DSM Supplementary Document

Appendix 9 to Annex B to DSM Part 2:60 Closed Circuit Television (CCTV)					
Version	8	**Publication date**	31 March 2016	**Amendment list**	26
Optimised for	Screen; Print; Screen Reader				
Releasable to	Defence, Defence Industry				
Compliance Requirements	Compliance requirements for this supplementary document are the same as for its parent document.				
Copyright	© Commonwealth of Australia 2010 This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Department of Defence. Requests and inquiries concerning reproduction and rights should be addressed to Defence Publishing Services, Department of Defence.				

1. Closed Circuit Television (CCTV) monitoring may be event-activated and used in conjunction with a security alarm system to help those responsible for responding to the alarm. It also may be used in conjunction with an access control system to aid personal identification for remote entry control. Motion detectors, left item (lack of motion detectors), etc can also be incorporated into CCTV monitoring systems. Considerations on the use of CCTV include:

   a. how its use fits into the context of the overall security plan of the site;

   b. the type of incident anticipated and in what way it will be expected to help the response to these incidents;

   c. the need to advise staff and clients that it is in use on the premises; and

   d. the functional requirement.

2. It is important to recognize that CCTV surveillance systems and CCTV alarm assessment systems perform separate and distinct functions. A properly integrated CCTV system provides a rapid and cost-effective method for determining the cause of intrusion alarms.

3. The surveillance system is designed to be used at the discretion of and under the control of the security centre's console operator. For surveillance, a CCTV system provides a cost-effective supplement to guard patrols. For large facilities, the cost of a CCTV system is more easily justified.

4. The alarm assessment system is designed to respond rapidly, automatically and predictably to the receipt of alarms at the security centre. When the primary function of the CCTV system is to provide real-time alarm assessment, the design is to incorporate a video processing system that can communicate with the alarm processing system.

5. CCTV cameras will typically be installed:

   a. outdoors:

      (1) along site-perimeter isolation zones;

      (2) at controlled access points; and

      (3) within the protected area, and at viewing approaches to specific assets; and

   b. indoors, at specific assets within the protected area.

System Application Guidelines

6. Site-specific factors are to be considered in selecting components that comprise a particular CCTV system. The first is the system's size in terms of the number of cameras needed for surveillance and to view all alarm points. Another factor is that some CCTV cameras may require artificial light sources. Finally, there are CCTV system performance criteria and physical, environmental, and economic considerations.

7. The level to which video details can be determined in a CCTV scene is referred to as resolving ability or resolution. It is generally accepted that for assessment purposes, three resolution requirements can be defined. In order of increasing resolution requirements they are detection, recognition and identification:

   a. detection is the ability to detect the presence of an object in a CCTV scene;

   b. recognition is the ability to determine the type of object in a CCTV scene (animal, swaying vegetation or crawling human); and

   c. identification is the ability to determine object details (a particular person or vehicle details).

8. A CCTV system shall provide sufficient resolution to recognise human presence and to detect small animals or blowing debris. Given an alarmed intrusion sensor, it is crucial that the console operator be able to determine if the sensor detected an intruder or if it is simply responding to a nuisance condition. If it is expected that CCTV images may be used in court, the quality of images or data should be suitable for use as evidence in criminal proceedings. Consideration is to be given to the period that images need to be retained when designing a CCTV system.

Note: The computers used to store images may require significant memory space to preserve images at the quality required by the agency. Excessive compression may lower the quality to the point where the images are no longer usable.

9. For interior applications where the same camera type is used in several different areas and the illumination in each area is constant, a manually adjustable iris lens may be used. This allows a manual iris adjustment appropriate for each particular area's illumination level at the time of installation. If the camera operates in an area subject to a wide dynamic range of illumination levels (such as would be found outdoors or indoors where the lighting levels may change or are subject to external influences), an automatically adjusted iris lens is to be used.

10. Some of the general design guidelines include the following:

a. system familiarity. Before designing an effective CCTV system, the designer is to be familiar with the function and purpose of the system and the type of threats; and

b. CCTV camera placement and lighting. The placement of exterior cameras requires more attention than that of interior cameras because of weather and illumination extremes. The field of view alignment, illumination range and balanced lighting are major design factors. Exterior CCTV design considerations include environmental housings, camera mounting heights, system types and tamper detection. Indoor design considerations include the mounting location and tamper detection.

11. Where a CCTV system is to be used for intruder alarm verification:

a. the camera's location shall monitor the complete sensor detection field in the camera's field of view;

b. lighting that is adequate to support alarm verification is to be used; and

c. protection from tampering and inadvertent damage by collision during normal area operations shall be used.

Lighting Requirements

12. The following considerations apply when lighting systems are intended to support CCTV surveillance or alarm verification:

a. lighting intensity levels;

b. maximum light-to-dark ratio;

c. scene reflectance;

d. daylight-to-darkness transitions;

e. the camera's spectral response;

f. the cold-start time; and

g. the re-strike time.

13. Relevant Commonwealth, State and Territory legislation and regulations to consider with regard to the installation and use of CCTV is listed in Table 2.60-B-9-1.

Note: Workplace health and safety, and electrical safety Acts and Regulations applicable in the relevant State or Territory also need to be considered.

Commonwealth	*Privacy Act 1988*
	Privacy Amendment Act 2000
	Privacy Amendment Act 2004
	Privacy (Private Sector) Regulations 2001
	Defence Act 1903 Part VIA Security of Defence Premises
ACT	*Listening Devices Act 1992*
	Security Industry Act 2003 (ACT)
	Security Industry Regulation 2003 (ACT)
NSW	*Privacy and Personal Information Protection Act 1998*
	Privacy and Personal Information Protection Regulation 2005
	Privacy Code of Practice (General) 2003
	Security Industry Act 1997 (NSW)
	Security Industry Amendment Act 2005
	Security Industry Amendment Act 2008
	Security Industry Regulation 2007 (NSW)
	Workplace Surveillance Act 2005
	Workplace Surveillance Regulation 2005
NT	*Surveillance Devices Act 2007*
	Surveillance Devices Regulations (NT)
	Private Security Act (NT)
	Private Security Regulations (NT)
QLD	*Invasion of Privacy Act 1971*
	Security Providers Act 1993 (QLD)
	Security Providers Regulation 2008
SA	*Listening and Surveillance Devices Act 1972*

	Listening and Surveillance Devices Regulations 2003
	Security and Investigation Agents Act 1995 (SA)
	Security and Investigation Agents Regulations 1996 (SA)
TAS	*Listening Devices Act 1991*
	Listening Devices Regulations 2004
	Security and Investigations Agents Act 2002 (Tas)
	Security and Investigations Agents Regulations 2005 (Tas)
VIC	*Surveillance Devices Act 1999*
	Surveillance Devices Regulations 2006
	Private Security Act 2004 (VIC)
	Private Security Regulations 2005 (VIC)
WA	*Surveillance Devices Act 1998*
	Surveillance Devices Regulations 1999
	Security and Related Activities (Control) Act 1996 (WA)
	Security and Related Activities (Control) Regulations 1997 (WA)

Table 2.60-B-9-1: Legislation covering CCTV installation and usage

Further Guidance

14. For further information see the Council of Australian Governments publication, *A national approach to closed circuit television - National code of practice for CCTV systems for the mass passenger transport sector for counter-terrorism*.

15. Related Australian Standards:

a. AS 4806 Set:2008 CCTV Set:

(1) AS 4806.1:2006 *Closed circuit television (CCTV)—Management;*

(2) AS 4806.2:2006 *Closed circuit television (CCTV)—Application guidelines;*

(3) AS 4806.3:2006 *Closed circuit television (CCTV)—PAL signal timings; and*

(4) AS 4806.4:2008 *Closed circuit television (CCTV)—Remote video*.

Appendixes and Attachments	
N/A	No annexes or appendixes