide quality of service (iii) the amount of usage the planned service must handle.	The intention of this new Network of sites is to provide the latest 3G coverage and services being introduced by 3GIS across Canberra. The transmit power settings at all facilities will be set to accomplish the desired coverage, capacity and call quality within the individual coverage areas. The Over the Air specifications provide for the ability for all facilities to reduce the transmitting power to each user based on the radio environment.
5.1.4 (b)	Minimisation of EMR exposure to public.	All facilities are designed and will be installed to restrict public access to any areas that exceed the general public EME exposure limits. The environmental EME level is minimised both through the radio network design and by reducing the transmit power to each user based on the radio environment.
5.1.4 (c)	The likelihood of an area being a community sensitive location.	All site locations have been selected with regard to the Precautionary Principles for site selection and infrastructure design. All reasonable



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		measures have been considered and incorporated to ensure sites are located in the least sensitive location available within the required coverage area.
5.1.4 (d)	The objective of avoiding community sensitive locations.	3GIS apply a sequential process of site selection that aims to avoid community sensitive locations. In all instances, measures have been incorporated to mitigate sensitive issues with regard to the siting, design and operation of proposed facilities.
5.1.4 (e)	Relevant state and local government telecommunications planning policies.	Relevant policies have been considered throughout the site selection and design process and addressed in the content of the Network Plan. The proposed network rollout is considered to be in accordance with relevant National Capital Plan and ACT Territory Plan policies and regulations.
5.1.4 (f)	The outcomes of consultation processes with Councils and communities as set out in Section 5.5.	The proposed Network Plan will be submitted to ACTPLA for approval. Appropriate community consultation will be approved and undertaken in accordance with ACTPLA requirements. Any submissions will be taken into consideration and addressed in the appropriate manner by ACTPLA and 3GIS.
5.1.4 (g)	The heritage significance (built, cultural and natural).	Review has been undertaken of the whole Network Plan and no significant heritage implications have been identified for any of the individual sites.
5.1.4 (h)	The physical characteristics of the locality including elevation and terrain.	The physical characteristics of each site have been considered during the evaluation of the Network Plan. Factors considered include the terrain, site elevation and the height of the surrounding obstacles. Each of the proposed sites is considered to fulfil coverage requirements.



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5.1.4 (i)	The availability of land and public utilities.	Opportunities for utilising existing utility services have been investigated and where possible utilised.
5.1.4 (j)	The availability of transmission to connect the radio communications infrastructure with the rest of the network, e.g. line of sight for microwave transmission.	Each 3GIS site will utilise existing Telstra optic fibre links. Fibre Optic is readily available across most urban and rural areas within Canberra and can be used at each of the proposed sites. A radio transmission dish to link sites will only be the fall back option should no optical fibre be available..
5.1.4 (k)	The radiofrequency interference the planned service may cause to other services.	Radio propagation analysis has been used to select appropriate antenna tilts to meet the requirements for coverage from each of the proposed facilities, while minimising interference to existing and other networks.
5.1.4 (l)	The radiofrequency interference the planned service could experience at that location from other services or sources of radio emissions.	Radio propagation analysis has been used to ensure each facility can be integrated with the existing network while minimising the interference to the new facility.
5.1.4 (m)	Any obligations, and opportunities, to co-locate facilities.	Opportunities for co-locating telecommunications facilities have been investigated and where possible utilised as the preferred option for establishing a new site. Alternatives have only been selected where there are no suitable opportunities to co-locate.
5.1.4 (n)	Cost factors.	3GIS has undertaken preliminary costing of this facility and are of the opinion these costs are reasonable.