

Australian Standard<sup>®</sup>

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**Automatic teller machines—  
User access**

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This Australian Standard was prepared by Committee IT/7. It was approved on behalf of the Council of Standards Australia on 1 February 1990 and published on 2 April 1990.

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The following interests are represented on Committee IT/7:

Australian Association of Permanent Building Societies  
Australian Bankers Association  
Australian Consumers Association  
Australian Federation of Consumer Organisations  
Australian Federation of Credit Unions  
Australian Information Industry Association  
Australian Quadriplegic Association  
Disabled Peoples' International (Australia)  
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Office of the Commissioner for the Ageing, South Australia  
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## PREFACE

This Standard has been prepared by the Standards Australia Committee on Public Access to Information Technology Equipment, following a recommendation in a report published by the Ministry of Technology, South Australia\*. The report maintained that a proportion of the aged population found the use of automatic teller machines difficult and often impossible for a number of reasons, many of which related to features of their design and installation. Organizations representing people with disabilities also recommended the preparation of a Standard which would provide for the installation of ATMs which were more accessible.

In particular, wheelchair users found that some ATMs were installed in locations where steps and other obstructions made it difficult, if not impossible, to approach the machine. Where approach to the machine was possible, the ATM often was installed at a height which was outside of their reach. Among other difficulties expressed was the complexity of the operation of ATMs perceived by elderly people and others.

While it was not feasible for the committee to make recommendations which would significantly improve all aspects of user access to ATMs which had been identified as problematical to some users, the recommendations of this Standard are those considered by the committee to be the most practical solutions towards reducing problems which are being encountered by users, within the constraints of current ATM designs.

Because there is no existing, or foreseeable, standardization of banking procedures or of ATM design, the aspect of complexity of operation is not covered in this Standard.

While some of the recommendations in this Standard cover features of ATM design which are conducive to the successful use of these machines by people with disabilities, these recommendations are not exclusive to 'special use' ATMs, neither is it intended that their implementation will create ideal conditions for accessibility to an ATM by any particular user group.

Some of the recommendations in this Standard which refer to VDUs and keyboards have been taken from the following publications:

- (a) *VDUs and Work, Occupational Safety and Health Working Environment* Series 13, Canberra, 1983, Commonwealth Department of Employment and Industrial Relations.
- (b) *Guidelines for Working with Screen-based Equipment*, Health and Safety Bulletin No 12, May 1982, ACTU-VTHC Occupational Health and Safety Unit.

Consideration needs to be given to the time for changeover to these recommendations because of the design restrictions of current models of ATMs.

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\* *Technology for the Aged*, Report by South Australian Council on Technological Change, Adelaide, 1984, Ministry of Technology.

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## FOREWORD

ATMs in use in Australia are designed and manufactured elsewhere. Therefore, in setting requirements for their access by users, consideration needs to be given to the technology, features of design and security aspects of these existing ATMs.

The view has been expressed that standardization of ATM design, and also the mode of effecting transactions could greatly increase the number of people who could use automatic banking systems. While it is not yet feasible to agree on standard banking transactions and standard ATM design, the objectives of providers of the ATM service should be for new installations, wherever possible, to comply with all of the recommendations of this Standard.

## STANDARDS AUSTRALIA

## Australian Standard

## Automatic teller machines—User access

**1 SCOPE.** This Standard sets out guidelines for the installation of automatic teller machines (ATMs). Included are some recommendations for their design and performance to facilitate unobstructed access to a level, adequately sized, well-lit area in front of an ATM, and the provision of features of the user-interface of the ATM which are within reach and operable by the greatest possible number of users, under conditions of adequate privacy and security. Excluded are ATMs installed for drive-up use.

**2 REFERENCED DOCUMENTS.** The following documents are referred to in this Standard:

AS

1428	Design for access and mobility
1428.1	Part 1: General requirements for access—Buildings
1680	Interior lighting
1680.1	Part 1: General principles and recommendations
2713	Lighting and the visual environment for screen-based tasks
2805	Electronic funds transfer—Requirements for interfaces
2805.3	Part 3: PIN management and security
2822	Acoustics—Method of assessing and predicting speech privacy and speech intelligibility

**3 DEFINITIONS.** For the purpose of this Standard, the definitions below apply.

**3.1 Automatic teller machine (ATM)**—a card operated, automated, customer-activated machine which dispenses cash as its prime function.

**3.2 Continuous accessible path of travel**—an uninterrupted path of travel to or within a building, capable of being negotiated by a wheelchair user and not incorporating any stairway, step, turnstile, revolving door, escalator, or other impediment to travel.

**3.3 Personal identification number (PIN)**—a numeric or alphanumeric code or password made up of between 4 and 12 characters that the cardholder possesses for the purpose of identification.

**3.4 User-interface**—the components of the automatic teller machine with which the user interacts to effect a transaction.

**3.5 Visual display unit (VDU)**—a device incorporating a screen or panel which displays messages.

#### 4 INSTALLATION.

**4.1 Site.** The choice of a site for the installation of an ATM will be influenced by such factors as the design, structure and location of an existing building, a site which is favourable to passing trade, security aspects, environmental noise, and laws governing the use of public walkways.

However, in choosing a site, it is important that consideration be given to the existence of the clear circulation space fronting the area of the proposed installation, as specified in Clause 4.2.

The existence of an area which is devoid of building stanchions, street utilities, and the like in the vicinity of the ATM installation will not only assist users who require wheelchair accessibility, but will also facilitate the queuing of users so that more privacy can be obtained.

A further consideration is that the site should be one where direct or reflected sunlight or other glare is prevented from striking the ATM display.

**4.2 Circulation space.** A clear circulation space should be provided in front of each ATM installation, as follows:

- (a) The surface of the circulation space should be level in the direction parallel to the installed ATM.
- (b) The circulation space and the gradient of any crossfall should conform to the dimensions for enhanced requirements shown in Figure 1.

Where the provision of a smaller space or a steeper space is unavoidable, the dimensions of the circulation space should be not less than those shown for the basic requirements in Figure 1, and any crossfall should be not steeper than 1 in 20.

#### NOTES:

1. Unavoidable conditions may include the topography of a street. Where gradients are too steep, consideration may be given to siting the ATM within an accessible lobby or alcove. The lack of a clear circulation space or convenient queuing area on the street may also favour the siting of the ATM within a lobby or alcove.
2. It is desirable that the circulation space have a slip-resistant surface that complies with floor surfaces in AS 1428.1.

**4.3 Lobbies.** Where lobbies with doors are provided, the circulation space within the lobby should be in accordance with the requirements for circulation spaces at doorways specified in AS 1428.1.

**4.4 Continuous accessible path of travel.** Where practicable, a continuous accessible path of travel from car-parking places to the ATM should be provided. Access should be provided in accordance with AS 1428.1.

**4.5 Lighting of the circulation space.** During day-light hours, ATMs in outdoor locations will probably have sufficient illuminance in the circulation space. However, by night it will be necessary to ensure that there is sufficient light.

It is recommended that a maintenance illuminance of at least 40 lx be provided in the horizontal plane at floor (ground) level within the circulation space, so that dropped objects can be easily located. Installations may need lighting which is additional to the task-directed lighting integral to the ATM.